**United Nations Development Programme**

**Project Document template for nationally implemented projects financed by the GEF/LDCF/SCCF Trust Funds**

| | | |
|---|---|---|
| **Project title:** Sustainable Productive Landscapes in the Peruvian Amazon | | |
| **Country:** Peru | **Implementing Partner:** Ministry of Environment (MINAM) | **Management Arrangements:** National Implementation Modality (NIM) |
| **UNDAF/Country Programme Outcome***:* **1:** Growth and development are inclusive and sustainable and incorporate productive capacities that create jobs and livelihoods for the poor and those excluded from CPD 2017-2021 | | |
| **UNDP Strategic Plan Outcome:**<br>1.5: Hectares of land that are managed sustainably under *in-situ* conservation, sustainable use, and/or Access and Benefits Sharing (ABS) regime.<br>**UNDP Strategic Plan Output:**<br>1.3: Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste. | | |
| **UNDP Social and Environmental Screening Category: Moderate** | **UNDP Gender Marker: GEN2** | |
| **Atlas Project ID/Award ID number:** 00087272 | **Atlas Output ID/Project ID number:** 00094356 | |
| **UNDP-GEF PIMS ID number: 5629** | **GEF ID number: 9272** | |
| **Planned start date: September 2017** | **Planned end date: September 2023** | |
| **LPAC date: July 2017** | | |
| **Brief project description:** This project support the implementation of Peru's National Strategy for Forests and Climate Change (ENBCC), contributing to the reduction of deforestation, and forest recovery, in production landscapes in Huánuco and Ucayali Departments in the Peruvian Amazon, by supporting natural resource management and production systems that incorporate considerations of environmental sustainability, through an integrated and comprehensive territorial approach that will recognize the complexity of local livelihoods and the landscape-wide scale of the drivers of deforestation, while at the same time taking targeted actions to address producer behaviour in selected sectors that have been identified as constituting particularly significant drivers of deforestation.<br>The project will consist of three components: 1) Improved policy planning and governance to reduce deforestation and enhance sustainable production; 2) Financial mechanisms and market incentives promote sustainable production practices and 3) Technical capacity installed to restore and sustain ecosystem services in target landscapes. It will generate global environmental benefits in the BD, LD, SFM and CC focal areas, working with national, regional and local governments, private sector actors and producers of a range of different scales with the aim of reducing rates of conversion of natural forests to agriculture and ranching by helping to ensure that productive activities are appropriately located in the landscape, supporting environmental governance, and ensuring that producers have access to the capacities and incentives required to enable them to apply sustainable production systems, paying particular attention to oil palm and cocoa production. The outputs will be delivered in such a way as to optimize outcomes for women in terms of capacity development, effective participation in decisions related to resource management and livelihood support, and the distribution of benefits, based on gender analyses and the collection and application of their local knowledge. | | |
| **FINANCING PLAN** | | |
| GEF Trust Fund | USD 18,346,927 | |

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|---|---|---|
| **Total Budget administered by UNDP** | **USD 18,346,927** | |
| **PARALLEL CO-FINANCING** (*all other co-financing that is not cash co-financing administered by UNDP)* | | |
| UNDP | USD 9,000,000 | |
| Ministry of Environment | USD 50,000,000 | |
| Ministry of Agriculture | USD 25,000,000 | |
| USAID | USD 35,000,000 | |
| Provincial government of Puerto Inca | USD 10,000,000 | |
| **Total co-financing** | **USD129,000,000** | |
| **Grand-Total Project Financing (1)+(2)** | **USD147,346,927** | |
| **SIGNATURES** | | |
| **Signature:** print name below | **Agreed by Government** | **Date/Month/Year:** |
| **Signature:** print name below | **Agreed by Implementing Partner** | **Date/Month/Year:** |
| **Signature:** print name below | **Agreed by UNDP** | **Date/Month/Year:** |

# I. TABLE OF CONTENTS

**Abbreviations and acronyms**

| | | |
|---|---|---|
| AGROBANCO | Agricultural Bank | Banco agropecuario |
| ASL | Regional GEF Programme on Sustainable Landscapes in the Amazon | Programa regional GEF Paisajes Sostenibles de la Amazonia |
| AIDER | Association for Research and Integrated Development | Asociación para la Investigación y el Desarrollo Integral |
| BID | Interamerican Development Bank | Banco Interamericano de Desarrollo |
| BMUB | German Ministry of Environment, Conservation, Construction and Nuclear Safety | BMUB: Ministerio de Ambiente, Conservación, Construcción y Seguridad Nuclear de Alemania |
| BMZ | German Federal Ministry for Economic Cooperation and Development | BMZ: Ministerio Federal de Cooperación Económica y Desarrollo de Alemania |
| CAF | Andean Foment Corporation | Corporación Andina de Fomento |
| CEPLAN | National Centre for Strategic Planning | Centro Nacional de Planeamiento Estratégico |
| CI | Conservation International | Conservación internacional |
| CIAM | Interregional Amazon Council | Consejo Interregional Amazónico |
| CIAT | International Centre for Tropical Agriculture | Centro Internacional de Agricultura Tropical |
| CIFOR | Centre for International Forestry Research | Centro para la Investigación Forestal Internacional |
| CIMA | Centre for the Conservation, Investigation and Management of Natural Areas | Centro de Conservación, Investigación y Manejo de Áreas Naturales |
| DAR | Law, Environment and Natural Resources | Derecho, Ambiente y Recursos Naturales |
| DCI | Joint Declaration of Intent (Peru, Norway and Germany) | Declaración Conjunta de Intención (DCI) entre Perú, Noruega y Alemania |
| DCZO | Directorate for Cadastre, Zoning and Planning | SERFOR- Dirección de Catastro, Zonificación y Ordenamiento |
| DEVIDA | National Commission for Development and Life without Drugs | Comisión Nacional para el Desarrollo y Vida sin Drogas |
| DGAAA | General Directorate of Agrarian Environmental Affairs | Dirección General de Asuntos Ambientales Agrarios |
| DGCCDRH | General Directorate of Climate Change, Desertification and Water Resources | Dirección General de Cambio Climático, Desertificación y Recursos Hídricos |
| DGDB | General Directorate of Biological Diversity | Dirección General de Diversidad Biológica |
| DGEVFPN | General Directorate of Assessment, Valuation and Finance of Natural Heritage | Dirección General de Evaluación, Valoración y Financiamiento del Patrimonio Natural |
| DGNA | General Directorate of Agrarian Businesses | Dirección General de Negocios Agrarios |
| DGOT | General Directorate of Territorial Planning | Dirección General de Ordenamiento Territorial |
| DGPA | General Directorate of Agrarian Policies | Dirección General de Políticas Agrarias |
| ECOSIRA | Management Contract Administrator for the El Sira Communal Reserve | Ejecutor de Contrato de Administración de la Reserva Comunal El Sira |
| ENBCC | National Strategy for Forests and Climate Change | Estrategia Nacional sobre Bosques y Cambio Climático |
| FAO | Food and Agriculture Organization of the United Nations | Organización de las Naciones Unidas para la Alimentación y la Agricultura |
| FIP | Forest Investment Plan | Plan de Inversión Forestal |
| FSP | Full Sized Project | |
| GCP | Green Commodities Programme | Programa de Commodities Verdes |
| GEF | Global Environment Facility | Fondo para el Medio Ambiente Mundial |
| GEFSEC | Global Environment Facility Secretariat | |

| | | |
|---|---|---|
| GIZ | German International Development Cooperation | Sociedad Alemana para la Cooperación Internacional |
| GOLOs | Local Government (municipal, district and province) | Gobiernos locales (Municipalidades distritales y provinciales) |
| GOREs | Regional Government | Gobiernos Regionales (Ucayali y Huánuco) |
| GRADE | Analysis for Development Group | Grupo de Análisis para el Desarrollo |
| IBC | Institute for the Common Good | Instituto del Bien Común |
| ICRAF | International Centre for Research into Agroforestry | Centro Internacional de Investigación Agroforestal |
| IIAP | Institute for Research in the Peruvian Amazon | Instituto de Investigaciones de la Amazonia Peruana |
| INIA | National Institute for Agrarian Research | Instituto Nacional de Investigación Agraria |
| IVITA | Veterinary Institute for Tropical and Highland Research | Instituto Veterinario de Investigaciones Tropicales y de Altura |
| JICA | Japanese International Cooperation Agency | Agencia Japonesa de Cooperación Internacional |
| KfW | German Development Bank | Banco de Desarrollo de Alemania KfW |
| MDA | Alternative Development Mechanisms | Mecanismos de Desarrollo Alterno |
| MEF - DIP | Ministry of Economy and Finance – Directorate of Public Investment | Ministerio de Economía y Finanzas - Dirección de Inversión Pública |
| MIMP | Ministry of Women and Vulnerable Populations | Ministerio de la Mujer y Poblaciones Vulnerables |
| MINAGRI | Ministry of Agriculture | |
| MINAM | Ministry of Environment | |
| MSP | Medium Sized Project | |
| OEFA | Organism for Environmental Evaluation and Fiscalization | Organismo de Evaluación y Fiscalización Ambiental |
| OOII | Indigenous Organizations | Organizaciones Indigenas a nivel Nacional (AIDESEP y CONAP) |
| OSINFOR | Organism for the Supervision of Forest Resources and Wildlife | Organismo de supervision de los Recursos Forestales y de Fauna Silvestre |
| PCM | Presidency of the Council of Ministers | Presidencia del Consejo de Ministros |
| PEPP | Pichis Palcazu Special Project | Proyecto Especial Pichis Palcazu |
| PIF | Project Identification Form | |
| PIP | Public Investment Project | Proyecto de Inversión Pública |
| PIR | GEF Project Implementation Report | |
| PNCB | National Programme for Forest Conservation | Programa Nacional de Conservación de Bosques |
| POPP | Programme and Operations Policies and Procedures | |
| PPG | Project Preparation Grant | |
| PPS | Sustainable Productive Landscapes Project in the Peruvian Amazon | Proyecto “Paisajes Productivos Sostenibles en la Amazonía Peruana” |
| PRODUCE | Ministry for Production | Ministerio de la Producción |
| SE Perú | Peru Ecosystem Services | Servicios Ecosistémicos Perú |
| SENACE | National Service for Certifications for Sustainable Investments | Servicio Nacional de Certificaciones para las Inversiones Sostenibles |
| SERFOR | National Forest and Wildlife Service | Servicio Nacional Forestal y de Fauna Silvestre |
| SERNANP | National Service for Protected Natural Areas | Servicio Nacional de Áreas Naturales Protegidas |
| SPDA | Peruvian Society for Environmental Law | Sociedad Peruana de Derecho Ambiental |
| STAP | GEF Scientific Technical Advisory Panel | |
| SUNARP | National Superintendency for Public Registries | Superintendencia Nacional de los Registros Públicos |

| | | |
|---|---|---|
| UNALM | La Molina National Agrarian University | Universidad Nacional Agraria La Molina |
| UNU | Ucayali National University | Universidad Nacional de Ucayali |
| UNAS | La Selva National Agrarian University | Universidad Nacional Agraria de la Selva |
| UNIA | National Intercultural University of the Amazon | - Universidad Nacional Intercultural de la Amazonía |
| WCS | Wildlife Conservation Society | |
| WWF | World Wildlife Fund | |
| ZEE | Economic Ecological Zoning | Zonificación Ecológica Económica |

## II. DEVELOPMENT CHALLENGE

**Context**

***The Peruvian Amazon***

*Overall description*

1. Peru's total forest area is approximately 73 million ha, almost 60% of national territory. Amazon forests (humid montane or *selva alta*[1] and lowland or *selva baja*) account for about 94% of the total forest area [1[2]], with an area of 69,356,948ha[3]: this includes 6,821,000ha of naturally regenerated secondary forest and 993,000 ha of planted forest[4]. Two-thirds of this area is under forest management [5]: forests in permanent production (concessions and reserves) amount to around 18 million ha (26%); protected areas amount to approximately 16.3 million ha (23.4%); areas of rainforest titled to native communities cover approximately 11.5 million ha (14.5%) and there are over 5 million ha of forest in other categories (7.4%) [2]. The land rights of native communities are recognised through property titles on land that is suitable for agriculture or grazing, and usufruct rights on forest lands.

2. Peruvian rainforests contain 23% and 44%, respectively, of known tropical plant and bird diversity in the tropics (IUCN, 1996). The varied topography (200 to 2000 m.a.s.l.) and associated annual rainfall, ranging from 1100 - 5000 mm, provide conditions for numerous species to thrive [8].

3. Nearly 60% of Peru's national territory is considered part of the Amazon. Despite the relatively large area, the Amazon region of Peru is markedly different and isolated from the rest of the country. To the west, the cooler sierra and drier coastal regions are stark contrasts to the hot and humid tropical forest. For centuries, the high Andes mountains have made access to the lowland Amazon region difficult, but new access roads and improved airports have facilitated a rapid change in the landscape.

4. The natural vegetation in the Amazon region is dominated by humid tropical forest. Over the region as a whole, around 9.5% of the area has been deforested and converted to a combination of grasslands, secondary forest and agriculture (see Additional Annex A, Table 7).

5. Ucayali and other regions in the Peruvian Amazon remain some of the country's poorest areas, Ucayali's contribution to the national Gross Domestic Product (GDP) was 0.9% in 2013 (INEI 2013). Over 13.4% of the population is considered poor and 2.1% as measured by earning less than US$1 day-1 (INEI, 2013). Poverty is also reflected by other quality of life measures. For instance, chronic malnutrition affects 24.5% of rural children below age five (INEI, 2013), anaemia and vitamin A deficiencies are widespread, and the incidences of malaria, dengue fever and persistent diarrhoea continue to rise (Dirección Regional de Salud, 1997) [8].

6. By 2014, Peru presents a Gender Inequality Index (GII) of 0.406, improving the situation recorded in 2000 (0.527) and in 2006 (0.441), however, at the level of the Peruvian Amazon the situation of women still presents serious disadvantages compared to men. The Peruvian Amazon is still a territory with high gender inequality on regard maternal mortality ratio, adolescent birth rate, education or labour force participation rate.[5]

7. According to INEI (2011), with data from the Native Communities Census of 2007, indigenous peoples constitute more than 10% of the population of the Peruvian Amazon. In the project's target area there are a total of 4,413 indigenous inhabitants, or around 5% of the total population (source: INEI Census 2007 and Indigenous Organizations, 2016).

***Farmer types in the Peruvian Amazon as a whole [9]***

8. Family producers manage around 3.5 million hectares in the Amazon region, almost 50% of the total area without forest [9]. 20% of this area is under fallow. Individual farmers account for around 98% of the farm units in all altitudinal zones; they control around 97% of the agricultural area but only around 24% of the non-agricultural area (see Additional Annex A).

[1] Including "*rupa-rupa*" between 400 and 1,000m and "*yungas*" between 1,000 and 3,600m.
[2] Number in square brackets are cross-references to the bibliography at the end of the document
[3] 2013 estimate [2]
[4] 2010 estimate [1]
[5] http://hdr.undp.org/es/composite/GII

9. Small farmers produce annual and biannual crops for consumption or sale in local markets (cassava, plantain, maize, rice and root crops) as well as fruit such as papaya, guava, pineapple and coconut. Many of producers are in an intermediate position between subsistence and market production. These groups complement their income with other sources such as small livestock production (poultry and pigs) as well as daily employment on the farms of medium and large scale producers.

10. In all districts there are specialized market-oriented farmers, who associate the production of annual crops with perennials (oil palm, cacao and coffee) for export or domestic markets, and/or cattle. In general, although farm sizes are typically small, due to the existence of incentives these producers have the capital and capacity to produce permanent crops that would otherwise be only found among medium-scale producers, such as oil palm and cacao in Irazola, and annatto in Codo de Pozuzo. In Codo de Pozuzo, small, medium and large farmers all carry out cattle production.

***Crop types***

11. Overall, coffee is the dominant crop in the Peruvian Amazon, covering around 40% of the area of family farms across all zones (see Additional Annex A, Figure 10); it is particularly significant in the higher altitude yungas where it occupies around 70% of the area of farms. In the three target provinces, however, coffee is only of minor importance, with a total of only 867ha reported in the 2012 agricultural census (754.25ha in Padre Abad, 81.1ha in Puerto Inca and 41.15ha in Coronel Portillo).

12. In the middle altitude foothill forest[6] and lower altitude "low forest", there is a greater diversity of crops, with no single dominant crop as is the case with coffee in the yungas. Cacao is most important in the middle altitude foothill forest or "*selva alta*"; and oil palm is only grown in the lower altitude "low forest". In the low altitude forest zone, annual crops are more important than perennials; overall, plantain is the most important crop here.

**Policy and regulatory context**

13. The principal strategy document to which this project responds is the National Strategy for Forests and Climate Change (ENBCC). As shown in Figure 1, the ENBCC seeks to reduce the loss and degradation of forests, and thereby GHG emissions linked to the LULUCF sector, and improve the resilience of the forest landscape and the population that depends on these ecosystems, with special emphasis on indigenous and peasant communities, to reduce their vulnerability to climate change. This is to be achieved through the promotion of sustainable competitive and climate resilient agriculture and ranching; increasing forest value through SFM, including community-based forest management; reducing illegal/informal activities and strengthening monitoring, supervision, enforcement, control, oversight and sanctions; reducing the impacts of economic development activities on forests; and completing forest zoning and planning, and the provision of rights on forest resources and lands.

14. The Joint Declaration of Intent between the Government of the Republic of Peru, the Government of the Kingdom of Norway and the Government of the Federal Republic of Germany on "Cooperation on reducing greenhouse gas emissions from deforestation and forest degradation (REDD+1) and promoting sustainable development in Peru"[7] aims to:

a. contribute to significant reductions in greenhouse gas emissions from deforestation and forest degradation in Peru;

b. contribute to the achievement of the target of zero net emissions from land use change and forestry in Peru by 2021 and the national target of reducing deforestation by 50% by 2017 and additional reductions thereafter; and

c. in the context of a) and b), contribute to the sustainable development of Peru's agricultural, forestry, and mining sectors.

15. The Intended Nationally Determined Contribution (INDC) of Peru to the UNFCCC, submitted in September 2015, envisages a reduction of emissions equivalent to 30% in relation to the Greenhouse Gas (GHG) emissions of the projected Business as Usual scenario (BaU) in 2030; the Peruvian State considers that a 20% reduction

[6] "*Selva alta"* is translated here as "foothill forest" rather than "high forest" in order to avoid confusion with high altitude forest or primary forest.

[7] https://www.regjeringen.no/contentassets/b324ccc0cf88419fab88f2f4c7101f20/declarationofintentperu.pdf

will be implemented through domestic investment and expenses, from public and private resources (non-conditional proposal), and the remaining 10% is subject to the availability of international financing and the existence of favorable conditions (conditional proposal)[8].

16. The Vision of the country's National Biodiversity Strategy and Action Plan 2014-2018 is that, by 2021, Peru will be conserving and rationally using its megabiodiversity and revaluing its associated traditional knowledge, for the satisfaction of the basic needs and wellbeing of current and future generations within a framework of sustainable, inclusive and competitive development[9].

17. As reported by Peru's President at the 71st session of the UN General Assembly, Peru's public policies and government plans coincide with the Sustainable Development Goals (SDG), including access to water, education, and healthcare for all Peruvians, among other services in order to reduce poverty. The current administration will provide significant investments prioritizing the Amazonia and High-Andean areas, for example by promoting the implementation of innovative systems for recollecting and harvesting water in rural areas and headwaters. Another priority linked to SDG is the promotion of sustainable economic growth linked to terrestrial and marine ecosystems, as well as efforts to mitigate and improve resilience to climate change.

18. Peru is committed to become a member of the Organisation for Economic Co-operation and Development (OECD) by 2021. As part of the OECD Country Programme since 2014, Peru is working on improving public policies for more inclusive growth, focusing around five key areas: economic growth; public governance, anti-corruption and transparency; human capital and productivity; and environment. The country is participating in OECD bodies and beginning to adhere to OECD Legal Instruments.

19. The principal policy, regulatory and procedural provisions of relevance to the environmental issues affecting the project area and comparable areas elsewhere in the Peruvian Amazon are as follows [21]:

- Land and Agriculture Laws govern land tenure and agricultural production systems, including both individual private property and communal rights.
- The Forestry and Wildlife Law—oversees management of forest landscapes and wildlife resources.
- The Biofuels Promotion Law—provides incentives and standards designed to promote the use and consumption of liquid biofuels.

20. The Ministry of Agriculture and Irrigation, the Ministry of Environment, the Ministry of Energy and Mines and the Regional Governments implement these laws, a situation which requires effective coordination between these sectors, a fundamental aspect of the current decentralization process in the country.

***The Land and Agriculture Laws***

21. The Political Constitution of 1993 supports the regulations governing land tenure and explicitly guarantees the property rights for land dedicated to agriculture for private individuals, communal groups and other types of associations. This fundamental legal basis is in line with the Agriculture Law 19912, which replaced the Agrarian Reform Law 1969 (DL 17716) and is further consolidated in the Land Law 19953, which has several articles in support of agro-industry. It reiterates the Constitution's commitment to economic pluralism and the right of all individuals to acquire and own land, including men and women, communities, and incorporated legal entities, both national and foreign. The Agriculture Law and Land Law establish norms for the use and allocation of lands located within montane cloud and lowland tropical forest regions, and are implemented by the Ministry of Agriculture and Irrigation. These laws are complemented by Legislative decree 8385, a regulation Congress approved in 1997 promoting the development of agricultural investments in areas at risk for terrorism or that are economically depressed. Lands identified with a principal land use capacity as forest should be governed and managed according to the laws that deal with the forest sector, and forest cover maintained or restored.

***The Forestry and Wildlife Law***

22. According to the Forestry and Wildlife Law (Ley N° 29763 of 2011), forest resources are considered as natural heritage: forest resources in this case are defined as natural forests, forest plantations, lands with 'forestry' and 'protection' principal land use capacity (see paragraph 22) and other components of terrestrial and aquatic flora including its genetic diversity.

23. The 'forest' category includes all those lands with an intrinsic value, with ecological or edaphic characteristics typical of forests, or with a capacity for the permanent and sustained production of forest goods

[8] http://www4.unfccc.int/ndcregistry/PublishedDocuments/Peru%20First/iNDC%20Per%C3%BA%20english.pdf
[9] https://www.cbd.int/doc/world/pe/pe-nbsap-v2-es.pdf

and services; the 'protection forests' category includes lands that are ecologically or edaphically fragile and are not appropriate for timber exploitation nor eligible to be classified for uses that might lead to their conversion or alteration (deforestation for agriculture) or the removal of their soils (for example for mining). Lands under these two categories, with or without forest cover, are considered forestry heritage (*patrimonio forestal)*; the conversion of those lands to agriculture is strictly prohibited, and they should be reforested if they have been previously deforested. The Forest Service (SERFOR) is responsible for monitoring and enforcing compliance with these provisions.

***The Biofuels Promotion Law***

24. The 2003 law governing biofuels establishes the production of biofuels as a national strategic priority. This determination is made using standard economic justification (e.g., economic growth and job creation) but also includes criteria linked to climate change mitigation and to the potential of increased rural investment to provide an alternative development model that can compete with the cultivation of crops used to make illicit drugs. The law and associated regulations include measures to foster agro-industrial development in the production and transformation of biofuel feedstocks, including palm oil. Since 2010, diesel in Peru is mandated to have a 5-percent biodiesel content. Despite this requirement, national production of biodiesel has been limited due to price undercutting by imports from Argentina (the required biodiesel in the mix can be of any vegetable origin and can be sourced nationally or internationally); however there are significant initiatives underway to lobby for changes in the biofuel policy, which may potentially result in significant increases in demand, with corresponding increase in the significance of oil palm production for biodiesel as a driver of deforestation.

***The Decentralization Process and Regional Governments***

25. After several unsuccessful decentralization attempts, the legal entity of region became official, and regional governments were elected to manage the departments of Peru on November 20, 2002. Under the new arrangement, the former 24 departments plus the Callao Province have become regional jurisdictions. Unlike the earlier departments, regions have an elected government and have a wide array of responsibilities within their jurisdiction. Under the 2002 Law of Foundations for Decentralization and the Organic Law of Regional Governments, there is an ongoing process of transfer of functions from the central government ministries and other institutions to the regions. The decentralization process is widely considered a social and political imperative, with 96.4% of the agreed functions transferred at the end of 2013 (USAID/Peru, 2014). However, it is as yet an unfinished process with different ministries having carried out the process in different forms and speeds, and with some sectors arguing for a recentralization of certain functions (USAID/Peru, 2014). Regional governments often voice the complaint that they have received added administrative duties without receiving the funding and fiscal independence to execute their new responsibilities adequately11. The National Assembly of Regional Governments (Asamblea Nacional de Gobiernos Regionales – ANGR) has voiced its concerns repeatedly that the decentralization process has lost momentum and strategic direction in recent years (ANGR, 2014).

**Key institutional actors**

26. The two principal institutional actors in the project are the following:

- The **Ministry of Environment (MINAM),** which was created in 2008 as the administrative entity charged with implementing the General Environment Law 20058. This law dictated the development of a decentralized land-use planning process intended to support the sustainable development of Peru's renewable natural resources. The task of overseeing and coordinating this process is given to the General Directorate of Territorial Planning (Dirección General de Ordenamiento Territorial – DGOT), an administrative unit within MINAM charged with coordinating, amongst other functions, the land-use zoning process.
- The **Ministry of Agriculture (MINAGRI)**, which was created in 1943 to coordinate and implement national agricultural policy. The Ministry was renamed Ministry of Agriculture and Irrigation (Ministerio de Agricultura y Riego – MINAGRI) in 2013 to better reflect the growing importance of irrigation in the Peruvian agricultural sector.

27. Further detail on institutional and other actors is provided in the Stakeholder Engagement Plan (Additional Annex O).

**Institutional and legal framework for land use planning and land use change authorisations**

28. There is a solid legislative and regulatory framework for spatial planning of forests and other lands in Peru, including the Amazon region: this provides for territorial land use planning, ecological and economic zoning (ZEE), forest zoning (*zonificación forestal*) and forest use categorization (*ordenamiento forestal*). This has been accompanied by developments in procedural frameworks, including MINAM's 2013 Methodological Guidance Document for economic and ecological zoning (ZEE), and the SERFOR's 2016 Methodological Guide for Forest Zoning (Executive Resolution N° 168-2016-SERFOR –DE). These instruments generally lack gender and inter-cultural approaches.

29. MINAM is the entity responsible for overseeing ZEE and OT, through its Viceministry for the Strategic Development of Natural Resources. Regional and local governments are responsible for executing ZEE and OT in their areas of jurisdiction.

30. A major characteristic of MINAM's approach to land planning is a consultation component that ensures that stakeholders contribute to the land use planning process from the beginning to end – in contrast with a public comment period, which often typifies environmental impact studies designed to facilitate the implementation of a project rather than seek substantive input on development options (FAO, 1997).

31. Procedures for the classification of lands according to principal use category (CUM), Ecological and Economic Zoning (ZEE), Territorial Planning (*Ordenamiento Territorial*) and land titling are summarized in Additional Annex C.

**Target areas**

***Selection criteria***

32. The project will work in 8 districts located in the Regions of Ucayali and Huanuco in the Peruvian Amazon (see Table 1 and Figure 4 in Additional Annex A).

**Table 1. Administrative units comprising the target area**

| Region | Province | District |
|---|---|---|
| Ucayali | Coronel Portillo | Nueva Requena |
| | Padre Abad | Curimana, Padre Abad, Irazola (since 2015 divided into two new districts, Alexander von Humboldt and Neshuya) |
| Huanuco | Puerto Inca | Tournavista, Puerto Inca, Codo de Pozuzo, Yuyapichis, Honoria |

***Characteristics of target localities***

*Climate*

33. Mean annual rainfall in the Aguaytia Basin is 2300mm, ranging from 1700mm in Pucallpa to 3000mm in Aguaytía, a town in the foothills about 160 km west-southwest of Pucallpa. Rainfall follows a bimodal pattern, with wet months from February-May and September-November, and dry months from June-August and December-January. The mean annual temperature of Pucallpa is 25$^{o}$C with a mean daily high and low of 31$^{o}$C and 20$^{o}$C, respectively. Soils in the Ucayali region include those found in alluvial, riverine systems (where pH is about 7.7 and available P is 15ppm), and poorer upland soils that are acidic (pH 4.4 and 2ppm of available P) [8].

*Territorial categories*

34. The territorial categories, including protected areas, native communities, production forests, rural properties and others, that constitute the target area are shown in Table 9 and Figure 5 (in Additional Annex A). The principal categories are non-categorised (34%), permanente production forests (29%), titled native communities (18%), rural properties (13%) and protected areas (6%).

*History of settlement*

35. Native Shipibo-Conibo communities have long inhabited the Ucayali region along the rivers, which served as the main transportation routes. Between 1880 and 1940, Europeans exploited Amazonian rubber tree resources that caused an economic revolution in the region, marking the first links to international markets. Large-scale settlement of the area began in the 1940s after construction of a road linking a major Amazon tributary, the Ucayali River, with the capital city, Lima. Today, economic activity in the Ucayali region is highly dependent upon the natural forest and soil resources. Agriculture, hunting and forest activities produce 31%,

and other manufacturing industries contribute 25%, of the gross regional product. Poverty is commonplace in the Ucayali region [7].

36. Human settlement patterns in the Ucayali region are heterogeneous, much like the entire Peruvian Amazon. In many areas, road and river access can be difficult or non-existent, especially since seasonal flooding can affect all means of transportation. Population density ranges from 0.22 persons $km^{-2}$ in the more remote eastern province to 9.3 persons km-2 in the Coronel Portillo province, which contains the city of Pucallpa. Average population density for Ucayali is 4.1 and the overall of the Peruvian Amazon is 3 persons $km^{-2}$ (INEI, 1999).

37. The Ucayali region follows a trend toward urbanization that is apparent in the greater Peruvian Amazon (Aramburú, 1984). In 1996, only 35% of the Ucayali population lived in rural areas. According to the Ucayali agricultural census (2012), 25,580 farmers with approximately 88,150 household members cultivated approximately 2.3 million ha.

*Inhabitants*

38. The total population of the target districts in 2015 was 96,381: those located in the region of Ucayali are the most populated, with around 67% of the total in 53% of the overall project area[10]. Socioeconomic conditions in the target localities are significantly inferior to the national average, with Human Development Index (HDI) ratings ranging from 0.2678 in Codo del Pozuzo to 0.4161 in Padre Abad, compared to a national rating of 0.5058. Forest areas, including those where the project is located, have a level of extreme poverty of 10.9%, only second to the rural Andes; however, they have also seen the highest rates of reduction of poverty levels, by 17.7% between in 2009 and 2015.

39. The principal socio-productive stakeholders in the target areas are informal settlers (coca growers, loggers, miners etc.), subsistence farmers (typically immigrants from Andean areas dedicated to basic agriculture), members of native communities (principally in areas dominated by primary forests), recently settled farmers (Andean immigrants), established colonist farmers and ranchers, intermediate level agrarian producers and commercial scale agrarian producers (see characterizations in Additional Annex B Table 10).

*Gender*

40. According to the Gender Analysis carried out in the project area during the PPG phase through both direct and indirect consultation (2014, UN Women CENAGRO 2012), the main significant gaps identified between men and women are:

a. Women are marginalized from the ownership and management of land, despite contributing significantly to the labour force: only 18.3% of the 16,120 Agricultural Units (UA), and 13.4% of the area that is cultivated, is owned and managed by women, while there is evidence of a high level of female participation in agricultural work on the Agrarian Units in charge by men.
b. 81% of male producers receive training or business support compared to only 18% of female producers.
c. The female workforce is younger than the male: 53.5% of men and 57.1% of women working in Agricultural Units are under 45 years of age.
d. Women are marginalized from agricultural intensification: 56.5% of men but only 52.2% of women report using intensified agricultural technologies such as seeds, organic manure, seedlings, chemical fertilizers and insecticides, non-chemical or biological insecticides, herbicides, fungicides).
e. Educational levels are lower among women than men: 95.6% of the men who are in charge of an UA have some degree of education, compared to 88.6% of female producers.
f. In indigenous communities of Ucayali (2007 INEI), there is also a marked gender differentiation of roles, with 70% of men reported engaging in agriculture, livestock, hunting and forestry compared to 30% women.

41. Knowledge of biological control and organic certification is very low for both men and women, as is access to training and targeted technical assistance for agriculture (80-81% of both men and women reported lacking access) and access to permanent work (around 95-96% of men and women working in the agricultural sector work on a temporary basis, while only 4-5% have permanent work.

42. Table 2 summarizes gender differences in roles between men and women in Ucayali.

[10] INEI, 2015. http://proyectos.inei.gob.pe/web/poblacion/

**Table 2. Roles perceived by men and women in the Peruvian Amazon (Ucayali) [6]**

| Men | Women |
|---|---|
| - Provision of food from the cropping area, hunting, gathering and fishing in locations far away from the home<br>- Responsible for the provision of materials for the construction of houses, furniture, canoes and tools<br>- Productive activities focused not only on meeting family consumption needs, but on supplying local markets, generating money for the purchase in towns of manufactured goods.<br>- Mainly responsible for commercial tasks and for representation in the community and with external institutions<br>- Migration for work to other areas of the Amazon, or to the capital | - Provisioning of the house with water, cooking fuel and food from locations close to the house<br>- Preparation and administration of daily food, as well as family health care<br>- Production of handicrafts, such as textiles, baskets, ceramics and ornaments for the family or for sale<br>- Low visibility of participation in community planning and decision-making, or in trips with their spouses to urban centres for purchasing or selling goods<br>- When men emigrate to urban centres for work, women take on many of the roles and responsibilities traditionally assigned to men. |

43. According to the Gender Analysis for Amazonia (Loreto, Madre de Dios, San Martín and Ucayali)[11], forest management activities are also differentiated by gender: while men tend to be interested in forests for the marketing of products (principally timber), women are dedicated to the use and management of non-timber forest products for subsistence, food, small-scale agriculture, and health (firewood, medicine, forage and natural fertilizers). The same study showed that women tend to have a very specialized knowledge of forests in relation to species diversity, uses, and conservation practices. Men, by contrast, when receiving benefits from timber extraction, tend to have less motivation for their conservation. These differences affect the degree of vulnerability and the response capacity of women and men to the impacts of climate change, for example. Although indigenous women depend more on forest resources and wildlife, they do not participate in decision-making processes and their concerns are often not valued by community leaders.

44. In the project area, there is at present a relatively high level of female representation at political level: the Province of Puerto Inca (Huánuco) has a (re-elected) female mayor, and three of the five districts have female mayors. Significant barriers still remain, however, to the access by women to productive and financial resources, including limited technical assistance and training for the improvement of productivity. Few women own lands, and those that do typically have small areas, of poor quality. At national level, 20.3% of farm units are managed by women, but only 4.7% of women farmers have property titles.

*Indigenous groups*

45. The principal indigenous groups in the districts targeted by the project are shown in Additional Annex B Table 13. Indigenous people represent around 5% of the total population.

46. The lands legally recognized as belonging to the native communities are shown in Figure 5. The indigenous people are by no means confined to these areas, however, carrying out activities such as hunting, fishing and non-timber forest product (NTFP) collection in a range of localities specifically identified by them throughout the landscape (see Figure 6 in Additional Annex A).

47. The native communities in the target area are largely typical of those found throughout the Amazon basin, being semi-nuclear, with houses made of local materials, some communal facilities and typically low levels of access to basic services.

48. The system of government imposed on native communities in accordance with the Law for Native Communities, based on the election of a "Community Chief" and a governing board, has led to difficulties because it did not reflect the traditional process of choosing leaders; however, it has progressively been accepted. There are also a number of organizations that function beyond the communities themselves, such as local and regional federations, whose leaders live in different communities but meet periodically; these

[11] http://www.unfpa.org.pe/WebEspeciales/2013/Nov2013/25NOV/USAID-PRODES-Diagnostico-Genero-Amazonía.pdf

organizations are normally focused on resolving identified threats identified by community leaders, in discussion with community members. Modern communication technology is increasingly used in these processes.

49. Indigenous people use "life plans" (*planes de vida*) to link their indigenous visions with the technical planning of the management of their lands and resources. They are considered by them as "presentation letters" to external actors who wish to relate or work with their communities. Life plans, which can also be considered as participatory local development plans, are developed by using their ancestral knowledge to recognise their problems, reflect on the use of their natural resources, identify challenges and consider the future without abandoning their traditional practices.

50. In general, everyday life in the Amazon basin is highly linked to family relations, under conditions of mutual help as the fundamental form of social structure and community life. Work patterns in the native communities are based on a system of reciprocity, rather than the use of paid daily labour. Community work (*minga*) between family, neighbours and friends is very important; this used for field work and other task such as house building, canoe building and community cleaning.

51. It is likely that the project area includes some indigenous people, from the Kakataibo group (see Figure 7 in Additional Annex A), who are in conditions of isolation or initial contact, located in an area classified under CUM as a Zone of Strict Protection. Following initial initiatives in 1997, further studies in 2016 resulted in confirmed sightings of these people, but these people have not yet received formal protection and are therefore in conditions of risk, including from hydrocarbon exploration and forest fragmentation.

*Migrants*

52. Migrants are also an important component of the rural population of the Amazon: their places of origin and forms of migration vary, ranging from direct migration to migration by stages and even circular migration. For example, most small and medium-scale family producers in Codo del Pozuzo are migrants originating from nearby localities in the provinces themselves or neighbouring provinces. Migration is not solely rural-rural or rural-urban, but also includes some recent cases of urban-rural migration.

53. In Codo del Pozuzo, the differences in the origins of producers result in differences in productive conditions and strategies. In this area, the small-scale and some of the medium-scale producers are migrants from nearby localities, while larger producers (described as "pioneers") are descendants of the first colonists of the area of Oxapampa, of Austrian/German origin: they have maintained their customs and productive activities, in particular cattle ranching.

54. The family producers in Irazola district are migrants from more distant regions such as Amazonas, Cajamarca, Piura, Apurímac, Huancavelica, Cusco, Puno, as well as some nearer localities such as Tingo María and Huánuco. The migrations from these different regions occurred in different waves and as a result of different expulsion factors: although poverty and limited resources are the predominant reasons for migration, in Irazola the migrants were also motivated by social violence and coca eradication campaigns.

55. The local population (as opposed to colonists) is chiefly composed of *mestizo* peoples who have been present in the area for several generations, in many cases mixed with indigenous people; as well as Kakataibo in Irazola and Codo del Pozuzo.

***Land use systems [***8***]***

56. The total area under production in the project's target localities in 2012 was 198,744ha (9.6% of the total) (source: CENAGRO, INEI). The areas by crop type are shown in Additional Annex B, Table 11. The principal determinants of the production selected in the area are summarized in Additional Annex E.

57. Farmers typically have diversified production strategies with a variety of agricultural activities and land uses. On average, annual crop production ranges from 1.3 ha for ranchers and oil palm producers to 2.6 ha for upland slash and-burn farmers. Riverine annual crops cover about 1.5 ha. Perennial crop production is greatest with oil palm farmers (5 ha) and least with riverine farmers and cattle ranchers (<2 ha). Fallow land on average comprises about 25% of the landholdings for all farm types.

58. Detailed descriptions of the different land use systems in the project area are presented in Additional Annex C.

*Income sources*

59. A variety of activities besides agricultural crops provide income. More than half of the survey respondents reported incomes from off-farm, non-farm labor and from pensions or other off-farm cash remittances. Nearly

20% sold cattle and 27% pigs and/or chickens to earn cash. Field observations revealed that many Aguaytía watershed farmers far from the roads cultivated coca for the illicit drug trade. Only 25% of the farmers (mainly those settled along the rivers) reported harvesting timber, mainly the softwoods bolaina (*Guazuma crinita*) and capirona (*Calycophyllum spruceanum*). Upland pioneer slash-and-burn farmers commonly produce charcoal from selected hardwood tree species such as Shihuahuaco or Cumaru (*Dipteryx odorata*) and Tahuarí (*Tabebuia* sp.). Markets as far away as Lima demand high-quality charcoal provided by these tropical tree species [8]. The relative importance of agriculture and livestock as income sources varies between altitude zones: livestock provides 15, 10 and 25% of income in the yungas, middle altitude and lower altitude belts respectively [9].

*Farmer organisations*

60. According to the 2012 Agricultural Census, 2,562 out of 16,158 producers belong to some kind of organization, the most common being Farmer Associations, Cocoa Producer Associations and Agrarian Cooperatives.

61. The main producer associations in the Ucayali benchmark area are Comité de Productores Agrarios de Nueva Requena y Bajo Aguaytía, Comité Central de Productores Agrarios de San Alejandro (COCEPASA), Asociación de Mujeres Campesinas de Ucayali (AMUCAU), Comité Central de Productores de Palma de Ucayali (COCEPU), Asociación de Productores de Leche de Ucayali (APROLEU), Centro de Promoción y Desarrollo Ganadero Forestal Ciudad Constitución, and the Asociación de Ganaderos y Agricultores Selva Central (GASEC). The Asociación de Productores de Semilla Mejorada (PROSEMA) is a group of 40 families that produces improved tree seed with ICRAF.

62. AMUCAU is the only organized women's group in Ucayali. As an organization representing approximately 600 families, it participates actively in numerous development projects and applies to the Ministry of Agriculture annually to receive permission to use riverine areas for cropping activities (see section 1.C.1.i). AMUCAU and PROSEMA are interested in sharing their experiences with other organizations in Peru and abroad. Both organizations consider themselves as technicians (developers and users of technical agricultural knowledge), but are not recognized as such by the government and others since they do not have formal qualifications.

*Government and policy makers*

63. Local policy makers include the mayors of municipalities and regional governors. Efforts to decentralize decision-making away from Lima and increase the management of budgetary decisions make these local positions more important than before. Decisions regarding forest concessions are also becoming more localized. Roundtable dialogues in the areas, San Alejandro and Ucayali, bring together groups with often-conflicting interests in management of the area.

64. Public Agencies that conduct activities within the benchmark site include regional directorates from the Ministries of Agriculture, Fisheries, Industry, Tourism and International Negotiations and Labour; The National Programme for Food Support (PRONAA); the National Fund for Social Compensation and Development (FONCODES); the National Commission for Development and Life without Drugs (DEVIDA); SERNANP and SERFOR; and ProAmazonia, from the Ministry of Agriculture.

65. National policy makers include ministries (mentioned above) and commissions or task forces from parliament members with direct influence on the Amazon such as the 'Amazon, Indigenous and Afro-Peruvian issues'; 'Environment and Ecology'; and 'Women' and 'Development'.

*Donors and international development agencies*

66. Donors and international development agencies contribute to alternative development programs to eradicate coca production. They include USAID, Winrock International, CARE, and the United Nations Office on Drugs and Crime (UNODC), through specific projects implemented by DEVIDA (formerly known as CONTRADROGAS). Proposed alternatives include cacao, coffee, cotton, peach palm, oil palm, and dairy processing plants.

*Research and development organizations*

67. The Consorcio para el Desarrollo Sostenible de Ucayali (CODESU) is an NGO founded with IDRC (International Development Research Centre of Canada) support in the 1990s. The consortium encourages inter-institutional collaboration, serves as a convener for discussions, and facilitates the implementation of numerous research and development projects. CODESU has achieved a degree of institutional sustainability by implementing the CONTRADROGAS (coca substitution) projects of the USAID/Winrock International.

68. Scientists and extension workers in national and international agricultural and forestry research systems comprise IIAP, INIA (Instituto Nacional de Investigación Agraria), IVITA, UNALM3 Forestry, Soils and Agronomy departments, UNAP, UNU, the Institute for the Common Good (IBC) and the Centre for Research and Management of Natural Areas (CIMA) which works in the Cordillera Azul and its buffer zone. International NGOs with local research stations and offices working in the region are ICRAF, CIFOR and CIAT.

69. Other NGOs and projects include WWF working with forest concession holders, Pronaturaleza, which leads a reforestation project, and Asociación para la Investigación y el Desarrollo Regional (AIDER) that works with native communities helping them with resource planning, especially for forests resources. One of AIDER's projects is the conservation of communal forests with Shipibo-Conibo communities, with the Foundation of Netherlands Volunteers (SNV).

**Threats and drivers**

70. The principal threat affecting the global environmental values of the Peruvian Amazon is the loss of forest cover. In 2001, the average annual deforestation rate for Amazon forests was estimated at 83,995ha/year, increasing to 113,504 ha/year by 2013 [2]. The business-as-usual scenario estimates that an additional 7.3 million hectares will be deforested by 2050, while the governance scenarios estimate 5.3 million hectares. However, the combined effect of roads, agriculture, cattle ranching, mining, hydroelectric power stations and the projected urban growth, could result in the deforestation of 19.6 million more hectares.

71. The selected target localities constitute one of the most significant hotspots of deforestation and forest degradation in the country over the last 15 years (see Figure 8 in Additional Annex A), and consequently have some of the lowest levels of forest cover in the lowland Amazon [11].

72. The principal causes of deforestation in the target areas are illegal logging and the conversion of forest to agriculture (see Additional Annex F for more detailed information and analyses of these processes).

***Drivers of deforestation***

*Determinants of production systems [9]*

73. The area cultivated by small and medium scale producers depends on a number of factors including availability of land, labour and financial resources. In the case of annual and biannual crops where land is available, labour is one of the most significant limiting factors. For perennial crops, access to financial capital crops is a key determinant, together with, in particular for small producers, the presence of support projects that allow access to credit and technology. A key example of the impact of projects in this regard is the expansion of cacao and oil palm in Irazola. The situation is different in the case of pasture, which farmers continue to expand under their own initiative and using their own capital, without reliance on project support. Typically pasture establishment is a strategy for occupying land rather than a productive strategy *per se*, which explains the existence of large areas of pasture with very low or nil stocking levels, for example in Irazola.

74. The origin of farmers is also a determinant of the nature of their productive activities. Immigrants tend to bring with them their customs, knowledge and productive practices, focused principally on agriculture, as distinct from the traditional agroforestry systems practised by many native and local *mestizo* people. There is also a relation between the origin of migrants and the initial capital invested in the establishment of agricultural activities. In many cases, this capital is related to the production of coca leaf. Migrant family producers typically move under the motivation of the availability of land and conditions (e.g. remote areas, limited control) for the establishment of coca crops. Although the relative importance and area of coca varies (according to factors such as the time of arrival of the migrants and the existence of eradication programmes), it is in all cases considered a strategic crop by producers for short term income generation, following which they can take advantage of incentives provided by coca eradication programmes, continue investing in the expansion, intensification and management of permanent crops such as cacao, coffee and oil palm, and/or continue to use coca as a source of additional income. Coca leaf production acts as a catalyst that allows small farmers rapidly to acquire capital and enter into value chains for commercial products and commodities, as intensive producers with technical capacities who contract labour. In many cases, the economic sustainability of these forms of production is reliant on the availability of ready cash generated through coca production.

75. Less important than coca as a source of initial capital is the extraction and sale of timber. This is typically led by timber operators and intermediaries, with limited interest or involvement by the farmers themselves. In general, timber production is a complementary activity, which can generate income for the establishment of permanent crops such as cacao and coffee, or livestock, following the felling of the original forest.

76. There is a continuous turnover of farmers, with some migrating to new areas while others continue to arrive. There are still people who arrive and acquire lands, who migrate to cities or to other areas of the Amazon, or who sell part of their lands to other, recently arrived, farmers.

77. Farmers who lack a single source of capital tend to diversify their activities inside and outside their plots. Coca production plays a strategic role in capitalizing farmers, and programmes for developing alternatives to coca are important drivers of social mobility.

***Migration and demographic growth***

78. The departments of Madre de Dios, Ucayali, San Martín and Loreto experienced the greatest demographic growth in the country between 1993 and 2007, during which period the population of Madre de Dios increased by more than 63% [12]. Over the last three census periods, the Ucayali region has also been a region of significant net immigration (with 267,000 immigrants, double the number of those who have emigrated); Huánuco showed net emigration (190,000 immigrants, but 2.7 times as many emigrants), however this was largely from its Andean portions, while the non-Andean areas showed net immigration. Rates of net immigration have significantly declined over the last two census periods. Migration from the Andes has principally been driven by the disparities in economic opportunities and poverty between the highlands and the Amazon. The discourse on deforestation in the Amazon refers to migrants as major deforestation agents, but the reality is more complex: while there was a net immigration of 20,303 people to the region between 1988 and 1993[12], between 2002 and 2007 the reverse was true, with a net *emigration* of 27,621 people from the region[13, 14].

***Infrastructure development [***10***]***

79. The opening of roads or access has been a driving force and a precursor to deforestation in the Amazon, since roads increase migration, human settlements, shifting cultivation (MINAM 2009) and land trafficking. The intensity and density of deforestation are directly related to the density of roads and the proximity to populated centres: in the period between 1999 and 2005, 75% of deforestation and degradation was located within 20km of a road (Oliveira et al. 2007). Although there are no studies on the Peruvian case, Brandão and Souza (2006) showed that the unofficial roads accounted for up to 80% of the road network in one region of the Brazilian Amazon; unofficial roads, built by the private sector to access natural resources, tend to grow faster than official roads (Perz et al. 2008) [10].

80. The current Amazon infrastructure includes areas established for oil exploitation in Loreto and gas exploitation in Cusco, as well as hydroelectric power plants such as Macchu Pichu and San Gabán, and thermal power plants (Dourojeanni et al. 2010). Since the mid-2000s, the Ministry of Energy and Mines (Ministerio de Energía y Minas, MINEM) has implemented an aggressive policy of allocation of hydrocarbon concession lots in the Amazon, in some cases overlapping with indigenous peoples' territories and protected natural areas. According to Gamboa (2009), between 2003 and 2009, hydrocarbon exploration and exploitation lots increased from 15% to over 70% of the Amazon area (55 million ha), including "technical evaluation" agreements with the multinational oil corporation Petrobras as well as lots that were abandoned or in conflict. In addition, there are now 15 hydroelectric dam projects in the pipeline with a potential for export to Brazil, some of which will be executed in the framework of an Electricity Supply Agreement signed between the governments of Peru and Brazil in June 2010.

***Economic and social development policies***

81. Deforestation is partly attributable to Government policies that have promoted resource extraction and agricultural production. Peru has the second largest forest area suitable for oil palm plantations among Amazonian countries, and the Government has declared oil palm cultivation to be in the national interest and put in place legal incentives for its cultivation [25], given the significant perceived economic opportunities that it presents, with potential to displace a significant percentage of the $300 to $400 million dollars of vegetable oil imports each year (IndexMundi, 2015)[21]. The expansion of smallholder palm oil plantations in the Peruvian Amazon has also been supported by the Government and UNODC/USAID on the understanding that it has compelling producer economics that can compete with those of illicit drug plantations, principally coca leaf [5].

[12] 154,918 people emigrated (32% to the Amazon, 18% to the highlands and 34% to Lima), while 175,223 immigrated (27% from the Amazon and 40% from the highlands) [12]

[13] 190,067 people emigrated and 162,442 people immigrated (26% from the Amazon and 40% from the highlands) [12]

[14] Available data do not make clear the urban/rural balance in the destinations of immigrants or in the origins of emigrants, which would be important determinants of the impacts of migration on natural resources.

82. In 2000, MINAG developed the 2000–2010 National Plan for Oil Palm Promotion, with a market-based approach. The plan intended to promote production nuclei or clusters in the departments of San Martín and Loreto, consolidating 50,000 ha. Several initiatives to develop oil palm plantations have been advancing in Puerto Inca and Yurimaguas (Dourojeanni et al. 2010). Technological development, demand and good prices for products derived from biofuel crops, together with incentive policies, foster replacement of forests by monoculture, even though there are around 825,000 ha immediately available for forest plantations (INRENA 2007). The Peruvian government has provided for the gradual application of biodiesel blends in diesel and of ethanol blends in gasoline, which has given an incentive to increase the areas of cultivation of biofuel crops such as oil palm, jatropha or pine nut, canola, sugar cane and wild cane (Velarde et al. 2010b), although only oil palm cultivation has expanded significantly [10]. Incentives include tax exemptions for investments in oil palm production in the Amazon and a mandate to mix 5% biodiesel in diesel oil by 2011 [25].

83. Oil palm production faces a number of financial and technical challenges, which suggest that it may not be an attractive alternative for all farmers. Low production levels threaten long-term financial viability: high output systems require relatively high levels of technology adoption with production levels dependent on fertilizer inputs and the multiplication and distribution of hybrid palm varieties. Although the Ministry of Agriculture has provided loans for the purchase of fertilizers at cost, sometimes farmers have resold them or applied them on other crops (White et al., 2005a). Production problems also include adverse weather and a tendency on the part of some farmers to neglect plantation maintenance. A realistic low production of 8t/ha generates a NPV of -US$634/ha over the 20-year horizon and associated returns to labor of US$2.59/workday, which is below the minimum wage. Despite the low earnings of oil palm production, farmers are often willing to become involved in Government projects in support of the sector: the benefits of land title and improved road access, for example, have the ability to overcome low earnings prospects (White et al., 2005a) [8].

84. The process of decentralization has allowed the Regional Governments of San Martín, Loreto, Huánuco and Ucayali to carry out actions in support of the development of the oil palm value chain, including the implementation of public investment projects to promote its planting on the granting of lands to companies interested in establishing large plantations. In general, the policies of regional governments have generally had the aim of promoting the sector, as a contribution to rural development [22].

85. Institutional, legal and financial incentives play a key role in influencing the decisions of family producers on their production systems; synergies between incentives may have significant implications for the expansion and advance of the agricultural/deforestation frontier; and perverse incentives may promote the change of use of forests to crops, as in the case of the provision of *constancias de posesión* and titling, promoted by DEVIDA programmes aimed at combatting coca leaf production. Further information and analyses of the implications of incentive systems for land use and land use change dynamics are provided in

***Global markets***

86. Despite the recession in 2009, chocolate consumption continues to grow at a rate of around 2% per year (LMC International, 2012). Demand for cocoa beans is concentrated in Europe (37% of world consumption) followed by North America (24%) and Asia (16%), and it is in these regions that the main milling and processing plants are located, as well as the main chocolate companies such as Hershey's, Mars and Nestlé. There is currently a deficit in global cocoa supply, which is forecast to continue in the long term.

***Intensification and deforestation***

87. To reduce environmental impacts of land-extensive agricultural practices (i.e. slash-and-burn), research and policy initiatives can promote cropping practices that are more sedentary. Labor-intensive production of high-value perennial crops can accomplish this by absorbing labor into sedentary production while still providing high returns to labor. Agroforestry techniques that incorporate trees with high-value products into pastures and fallows also have the potential to do so. Nevertheless, the realization of intensive production with associated financial benefits may encourage more deforestation in two ways. First, if new practices or crops are sufficiently profitable, farmers may invest in labor-saving capital equipment or simply hire more labor to expand production into the forest margins. Second, more settlers arriving to the region to earn a living from improved agricultural practices may exacerbate deforestation rates [7].

***Illegal crops***

88. Coca cultivation is an ancestral practice developed in the areas of the upland Amazon and rainforest–highland transition zone (ceja de selva) (Gómez et al. 2008). Since 1980, due to its high profitability, coca growing to meet the global demand for cocaine has been a promising activity for farmers and settlers, offering them an attractive alternative given the volatile prices of conventional, legal crops such as maize, cacao and coffee. In

2010 legal coca production covered 17,915 ha in forest regions (INEI 2010), and Peru's total coca-growing area was larger than that in Colombia (UNODC 2011).

89. Despite the significance of coca cultivation as a driver of deforestation, eradication efforts have also had negative effects. As aerial eradication efforts increased, coca fields became smaller and in more remote areas to avoid detection. Chemical sprays used in the eradication of coca are known to affect the productivity of agricultural crops for many years; as a result, some farmers have been forced to migrate to new areas and to turn to the production of cassava, plantain, and charcoal, cultivating larger fields than those required for coca, again encouraging deforestation [7].

90. Alternative development initiatives aimed at reducing coca production have become one of the main determinants of current land use patterns in areas such as Irazola. The incentives provided through these initiatives, which facilitate access to capital (in addition to that generated through the coca production itself), as well as knowledge and technology, accelerate processes of social transformation and consolidation of producers and the transition to more entrepreneurial systems [9]. Improved access provided by Government road programmes, intended to spur legal development and facilitate alternative crops to markets, has also exacerbated deforestation (Krauss, 2001) [7].

91. Ill-defined property rights together with unclear forest management procedures and monitoring have created conditions for illegal logging activity (for more details on the forestry law, see section 4.C.2.b). [7]

**Value chains**

92. Cocoa production in Peru was 61,000 tons in 2013, of which 32,061 tons were exported, with an FOB value of US$88,893,000 (ITC, 2014).

93. The Peruvian cocoa market has been dominated by conventional varieties, especially through the introduction of the hybrid clone CCN51. However, since global market tendencies began to favor high quality cocoa from sustainable sources, producers have had incentives to sow CFdA based on Criollo and Nativo varieties (Larrea & Lynch, 2012). Since 1930, cocoa production has passed through various stages. Until 1970 it was solely aimed at national demand. From 1980, the crop was the subject of interest by international cooperation programmes, which supported alternative development and the increase of international demand (IICA, 2009).

94. Although from the 1980s and 1990s, production was affected by pests, socio-political problems and the drug trade in production areas (Conchanya et al., 2011), national supply has increased exponentially in recent years. Peru has traditionally been a small cocoa producer, with low value products on low profile markets. Between 2008 and 2012, a USAID project resulted in a first production in 24.000ha of cacao, which was well accepted on international markets (USAID, 2012).

95. There are around 30,000 cocoa producers in the country. Most producers are poor and also cultivate complementary crops and other subsistence activities. In most cocoa production zones, plantation sizes are mostly less than 2ha per family (IICA, 2009).

**Implications of deforestation**

96. The implications of deforestation in terms of land degradation, biodiversity and climate change are discussed in Additional Annex D.

**Baseline investments**

97. Details of relevant baseline investments by the Government of Peru and cooperation agencies are provided in Additional Annex H; the most important elements of these including the following in relation to forest management and the combat of forest degradation and deforestation:

- Through the **National Program for Forest Conservation (PNCB)**, the Ministry of Environment (MINAM) is investing in the reduction of deforestation nationwide and thereby to climate change mitigation. The PNCB had an initial target of conserving 54 million ha, but this has increased over time, and it is now aimed that by 2021 net GHG emissions resulting from deforestation will be on the decrease. The annual public budget of PNCB at present is USD 5.2 million (an estimate of USD 31.2 million for the 6 year duration of the project). In addition to that, currently PNCB receives funding for REDD+ readiness from FCPF (R-PP) (USD 3.8 million for 2015-2017), and the REDD+ MINAM Project (KfW) (USD 7 million 2013-2016).
- **The Joint Declaration of Intent (DCI) between Peru, Norway and Germany for the promotion of sustainable development in Peru (MINAM/UNDP, US$300 million between 2014 and 2020)** aims to

contribute to significant reductions in greenhouse gas emissions from deforestation and forest degradation, helping to achieve the target of zero net emissions from land use change by 2021 and the national target of reducing deforestation by 50% by 2017 and further reductions from then on, as well as contributing to sustainable development of the agricultural and forestry sectors and to environmentally appropriate mining in Peru. The DCI is national in scope, focusing especially in the Amazon basin. The agreement has led to an initial disbursement of 6.1 million for 2016-2018, with future disbursements expected to total approx US$280 million for 2017-2021, which includes up to US$250 million for Results-based Payments.

- The **Programme for the promotion and sustainable management of forest production in Peru** (SERFOR/KfW, USD$123 million between 2017 and 2021) has the aim of increased productivity and competitiveness in forest production in Peru, in the provinces of Ucayali, Huánuco (in both of which this project will work), Loreto, San Martin, Pasco, Junín, Cusco, Apurimac and Ancash.
- The Japanese International Cooperation Agency (JICA) is supporting the **Project for the Development of Capacities for Forest Conservation and REDD+ Mechanisms** (JICA/MINAM-PNCB, U$5,900,000 between 2014 and 2017), and the **Programme for Forest Conservation** (US$57 million between 2017-2021, coinciding with the project period). Both initiatives cover the provinces of Amazonas, Lambayeque, Loreto, Piura, San Martín, Tumbes and Ucayali, and have the objective of capacity generation and strengthening of target groups for forest conservation, mechanisms for the reduction of emissions from deforestation and degradation (REDD+.
- The IFC-funded **Forest Investment Plan for Peru (FIP)** (MINAM – BID/ICF US$50 million, 2016-2021) has the general objective of reducing deforestation, forest degradation and greenhouse gas emissions, as well as improving carbon stocks in sustainable productive landscapes, and the specific objectives of contributing to the strengthening of governance and forest planning, promoting sustainable forest management, promoting the recovery of degraded areas and forest conservation; and contributing to the control of deforestation in Amazon forests. It works at national level, and at territorial level in three zones: Zone 1 the Yurimaguas-Tarapoto corridor, Zone 2 the Atalaya (Ucayali) Corridor (coinciding with this project) and Zone 3 the Iñapari-Puerto Maldonado-RC Amarakaeri Corridor.

98. The Government, the private sector and international cooperation agencies are also investing in the development and expansion of the cacao, coffee and oil palm sectors, through the following programmes:

- MINAGRI is currently investing about USD 48.5 million annually (2015), through several programs (**Procompite**, USD 7 million; **Agroideas**, USD 1.5 million for business plans; **Program for illegal coca plantation replacement**, USD 10 million; **Program for coffee tree renewal**, USD 30 million).
- **Agrobanco** is currently funding almost 48,000 producers, with an annual budget of USD 180 million.
- Investments by the **DEVIDA** programme (National Commission for Development and Life without Drugs)**,** which **supports alternatives to coca production,** for the Project area includes support of cacao, coffee and oil palm installation and improvement, totalling around USD 10 million per year between 2012-2015: it is envisaged that this will be maintained in coming years.
- The **Alliance Cacao Peru**, with the support of USAID (budget USD 36 million), promotes the fine and flavor cocoa as an opportunity of sustainable business and vehicle for social inclusion of families in the Amazonian region (Huanuco, San Martin and Ucayali).

99. In addition to these investments, the Government is seeking to promote the environmental sustainability of sector development though initiatives such as the 20x20 Initiative and NAMAs for four key commodities. The 20x20 Initiative, led by MINAGRI, with MINAM participation, and supported by IADB, WRI, IUCN and recently FAO, aims to restore 3.2 million ha, 2.0 million ha of which through reforestation, but is still looking for specific funding. MINAGRI is leading the development of four NAMAs: oil palm, coffee, cacao and cattle in the Amazon, with MINAM, NGOs, UNDP and international research institution involvement. The National Plan for Forest and Climate Change and the REDD+ Action Plan, led jointly by MINAM (PNCB) and MINAGRI (SERFOR), support the alignment of sectorial policies with national forest conservation policies and help to improve enabling conditions for low emissions development in the Amazon rural sector. These initiatives will be complemented by public/private investments in commodity platforms.

100. In addition, the Government is making major investments in territorial land use planning (*ordenamiento territorial*), through MINAM and regional governments projects (15 programs with a budget estimated at USD 40 million over the project period).

101. The project's investments in ecosystem restoration will also build on a significant but as yet insufficient baseline of investments by other actors (see Additional Annex H).

102. Despite the magnitude of this baseline, it is inadequate in a number of key aspects for ensuring the sustainable management and conservation of globally important forests and landscapes in the Amazon:

- The investments in forest conservation lack the adequately integrated vision and landscape-wide perspective that would permit the multiple drivers of deforestation to be addressed effectively;
- Small- and medium-sized producers would lack the technical orientation required to apply viable BD- and LD-friendly forms of production that would permit the stabilization of Amazon landscape dynamics, with reduced environmental footprints;
- The expansion of production sectors, even with the baseline investments in reducing their environmental footprints and in strengthening territorial land use planning, would fail to adequately take into account the land use potential, carrying capacity and environmental importance of different sites, or to take into account the risks and implications of indirectly stimulating the advance of the agricultural frontier.
- The support to national commodity platforms would lack sufficient connection with local producers and on-the-ground initiatives, necessary to allow the development of functional environmentally-friendly commodity value chains.

**Barriers**

103. The principal barriers to resolving the threats described above are as follows:

***Inadequate consideration of landscape sustainability in sector development initiatives***

104. As highlighted in the sector-based Nationally Appropriate Mitigation Activities (NAMA) documents, Government and private sector policies for the development of certain sectors, particularly coffee, cacao and oil palm, have resulted in these become increasingly significant as drivers of deforestation. For example, the Law for the Promotion of Investment in the Amazon (Law Nº 27037), which has as its objective the promotion of the sustainable and integrated development of the Amazon, provides for tax exemptions of up to 50 years for public and private investments in the Departments of Loreto, Ucayali, San Martín, and Madre de Dios, as well as provinces including Leoncio Prado and Puerto Inca [22]. It also provides for exemptions from General Sales Tax, Selective Consumption Tax, Fiscal Credit and Tributary Reintegration. The economic activities covered under this law are agriculture and livestock, aquaculture, fishing, tourism and manufacturing activities related to processing, transformation and marketing of the primary products from these sectors, as well as forest product processing. This policy has contributed to deforestation through favouring the expansion of commercial crops.

105. Furthermore, sector development and spatial planning policies fail to take adequately into account the complexities of agricultural frontier dynamics and the indirect implications of sector growth, such as the differential behaviour of large- and small-scale oil palm producers and their correspondingly different impacts on forest loss, and the growth of informal settlements and corresponding deforestation in the areas around the areas directly affected by forest clearance for plantations.

106. National policies related to the oil palm sector, while in theory recognising the need for integrated and socially, environmentally and economically sustainable solutions, in practice tend to prioritise one consideration over another, a situation which often results in contradictions. While some (for example biofuels and investment policies) promote private investment and the expansion of oil palm, others (forestry and environment policies) place more emphasis on the conservation and use of standing forests. There are also in some cases contradictions between what is said in sector policies and laws, and what is said in the corresponding regulations: in the forestry sector, for example, the policy and law state that forests located in areas with agricultural Major Use Capacity (CUM) form part of the national forest estate, while the regulation states that they can be deforested [22].

107. Land titling legislation (D.S. 032-2008-VIVIENDA) has also led many producers to clear forest in order to demonstrate "productive use" (without the need of planting), given that in order for the fiscal and legal status of land units to be confirmed the land must be shown to be under economic exploitation, i.e. with evidence of "nurseries, crop plantations or cattle raising… or land preparation works…; rural properties in fallow periods

can also be considered to be under economic exploitation (D.S 032-2008-VIVIENDA, Art. 18.2). However, producers can formalize and title more land than that which they in practice cultivate by including land intended for future cultivation, a practice that is used to facilitate land speculation and later sale to third parties [9].

***Governance conditions are inadequate to support integrated landscape management***

108. Population growth and land use change in the Peruvian Amazon often lead to social tension. Although areas may be undeveloped, it does not imply that they are uninhabited. Timber logging and settlements sometimes threaten the land of indigenous groups living throughout the region. As land tenure claims fall into dispute, tensions arise. Loggers are typically the first to arrive in search of high value timber to extract. Sometimes formal permission is sought before resources are harvested; other times force is used. The government of Peru and NGOs are clarifying the legal rights of indigenous groups and providing fora to settle disputes. [7]

109. The governance of natural resources in the Peruvian Amazon is not always transparent and equitable. The remoteness of the Amazon coupled with centralized decision-making in the capital of Lima makes the development of transparent government policies and their consistent implementation difficult. Although Peru is currently undergoing a process of decentralizing government responsibilities, changes are not always smooth as diverse stakeholders attempt to influence decisions. For example, the allocation of funds is in contention amongst different government sectors such as agriculture, forestry, education, health, and transport. How changes in government priorities will affect long-term forest cover, the well-being of settler farmers and indigenous communities, and the overall economic welfare of the region are not known. [7]

110. The pattern of oil palm expansion described above, in which new industrial-scale high-yield oil palm plantations expanded principally into forested areas, suggested that high-yield agriculture of this type can be effective in sparing forests only if coupled with incentives for agricultural expansion into already cleared lands. The large areas needed for high-yield plantations lead owners to avoid land previously cleared, which is frequently under uncertain and disputed tenure; it is simpler to establish tenureship over forests, officially owned by the State. Moreover, many high-yield plantations are owned by large, extra-local entities that choose not to engage with the local social and political complications that any land disputes might entail. Smaller holdings avoid such difficulties partly because they need smaller spaces, and because local, family owners are usually willing to take on the uncertainties of local tenure systems [25].

**Inadequate recognition and realization of potential synergies between business interests and environmental objectives**

111. There is increasing pressure from worldwide consumers for evidence that commodities are sourced from production systems that minimize negative social and environmental impacts; at the same time, companies, especially multinationals that trade in international commodities, are increasingly concerned with protecting their corporate images regarding their social and environmental performance, while producers are concerned with maintaining or increasing the productivity, profitability and resilience of their production systems, as well as reliable access to favourable markets. There is much potential for synergies between these interests: by supporting producers in applying production systems that are environmentally sustainable and at the same time resilient and profitable, purchasers can improve the reliability of supply of the products on which their businesses depend, and strengthen their own social and environmental credential; much attention has also been paid to environmental certification systems whereby producers who comply with social and/or environmental standards are granted a seal which allows consumers to identify and favour them, in some cases to paying premium prices for them. At present, however, supply chains are in many cases fragmented and dispersed, with little direct relation between purchasers and producers: products may pass through a number of intermediaries on the way to the end purchasers, who may therefore be unable to trace their origins or to influence how they are produced.

112. The potential for applying market-based instruments varies between different commodities:

- In the case of ***cocoa***, the large majority of national production is exported: international cocoa markets are quite engaged in sustainability issues, and the supply chain is organized with exporters and traders receiving product at local buying stations. A significant share of the cocoa is exported as organic and/or Fairtrade certified, or with other seals like Rainforest Alliance Certified or Utz Certified. Certified cocoa is traceable, which is necessary so that buyers and consumers can know that the product comes from farms that have used sustainable production practices. Even so, different certification seals emphasize different sustainability aspects, and only Rainforest Alliance Certified offers some assurance against deforestation. Among international cocoa buyers there is increasing interest in and commitment to the idea of

"deforestation-free" cocoa, but there is less clarity and agreement on how that commitment should be fulfilled in practice.

- In the case of ***oil palm***, Peru has a deficit of domestic production and virtually the entire national production is consumed nationally. The potential of demand-driven change to sustainability in the palm oil sector faces several challenges: first, there is virtually no domestic market for sustainably produced goods and hence no consumer pressure on palm oil producers, or palm oil consuming companies. Second, palm oil is usually a fairly anonymous ingredient in consumer products and therefore not particularly visible for the consumer. Third, traceability in palm oil is complicated as product separation is not possible at the processing plant level. Certification systems typically use a mass balance system, which, however, is less apt at controlling for deforestation. To provide traceable, deforestation-free palm oil each processing plant needs to maintain strict control with each supplying grower. At the same time, however, there is significant and mounting pressure on the palm oil industry globally, which has led to a spike in RSPO certified palm oil supply, and public declarations from palm oil-using companies as well as traders to avoid deforestation within their supply chain. This trend is rapidly changing what is acceptable behaviour in the industry, and it might also affect Peruvian players in the medium term. For example, the largest Peruvian producer and processor – the Grupo Romero – is a conglomerate with widespread interests, which could be susceptible to negative exposure. There is an opportunity for the project to use this international trend to influence the dialogue with palm oil producers and encourage internal self-regulation in the industry.
- In the case of ***coffee*****,** the opportunities for supply chain-driven changes are similar to those with cocoa, described above. Coffee has a long history as a leader in sustainability initiatives, and many buyers are deeply concerned for the future of the industry. But certification schemes have shown their limitations as discussed above, and producers who deforest can easily find ways to sell their product. So, for coffee, just like cocoa, market-driven change will be to provide a carrot for producers who make a difference, not as a stick for violators.

113. In summary, on the basis of this review of national conditions and of experience gained and systematized by the UNDP Green Commodities Programme, the main challenges for applying market-based mechanisms to counter sector-based threats to forests are as follows:

- *Unrealistic expectations on market benefits.* Producers world-wide tend to believe their products are special and more desirable than products from other producers or origins, and therefore merit higher prices and special attention from buyers. Of course, some of them are right, but more often producers significantly overestimate buyers' willingness for preferential treatment, in particular premium payment.
- It is *difficult to set up a credible certification system*. Behind any seal must be a whole organization that monitors that producers comply with the seal's promises and take appropriate action or sanction if they do not. It needs to provide traceability through supply chains to make sure products from the region are not mixed with products from other regions (such as in ports, or at processing plants, even outside of Peru), and it needs to manage seal use to guarantee the integrity of the seal. There is a risk proponents may not recognize the complexities of managing this system.
- *High cost of origin certification.* It is costly to run a certification system, which is precisely one of the frequent points of critique to traditional certification systems. For these certifications the client is the producer who pays to get certified, and for some systems the seal users also pay for the use of seal. A landscape-focused seal would conceivably not have to inspect individual farms, but it will have to do detailed land-use monitoring throughout a large region, and also perform many of the other functions of a traditional certification system, but probably without user-payment from producers. This raises the question who will pay to run a system that may not be able to generate income.

**Land use planning and classification is ineffective and incomplete**

114. Although a solid legal framework exists for land use planning (see paragraph 19), coverage of the different instruments provided for by the law is in practice incomplete (see . The land classification studies carried out to date have been for specific locations of limited area. There are large areas of the country, including the Amazon basin, which do not have land classifications more detailed than that presented in the map generated by ONERN in 1982. The studies carried out by ONERN are at such a large scale (1:1,000,000), that they only constitute fifth order exploratory studies (as defined by Supreme Decree N° 013-2010-AG) and as such are only suitable for national level planning. The ONERN maps have not been distributed widely in Peru and have not been updated

since their production. Their main utility is for the identification of areas with potential to be subject to more detailed studies [22]. Micro-zoning (1: 25,000) has only been carried out in a few localities.

115. Almost one-third of forest lands in Peru (30.4%) do not fall into any category of forest use. Forests with no classification of use are mainly located in the remotest areas of the country, particularly in the Department of Loreto. There is little information on the de facto use of unclassified forests. Regarding access to lands, there is overlapping of original rights (mainly those of indigenous peoples, then rights established in the colonial era or after the inception of the Republic) with other legally acquired rights (for example, by means of titles via colonization projects) and illegally acquired rights (through old and recent invasions), as well as with other types of occupation and rights. Access to forests has not been less conflicting: occupation of forests has been hindered by current policies conditioned by social pressures and a lack of necessary planning. This has made sectors compete to occupy territories and exploit natural resources. During such competition, the forestry sector has clearly had less political and economic clout than sectors like mining, oil and agriculture.

116. To date there has been limited inter-sectorial coordination between MINAM and MINAGRI to coordinate their land use classification and allocation processes. These differences have confused the public and seem to contribute to the misunderstandings that characterize private sector and civil society perceptions of the palm oil sector in Peru. At least one developer, Grupo Palmas, has succeeded in obtaining permission for establishing new plantations on primary forest landscapes that approach the maximum of 10,000 hectares (Dammert et al., 2012). In this case, 30 percent of the land holding must be conserved as natural forest habitat. However, in practice, the allocation of a geometric 30-percent conservation block would appear to be motivated by logistic or public relations considerations rather than by conservation priorities based on an objective evaluation of the ecological characteristics of the land and its importance within the larger landscape. [9].

117. Integration between sector-focused and spatial planning is weak. In the process of land classification, the DGAAA and Regional Governments do not require approval by other sectors such as forestry or environment; when the classifications are carried out by Regional Governments, the studies are supervised and approved by the DGAAA [22].

118. The process of classification of lands according to their Main Use Capacity (CUM) is based on considerations of “the degree of difficulty that exists in making them produce in agronomic terms without destroying or losing them”, and the regulation for land use classification defines the factors of relevance for land classification as including climate (life zones), soil and relief, but therefore lacks an ecosystem approach as it fails to take into account the forest-soil-water system for areas of high and low forest. [22]. The fact that a tool that is intended for determining the agronomic potential of the soil is used to determine the use of a territory as a whole implies that the procedure is neither integrated or holistic, and the fact that the primary priority for land use is agricultural indicates a development-focused vision which considers land that it is not principally agricultural as being wasted or useless.

119. Despite the provisions of the Forest and Wildlife Law (see paragraph 14), the Land Use Classification Regulation currently allows lands to be reclassified (including those under forest and protection categories) if they have been subject to actions that change their nature. The law is also currently interpreted to mean that when natural forests are located on soils with agricultural land use capacity (A, C or P, see paragraph 22), agricultural use is given preference, allowing them to be deforested. In the case of oil palm, the existing legal frameworks create the conditions for the development of a palm oil industry that includes both small farmers and corporate agro-industrial actors. It also creates a legal pathway that permits the conversion of forest landscapes to oil palm plantations for all producer groups. That pathway depends on the determination of the principal land use capacity of the land being considered for development. If that land and its soils are deemed to have a principal land use capacity as some form of agriculture (annual crops, perennial crops, or pasture), then the determination of its management is no longer governed by the Forestry and Wildlife Law, but by the Land and Agriculture Laws.

**Inadequate institutional capacities for implementation and enforcement**

120. The application of the proposed model of forest and land management assumes that the development of technical capacities and market-based incentives is backstopped by effective governance conditions. At present capacities are limited in this regard in entities of central Government (e.g. MINAM, SERFOR and the Environmental Police), and more significantly in regional and municipal governments, that are autonomously responsible for environmental oversight and planning in their areas of jurisdiction. These deficiencies are manifested in the levels of infraction of environmental laws, such as the unauthorized expansion of production sector activities into environmentally valuable forest lands; and also by the failure of designated institutions to

carry out their assigned functions adequately, as evidenced for example by the limited progress that has been made to date in clarifying use and tenure rights on forest lands, coupled with ineffective enforcement of compliance with the provision of land use classification, ZEE and territorial planning [12].

121. Limitations are also evident in the institutional framework at community level: while many indigenous communities have their own governance structures and norms, these are often inadequate to deal with the new and growing pressures to which they are subject by external actors, including both small colonist farmers and large commercial-scale operators. Producers also suffer from limited organizational capacities: this typically affects their ability to access markets and influence market conditions, to gain access to financial and technical support, and to exploit opportunities for economies of scale through the sharing of post-harvest facilities.

122. Existing governance and participation mechanisms are also often inadequate to guarantee the effective and equitable representation and participation in decision-making of different stakeholder groups, especially traditionally marginalized sectors such as indigenous groups, the poor and women.

**Inadequate technical and financial capacities for the implementation of environmentally sustainable production systems**

123. Although the improvement of production systems to take into account considerations of environmental sustainability has the potential to generate significant benefits for producers in terms of productive efficiency, market access and productive sustainability, it requires levels of technical knowledge and capacity, and initial financial investment, which may not at present be accessible to many farmers. Areas in which such technical knowledge may be lacking include, for example, the establishment and management of the types of shade regimes in coffee and cacao plantations that enhance crop quality, nutrient status and ecological sustainability without affecting short term productivity; and the application of integrated pest and integrated nutrient management systems capable of limiting the need for chemical inputs. Types of investment that may be required to meet the social, environmental and quality requirements of global commodities purchasers, and which some producers may have difficulty in financing, include “ecological” coffee processing centres that avoid the generation of polluted waste water, improved living and working conditions for workers, and improved post-harvest care facilities for commodities.

124. Research and policy efforts to improve the productivity of land face a difficult challenge (White et al., 2005a). For farmers it is typically preferable to expand production than to invest in land improvements or to use fertilizers. One hectare of land in the Peruvian Amazon can cost less than 50 kg of fertilizer or the equivalent value of two days’ wages. Thus, while many technologies exist that may help minimize the negative environmental impact of agricultural practices and permit a more intensive and sustainable land use, options need to be developed with special regard to their financial feasibility, and to resource constraints (land, labor and capital) of farmers (White et al., 2001) [8]. Data on current crop yields in selected localities of the project area are presented in Additional Annex A Table 14.

## III. STRATEGY

**Selected approach**

125. The present project will contribute to the reduction of deforestation, and forest recovery, in the Peruvian Amazon by supporting natural resource management and production systems that incorporate considerations of environmental sustainability, through an integrated and comprehensive territorial approach that will recognize the complexity of local livelihoods and the landscape-wide scale of the drivers of deforestation, while at the same time taking targeted actions to address producer behaviour in selected sectors that have been identified as constituting particularly significant drivers of deforestation.

126. The project's approach has been selected in accordance with the priorities of the National Strategy for Forests and Climate Change (ENBCC). The Theory of Change of the project is integrally inserted into that of the ENBCC (see Figure 1); at the same time, the project will contribute incremental value added to the actions of national institutions in relation to the ENBCC, by ensuring that they incorporate an integrated approach to landscape management that delivers global environmental benefits, as well as social benefits, in a sustainable manner. The specific incremental contributions of each of the proposed outputs of the project to the activities of the ENBCC are set out in Additional Annex J.

127. **In the absence of the project**, the future development of commercial agriculture in the Peruvian Amazon would take place at the expense of the region's forests and related natural resources, resulting in continually increasing negative impacts on globally important environmental values (biodiversity, carbon stocks and land/ecosystem functions), as well as the loss of nationally important ecosystem services and the undermining of natural resource-dependent livelihoods.

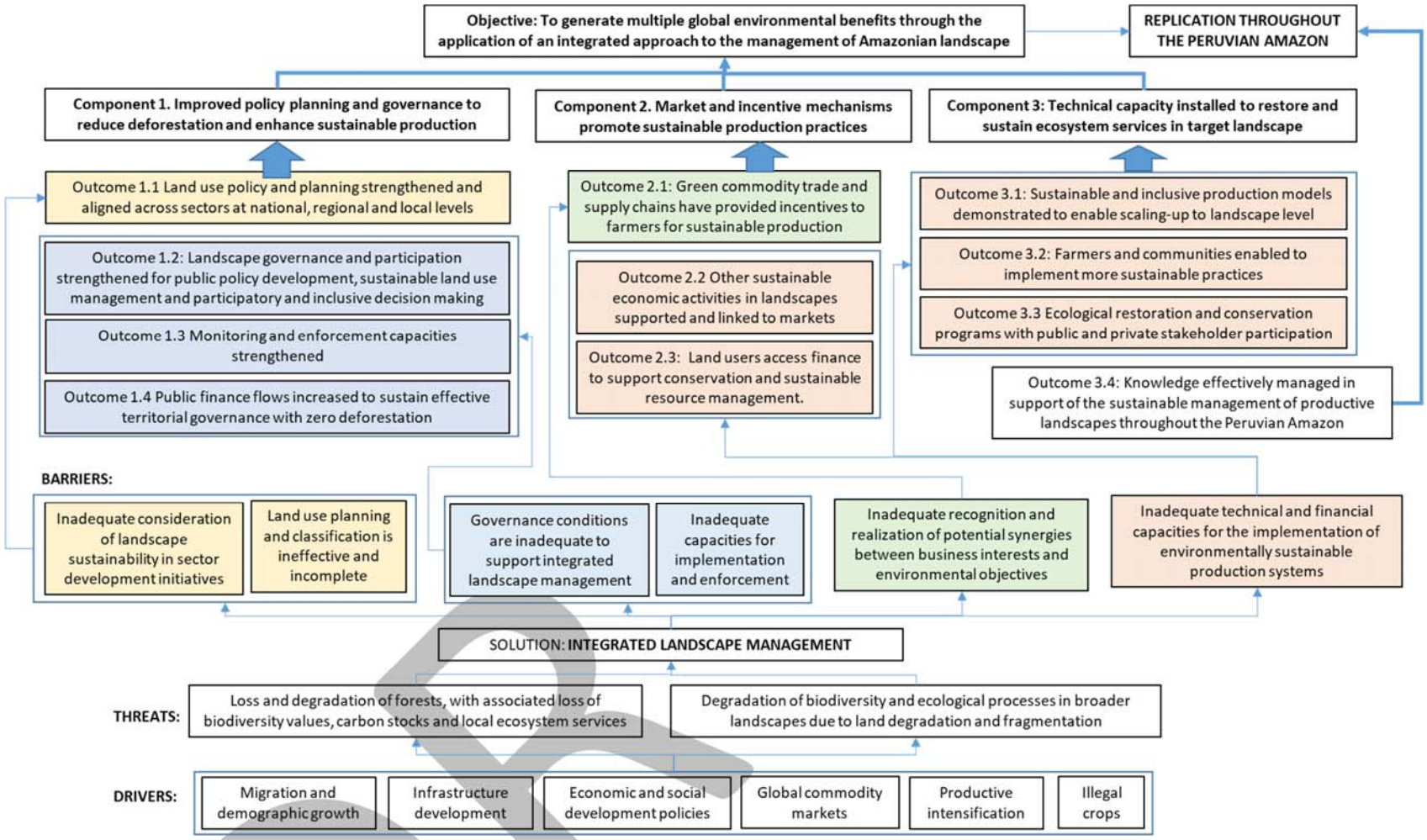
128. Specifically, under the without-project scenario, landscapes in the Peruvian Amazon would continue to be managed as a mosaic of protected areas (with their associated buffer zones), indigenous territories, forest lands subject to or threatened by conversion, and lands already converted to agricultural use, with inadequate consideration given to the interactions between these land uses and the landscape-wide dynamics of deforestation. The conversion of forest to agricultural use (principally commercial crops including cacao, coffee and oil palm, together with food crops grown largely for subsistence and local consumption purposes) would continue apace, in accordance with the priority given by the Government to the development of these commercial crops. Capacities and enabling conditions would remain inadequate to allow the implementation of the environmental mitigation measures proposed in the sector-based NAMAs for coffee, cacao and oil palm, and for the incorporation of the integrated vision contained in the iNAMAzonia.

129. This **baseline situation** reflects that in neighbouring countries participating in the Amazon programme. A fragmented approach involving disconnected national initiatives would fail to address the regional nature of the socioeconomic and productive pressures that constitute drivers of deforestation, the risk of leakages of pressures across frontiers, and the biological porosity of national frontiers.

130. Under the **GEF alternative**, an innovative approach will be applied in which the different elements that compose the landscape will be managed in an integrated manner: most significantly, commercial agriculture (cacao, coffee and oil palm) will be located preferentially in areas with low levels of global environmental value and vulnerability, and where they are least likely to stimulate indirect impacts on high value areas as a result of immigration and the development of infrastructure and service sectors; and the management practices applied in these sectors will optimize global environmental benefits (in terms of sustainable land management, biodiversity and the protection and promotion of carbon stocks).

131. Another key aspect of the GEF increment will be that compatibility will be maximized between the generation of these global environmental benefits and the satisfaction of national and local development goals: the project will seek the appropriate management, rather than the elimination, of the expansion of the target production sectors, and will seek "win-win" solutions whereby producers are able to operate in ways that combine environmental and productive sustainability with profitability. A key element in this regard will be the support of links between sustainable production systems and "green" global commodity markets.

**Figure 1. Project Theory of Change**



132. The project will generate major environmental benefits under the three target focal areas:

- Biodiversity benefits will be generated through the avoidance of the deforestation of large areas (48,398ha) of primary, disturbed and secondary humid Amazon forests (including lowland humid forest, "*rupa-rupa*" between 400 and 1,000m and "*yungas*" between 1,000 and 3,600m) and the consequent loss of their constituent flora and fauna, and the enhancement of the habitat value of production systems including shade cacao and coffee plantations, and oil palm plantations, through the introduction of BD-friendly management practices. In addition to direct on-site benefits, it will also generate landscape-wide benefits in terms of improved biological connectivity, which is of particular importance in the case of apex predators such as jaguars: improvement in the "BD-friendliness" of the production landscapes surrounding key refugia (PAs) will facilitate the movement of such BD elements between refugia, thereby improving inter-population diversity as well as expanding their effective foraging ranges.
- Sustainable land management benefits will be generated through the promotion of integrated, landscape-scale approaches to the management of the different units constituting the target landscapes, in such a way as to maintain and promote the generation of ecosystem services from both forested and non-forested lands (ecosystem health, the protection of soil against degradation[15] and the maintenance and promotion of water and nutrient cycles).
- Sustainable forest management benefits will be generated in terms of the avoided deforestation of large areas of tropical forest, and what would have been the consequent loss of carbon sinks (avoided emissions are estimated at 15,796,553tCO2eq[16]), and through the restoration of degraded forest lands in such a way as to restore degraded ecosystem services.

133. These benefits will constitute a major contribution to the programmatic goals of the Amazon Basin Programme. Given the need and potential for synergies between the constituent projects of the ABP, the overall contribution will be greater than the sum of the benefits of the individual projects, as a result of improved effectiveness in addressing regional-scale socioeconomic and productive pressures on forests, improved efficiency as a result of interinstitutional and inter-country coordination, and the sharing of lessons learnt and best practices.

134. The project is consistent with the Aichi Biodiversity Targets and will contribute to their achievement, particularly:

- **Strategic Goal B:** Reduce the direct pressures on biodiversity and promote sustainable use, **Target 5**: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced and **Target 7**: By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity;
- **Strategic Goal D**: Enhance the benefits to all from biodiversity and ecosystem services, **Target 14**: By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable; and **Target 15**: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.

135. Furthermore, the project is consistent with the Sustainable Development Goals (SDGs), in particular SDG Goals 2, 5, 12 and 15 and its targets:

- **Goal 2** End hunger, achieve food security and improved nutrition and promote sustainable agriculture, and its **Target 2.3**: By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment; and **Target 2.4:** By 2030, ensure sustainable food production systems and implement resilient agricultural practices that

[15] The selected region of Padre Abad is susceptible to landslides, as is much of Peru.

[16] From ExACT results table (see Additional Annex N Table 9)

increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality;

- **Goal 5** Achieve gender equality and empower all women and girls and its **Target 5.5:** Ensure women´s full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life;
- **Goal 12** Ensure sustainable consumption and production patterns, and its **Target 12.2:** By 2030, achieve the sustainable management and efficient use of natural resources;
- **Goal 13** Take urgent action to combat climate change and its impacts, and its **Target 13.1:** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
- **Goal 15** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss and its **Target 15.2:** By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally; and **Target 15.3:** By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world; **Target 15.5:** Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species; and **Target 15.9:** By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts.

136. The Rio+20 (UN Conference on Sustainable Development) declaration called for 'holistic and integrated approaches to sustainable development' and for the promotion of 'integrated and sustainable management of natural resources and ecosystems. It aims to support economic, social and human development while facilitating ecosystem conservation, regeneration and restoration and resilience in the face of new and emerging challenges'. Such EBM approaches imply, for instance, the coordination of forest-relevant policies, the involvement of different actors in policymaking and that a multilevel dialogue is taking place, which this project fully integrate on its strategies.

**Specific strategies**

137. In recognition of the complexity of the target landscapes and the issues affecting them, the project will apply a wide range of key strategies: despite their diversity, these will be highly complementary and integrated, as well as clearly defined and relevant to the needs and conditions in the landscape, and to the specific changes which the project will promote in land use trends.

***1) Strengthening enabling conditions***

138. The project will help to orient and form policy and planning processes at national and regional levels in order to ensure that these are supportive of the landscape management approaches promoted at field level. This support will focus on ensuring that policies and plans are consistent and harmonized between sectors in order to avoid contradictions and "perverse incentives" for deforestation; and that policy makers and planners have access to reliable information that allows them to appreciate and weigh the diverse potential implications of alternative decision scenarios, including the economic value of the goods and services provided by ecosystems.

***2) Environmental governance***

139. The project will support the strengthening of governance conditions in the target localities in order to ensure that the provisions of regulatory and zoning instruments, such as restrictions on the felling of primary forest, are respected. This will be achieved through support to local governance mechanisms (including those of indigenous communities and women), complemented by policy influence and awareness raising, which is expected to lead to increases in budgetary allocation by central and regional governments for environmental supervision and enforcement.

***3) Landscape planning***

140. The project will help to ensure that management activities are located in the landscape in accordance with productive potential, ecological conditions and sociocultural conditions, and take into account the spatial dynamics affecting the landscape as a whole, for example by considering the expansion of commercial crops in already-deforested areas, rather than primary or secondary forest. This will involve, for example, supporting the

development of Principal Land Use Capacity (CUM) maps; encouraging the integration between this and processes of Agro-ecological Zoning (ZAE), Ecologic-Economic Zoning (ZEE), forest zoning and territorial land use planning; and directly supporting "micro-zoning" in selected priority localities.

***4) Producer support***

141. The project will support producers in managing their production systems in ways that combine the optimization of environmental benefits with productive sustainability, profitability and compatibility with livelihood sustainability and sociocultural conditions, mainstreaming gender and inter-cultural issues.

142. Emphasis will be placed on tree-based production systems such as coffee and cacao, with the aim of stabilizing the productive dynamics that drive agricultural frontier advance and creating favourable conditions of habitat and connectivity compared to pasture or annual production systems. This support will be contingent on the application of measures to maximize environmental sustainability, and will take into account the results of analyses of potential indirect landscape-level impacts, such as the reinvestment of farmers' income from these crops in unsustainable forms of production elsewhere, the attraction of additional population to service these sectors, and the possible displacement of traditional cyclical production of annual crops, resulting in the loss of secondary fallow vegetation and the leakage of annual production systems to other localities.

***5) Private sector involvement***

143. The project will involve the private sector, and work with market-based instruments and green value chains, in order to promote environmentally sustainable and zero-deforestation forms of production. To this end, the project will support the functioning and expansion of national and regional platforms bringing together the key public and private actors involved with the value chains of each of the project's main target commodities; assist producers in gaining access to markets that reward good environmental performance; and assist private companies in making provisions in their business plans for working with and supporting their supplying farmers in the application of environmentally and productively sustainable practices.

***6) Active forest management***

144. The project will support the active, sustainable management of remaining forests by local people (indigenous and otherwise) in order to motivate and enable them to protect them against conversion to other uses. This will be of particular importance in helping native (indigenous) communities to assert their occupancy rights over ancestral lands in support of their livelihoods and in accordance with their cultural norms, for example through the sustainable extraction, use, processing and sale of non-timber forest products. Preference will be given to the model of "local forests" (*bosques locales*) provided for in the Forestry and Wildlife Law, as an alternative to forestry concessions, which (although in some cases successful) have often proven ineffective in stemming deforestation and in some cases have led to conflicts between concession holders and local communities or been used for the "laundering" of illegally logged timber. The project will not support timber extraction from natural forests.

***7) Landscape restoration***

145. The project will support the active restoration of degraded landscapes, outside of the context of the management of production systems. This will be subject to considerations of social and institutional sustainability, the existence of adequate conditions of technical capacities, governance and finance to ensure ongoing maintenance, and potential to generate environmental benefits. Strategies to be considered in order to address these concerns may include strengthening the organisational and management capacities of existing community-based, watershed protection or producer organisations; awareness-raising campaigns regarding the community benefits achievable from the restoration such as the protection of water sources; and the facilitation of linkages between the communities and sources of financial support such as carbon payment schemes or Government incentive programmes.

***8) Addressing leakage risks***

146. The adoption of an integrated, multi-faceted approach covering the landscape as a whole will minimize the risk of the reduction of environmentally damaging activities in one area simply resulting in their displacement elsewhere in the landscape. In addition, the project will focus on building links with regional governments and private sector actors active in other landscape areas in the Amazon, in order to develop conditions for replication of the strategies applied by this project and thereby minimize the risk of the displacement (leakage) to them of the pressures addressed by the project in its target area.

147. The support by the project to the mainstreaming of environmental considerations into the oil palm sector will build upon and help to implement the recommendations generated by the Forests, Carbon, Markets and

Communities (FCMC) programme supported by USAID in its study "Towards Zero Deforestation Oil Palm in Peru: Understanding Actors, Markets and Barriers" (See Additional Annex H for detail).

148. The project will apply a highly targeted set of strategies aimed at achieving specific transformations in the landscape, which will complement each other at landscape level. The changes sought, and the strategies to be applied to achieve them, are summarized in Table 3.

**Table 3. Changes sought by the project on land use transitions in the target landscapes**

| Change sought | Strategies | Environmental Benefits |
|---|---|---|
| **Reduction** in conversion of **original (primary) forest** to | | |
| **1. forest disturbed by logging** | through:<br>- improved forest sector governance, including adequate application of forest law enforcement | Protection of BD values, carbon stocks and ecosystem services of primary forests |
| **2. annual crops and pasture** | through:<br>- improved governance to reduce forest clearance by colonist farmers and ranchers<br>- improvement of sustainability and stability of existing pasture systems, through their conversion to silvo-pasture systems (13), in order to reduce the need to expand into forest areas<br>- improvement of the sustainability of existing annual crop production systems through their conversion into agroforestry systems (see 11), in order to reduce the need to expand into forest areas | |
| 3. **perennial crops** (cacao and palm) | through:<br>- improved governance to reduce forest clearance by palm and cacao growers<br>- improvement of mechanisms and criteria for land use planning, titling and authorisation of land use changes<br>- market-based instruments, including application of certification and industry standards<br>- expansion instead into already deforested areas (see 12) | |
| **Reduction** in conversion of **original forest disturbed by logging** to | | |
| **4. annual crops and pasture** | through:<br>- improved governance to reduce forest clearance by colonist farmers and ranchers<br>- support to declaration and community-based management of local forests (*bosques locales*)<br>- improvement of sustainability and stability of existing pasture systems, through their conversion to silvo-pasture systems (13), in order to reduce the need to expand into forest areas<br>- improvement of the sustainability of existing annual crop production systems through their conversion into agroforestry systems (see 11), in order to reduce the need to expand into forest areas | Protection of BD values, carbon stocks and ecosystem services of disturbed (logged) original forests |
| 5. **perennial crops** (cacao and palm) | through:<br>- improved governance of forest clearance by palm and cacao growers<br>- support to declaration and community-based management of local forests (bosques locales)<br>- improvement of mechanisms and criteria for land use planning, titling and authorisation of land use changes<br>- market-based instruments, including application of certification and industry standards | |
| **Reduction** in conversion of **secondary forest/fallow** (*purmas*) to | | |

| Change sought | Strategies | Environmental Benefits |
|---|---|---|
| **6. annual crops** | through:<br>- provision of technical and financial support for improvement in the sustainability and productivity of annual cropping practices in cyclical production systems, to reduce area needs<br>- motivation by sustainability, productivity and livelihood benefits | Protection of BD values, carbon stocks and ecosystem services of secondary forests |
| **7. pasture** | through:<br>- improvement of sustainability and stability of existing pasture systems, through their conversion to silvo-pasture systems (13), in order to reduce the need to expand into forest areas<br>- motivation by sustainability, productivity and livelihood benefits<br>- provision of technical and financial support | |
| 8. **Perennial crops** (cacao and palm) | through:<br>- substitution by expansion of perennial crops instead into already deforested areas (see 12)<br>- improvement of mechanisms and criteria for land use planning, titling and authorisation of land use changes | |
| **Reduction** in conversion of **annual crops** to | | |
| **9. pasture** | through:<br>- conversion instead into agroforestry systems (see 11),<br>- motivation by sustainability, productivity and livelihood benefits<br>- provision of technical support | Reduction of pasture expansion displacing annual crops into forest areas |
| **Promotion** of conversion of **annual crops** to | | |
| 10. **Secondary forest/fallow**, as part of sustainable cyclical crop/fallow systems | through:<br>- reductions in expansion of perennial crops into secondary forests (see 21)<br>- reductions in the expansion of pasture into secondary forests (see 20) | Protection of BD values, carbon stocks and ecosystem services of secondary forests |
| **11. agroforestry systems** | through:<br>- provision of technical support<br>- motivation by sustainability, productivity and livelihood benefits | Improvement in carbon content and some improvements in BD values and ecosystem services, especially in areas with higher demographic pressure where cyclical systems are less sustainable |
| **Promotion** of conversion of **pasture** to | | |
| 12. **Perennial crops** (cacao and palm) | through:<br>- provision of technical and financial support market-based instruments, including application of certification and industry standards | Improvement in carbon content and some improvements in BD values and ecosystem services Reduction in processes of expansion of perennial crops into forest areas |

| Change sought | Strategies | Environmental Benefits |
|---|---|---|
| **13. <u>Silvopasture systems</u>** | through<br>- provision of technical and financial support<br>- motivation by sustainability, productivity and livelihood benefits | Improvement in carbon content and some improvements in BD values and ecosystem services<br>Sustainability, stability and reduction of expansion of pasture into forest areas |

**Incorporation of stakeholder concerns**

149. Particular emphasis was placed during project formulation on incorporating concerns and priorities expressed by the members of native (indigenous) communities and women (see Additional Annex P).

**Relevance in relation to the baseline scenario**

150. The project is timely and relevant given the solid baseline of other investments with which it will be associated and on which it will build, and which in the absence of the project are expected to either exacerbate these negative impacts or fail to take advantage of opportunities to apply integrated and sustainable solutions (see Section II and Additional Annex H for details of baseline investments. Specifically, the project will respond to the baseline gaps set out in paragraph 102, through the mainstreaming of an integrated landscape vision into investments in forest conservation, the provision of technical orientation to small farmers to enable them to apply BD- and LD-friendly production systems, the incorporation of environmental considerations into the planning of the expansion of key production sectors, and the strengthening of the role of the GCP in connecting small farmers to market actors in such a way as to favour the adoption of environmentally-friendly production systems.

**Relevance to other initiatives**

151. The project will be led by the Ministry of Environment (MINAM), through its General Directorate of Evaluation, Valuation and Financing of Natural Heritage, with the direct participation of a number of its other dependencies including the National Programme for Forest Conservation (PNCB), the General Directorate of Biological Diversity, the General Directorate of Climate Change, Desertification and Water Resources, and the General Directorate of Land Use Planning, as well as the Office of the GEF Operational Focal Point. Other key institutional participants will include the National Forest and Wildlife Service, and the General Directorate of Agriculture, and the General Directorate of Agrarian Policy of the Ministry of Agriculture (MINAGRI); the National Commission for Development and Life without Drugs (DEVIDA); and regional and municipal governments in the target areas.

***GEF Amazon Sustainable Landscapes Programme***

152. The Project will form part of the **GEF Amazon Sustainable Landscapes (ASL) Programme**[17] and will be coordinated with and complement the other constituent "child" projects of the programme in Peru and in neighbouring Amazon Basin countries. The project will specifically contribute to the integrated productive landscapes component of the overall ASL Programme, which will complement the other components on integrated Amazon protected areas, policies for protected and productive landscapes, and coordination and learning; together, these components will enable the achievement of the overall objective of the ASL Programme, which is to protect globally significant biodiversity and implement policies to foster sustainable land use and restoration of native vegetation cover (see ASL Theory of Change in Figure 2).

153. Knowledge generated through this and the other country-specific projects will be managed and exchanged through the Coordination and Learning project, which will collect international best practices and knowledge sources on an ongoing basis from internationally recognized experts, institutions, and field practitioners, implement a knowledge sharing and capacity building platform, conduct workshops, field visits and study tours, develop and knowledge repository and community of practice, as well as strengthening coordination, monitoring and communication among the child projects.

[17] https://www.thegef.org/project/amazon-sustainable-landscapes-program

**Figure 2. Overall Theory of Change for the GEF Amazon Sustainable Landscapes Programme**

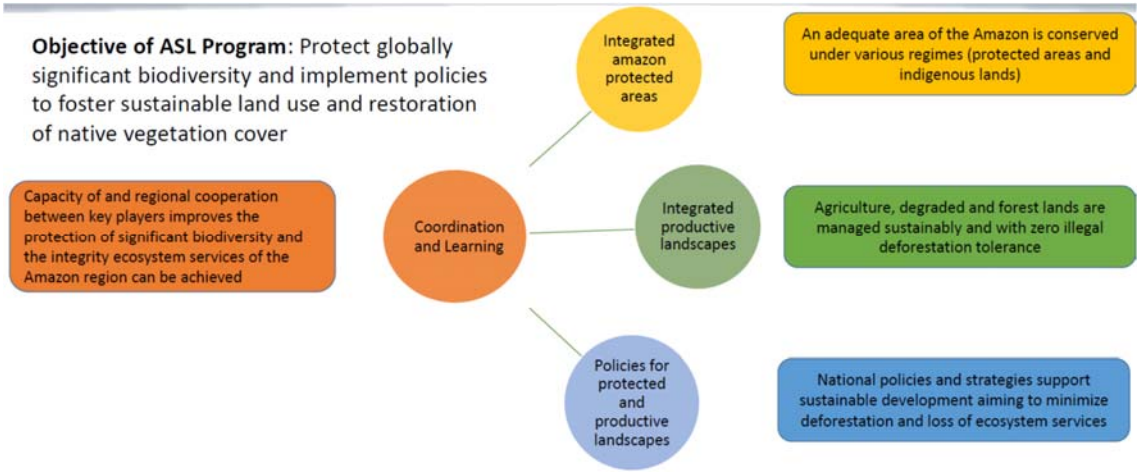



**Table 4. Opportunities for collaboration with other projects in the ASL Programme**

| Title and description | Opportunities for collaboration |
|---|---|
| **Ensuring the future of protected areas in Peru** (GEF/SERNANP/WWF): this project is focused on protected natural areas and financial strategies for their sustainability. It will work in 6 PAs and 4 reserved zones in the Peruvian Amazon, which will not coincide geographically with the present project. | The SERNANP/WWF project will work at national level on policies and guidelines for incorporating sustainable forest management and the provision of ecosystem services in the whole national PA system; it will also work on increasing public investment in the integrated management of landscapes inside and outside PAs, including participatory planning for integrated management in PA buffer zones. These results are related to those of the present project, which also aims to increase public investment in sustainable production systems, as well as local and regional planning with provisions for stabilizing land use changes. |
| **Connectivity and conservation of biodiversity in the Colombian Amazon**: this project will work on the strengthening of institutions and local organizations to ensure integrated territorial management. The Colombia child project will aim to maintain and increase areas with sustainable production systems and/or traditional practices, in order to improve forest cover, increase connectivity and reduce emissions. The institutions involved in Colombia have strong capacities in relation to technological packages for sustainable productive activities, including SFM and the use of hydrobiological resources. | Both projects will include indicators and outputs related to ecosystem restoration in fragmented and degraded areas, and the improvement of connectivity, providing opportunities for the exchange of experiences. The present project aims to improve access to public and private credit and financial and market incentives to motivate sustainable production. There are therefore opportunities for collaboration in this regard: the Colombian child project will also support the implementation of the regional green business programme, which will generate experiences of relevance to the present project in relation to community-based forest management (for example value chains for non-timber forest products) and the improvement of forest value. |
| **Sustainable Amazon landscapes (Brazil):** aims to achieve innovative and integrated landscape management, with connectivity considerations in areas with high biodiversity values | The focus of the present project on local and regional planning for stabilizing land uses coincides with aspects of the child project in Brazil. The Brazil project will also work on the characterization of secondary forests and proposals for its conservation and sustainable use, in an area much larger than that of this project in Peru, with the opportunity to generate useful lessons. Both projects will promote value chains and technical assistance packages for producers. The Brazil child project will support restoration plans for the maintenance of environmental services, integrating different stakeholders and levels of Government, as well as |

| Title and description | Opportunities for collaboration |
|---|---|
| | the use of agroforestry systems, providing opportunities for collaboration and exchanges of experiences on these issues. The Brazil project will also be a potential source of lessons on the development and application of policy, norms and control measures aimed at combatting deforestation processes in the Amazon. |
| **Capacity Development and Regional Coordination for the Amazon Sustainable Landscapes Programme**[18] | One of the components of this project will focus on the promotion of collaboration in learning and capacity development between countries and entities participating in the Programme, in relation to natural resource management, deforestation processes, the development of sustainable landscapes and the restoration of forest ecosystems. The coordination project will also facilitate collaboration on policy and regulatory aspects and the development of learning platforms between the three countries, as well as coordination between institutions and the development of a shared information management system. |

***Other projects***

154. The main opportunity for collaboration with the UNDP/GEF Project **"Transforming Management of Protected Area/Landscape Complexes to Strengthen Ecosystem Resilience"** is in relation to working with native communities and PA buffer zones. The "PA resilience" project is working in the Yanachaga PA complex, which includes the El Sira Communal Reserve and its buffer zone, part of which coincides with the target districts of the present project. There is also opportunity for collaboration in relation to the improvement of instruments for planning and local management, as the PA Resilience project will improve the institutional framework for planning and management in buffer zones, as well as the strengthening of PA management instruments related to climate change and resilience. Both projects will have a landscape approach, as well as contributing to interinstitutional and inter-sector systems for decision-making. Both projects will promote sustainable production, with an emphasis in the PA Resilience project on systems that are resilient to climate change, which will have potential applicability to the landscapes targeted by the present project.

155. **Global Commodities Programme/Swiss Secretariat for Economic Affairs** (GCP/SECO)[19]: this initiative is working on the development and strengthening of a national coffee sector platform in Peru. This will constitute a base for the actions of the project in relation to the coffee sector value chain, supporting the sustainability of the sector and also generating lessons for the development of platforms in other sectors. The GCP/SECO initiative and the present project are both aligned with and will contribute to the NAMA processes, including the existing coffee NAMA, and also the cocoa NAMA which is due to start soon. The GCP/SECO project will also improve technical assistance to farmers for the implementation of improved production processes, as well as economic incentives for sustainable production, and will therefore contribute directly to the present project, for example in the proposed pilot area in Padre Abad district.

156. **Ecosystem-Based Adaptation in Amazonia:** this project aims to generate income and food security alternatives with multiple benefits related to biodiversity conservation, climate resilience and the reduction of poverty in two Communal Reserves in the Amazon basin, in the regions of Amazonas and Madre de Dios. Although the EBA project does not coincide geographically with the present project, it will generate important lessons in relation to the provision of technical assistance packages, including community-based forest management, the management of landscapes in communal reserves, and economic activities including cacao production, rubber tapping, fish farming, handicraft production, reforestation and agroforestry. There are also important opportunities for collaboration in the incorporation of strategies for vulnerability reduction, such as community-based and ecosystem-based adaptation.

157. **Joint Declaration of Intent (DCI) between Peru, Norway and Germany:** the DCI, which will contribute to significant reductions in emissions of greenhouse gases from deforestation and forest degradation in Peru,

[18] https://www.thegef.org/project/capacity-building-and-regional-coordination-amazon-sustainable-landscape-program

[19] http://www.undp.org/content/gcp/en/home/where-we-work/peru.html

coincides with this project in its two regional areas of work as well as its systemic focus at national level. One of its outputs in its Phase 2, which is highly compatible with the strategies and goals of this project, is related to the consolidation of national sector platforms and the strengthening of local and regional planning. It will work jointly with the public and private sectors on the design and implementation of NAMAs for the sustainable production of cocoa, coffee, agro- and biofuels, agroindustry and livestock production, optimizing the use of deforested lands and avoiding the conversion of forest to agriculture.

158. The DCI also aims to reduce by 50% the remaining area of forest without legal assignation of forest use category, or assigned rights, in order to avoid forest conversion; it also works on the titling and registry of native communities. This is complementary to the outputs of this project related to institutional strengthening for territorial land use planning, ZEE and landscape planning. Given that this project will strengthen capacities but will not carry out land titling and categorization per se, it will be very important for the two projects to coordinate and prioritize actions in their shared area of influence in Ucayali. The commitment of the DCI to cease authorisations for the conversion of forest and protection lands will be a determinant of the success of this project.

159. **UN-REDD**: the national UN-REDD National Programme is due to commence in mid 2017. Three of the outputs of its first component, "support to the implementation of the ENBCC" is closely related to the proposed work of this project in relation to the improvement of instruments for local planning and management. There are good opportunities for collaboration in the strengthening of capacities for the implementation of REDD+. UN-REDD will also work with indigenous actors, strengthening mechanisms for dialogue and technical assistance in relation to REDD+, the Amazonian Indigenous REDD and forest management. There has been a proposal for an Indigenous REDD initiative in the El Sira Communal Reserve (which overlaps with the project's target districts), providing the opportunity for linkages with this project, and also with the PA Resilience project.

160. **Peru Forest Investment Plan (FIP)**: one of the strategic objectives and public investment projects proposed within the FIP is related to guidelines and policies for the management of forest ecosystems and the control of deforestation, which is compatible with the work of this project on the improvement and harmonization of policies and planning instrument in order to reduce deforestation. There are also opportunities for synergy in relation to the design of financial instruments in support of sustainable production. The FIP will also work on forest planning and management in Atayala, in Ucayali District: although this does not coincide with the area of work of this project, it will be important to share strategies for institutional work and take into account regional actors. Both this project and the FIP will work on the development of capacities at national and regional levels in relation to environmental governance and planning, including the model of participatory forest planning.

161. **JICA projects:** JICA has two cooperation projects with MINAM. The technical support project "Development of Capacities for the Conservation of Forests and REDD+ Mechanisms" is a four-year pilot covering three regions, including Ucayali, in collaboration with regional and local governments and forest stakeholders, principally members of regional and local forest committees, native communities and other local forest users. This JICA project coincides with the GEF project in its work with native communities, including community-based forest management. The financial cooperation project "Forest Conservation Programme in the departments of Amazonas, Lambayeque, Loreto, Piura, San Martín, Tumbes and Ucayali will be implemented through three Public Investment Projects (PIP). The one of these that it most closely related to this project is "Improvement of governance from the State and civil society for forest conservation", with which there are opportunities for linkages and collaboration in the strengthening of systemic institutional capacities in order to create enabling conditions for the combat of deforestation.

162. The other JICA Project is on "improvement of sustainable production systems in forests for the mitigation of climate change", resulting in increased value added and including agroforestry systems and community-based forest management. The JICA project will implement competitive funding schemes to promote sustainable initiatives in pilot communities. It will be important to coordinate with this project in order to ensure common operational strategies that are agreed with MINAM. This project will also strengthen geographical information systems with innovative technology, which will complement the information and monitoring needs of this project.

163. **The Peru Cocoa Alliance (ACP)** is a public-private initiative that promotes the production of fine-flavoured and aroma cocoa in agroforestry systems; its operations coincide with the target areas of this project in Huánuco and Ucayali. There are particular opportunities for collaboration in relation to technical assistance packages for producers, for sustainable production systems. ACP has also generated experiences with the promotion of

partnerships between cacao growers and buyers, linking small farmers to markets. Furthermore, it channels public and private investment to support producers who adopt and develop innovative models.

164. The Programme for Sustainable, Inclusive and Competitive Forest Development in the Peruvian Amazon (Andean Foment Corporation CAF/MINAGRI): this is focused on the forest sector and will include in one of its public investment projects the inclusion and participation of native peoples and local communities in forest development. It will include the strengthening of community capacities for the development of sustainable community-based production systems based on lead products, in relation to which there will be opportunities for compatibility and synergy with this project. There will also be coincidence with the second PIP in relation to the management of forest resources for conservation, in particular the management and use of secondary forets and residual primary forests, and the promotion of natural resource use in PA buffer zones. This project also includes a competitive fund of 35 million soles to support forestry projects of regional governments,

165. **ProAmbiente:** this programme, supported by German cooperation, contributes to the environmental goals of Peru through the provision of technical and organisational assistance and capacity strengthening. Two of its four action frameworks are compatible with the outputs of this project: the first is related to environmental management and policy, through which it will strengthen the National, Regional and Local System for Environmental Management. It will also support the implementation of Strategic Environmental Assessment (SEA), which is an area on which this project will also work. Another area of relation is that of environmental and climate funding. ProAmbiente has the objective of incorporating environmental criteria in the policies and public investment, contributing to the "green" national system for public investment (SNIP). At regional level, it will support the incorporation of environmental considerations in consensus-based Development Plans. In relation to public-private finance, ProAmbiente promotes the instrument of "Corporate Ecosystem Services" within the framework of the "Biodiversity and Businesses" initiative promoted by MINAM. This has potential for this project, in support of the conservation and recovery of areas that provide ecosystem services to agricultural production areas. Proambiente also has experience in the design and implementation of mechanisms for the compensation of ecosystem services in micro-catchments.

166. Programme for the Promotion and Sustainable Management of Forestry Production in Peru: this initiative of SERFOR and KfW, with a budget of US$123 million, consists of three public investment projects, related to the promotion of commercial forest plantations, the promotion of sustainable forestry production and the planning and organization of the forest estate. The greatest opportunities for collaboration are with this last one, as it will strengthen the process of forest zoning and the capacities of regional governments, with the aim that forest zoning will be formulated and approved in the target regions of Ucayali and Huánuco. In relation to sustainable forest management, there is a need for close collaboration in order to ensure sustainable management of the landscape as a whole, complementing the focus of the GEF project which will be principally on agricultural production systems (including tree crops). There is also potential for collaboration in relation to forest plantations, as the GEF project may support enrichment planting in secondary forests and in agroforestry systems.

167. **Rural Land Titling and Registration Project, Third Phase (PTRT-3)**: PTRT3 is highly relevant to this project given that a third of the lands covered do not have rights assigned, which is a fundamental basis for the application of strategies to combat deforestation. In its first component on Cadastre, Titling and Land Registry includes activities necessary for the cadastre, titling and land registry of individual rural properties, and communal indigenous and campesino communities. The other relevant component is the third, Services Component for Land Administration, which focuses on the strengthening of the institutional capacities both of MINAGRI and Regional Governments for rural titling and policy frameworks, as well as the establishment of mechanisms for the updating of land registry information.

## IV. RESULTS AND PARTNERSHIPS

**Expected Results:**

168. The objective of the project is to reduce pressures on Amazon forests through the promotion of the sustainable management of productive landscapes.

**Outcomes and components**

169. The objective of the project will be achieved through actions structured under three components.

***Component 1. Improved policy planning and governance to reduce deforestation and enhance sustainable production***

170. Ensuring engagement, capacity building and participation in landscape management is a first step towards maintaining the provision of ecosystem goods and services.

**Outcome 1.1 Land-use policy and planning strengthened and aligned, including the approach of landscape sustainability, resilience and inclusiveness**

171. Project strategies in support of the improvement and harmonization of the policy, planning and regulatory framework will cover a diverse yet interrelated set of issues, including the following:

- Land use categorization, in order to ensure the existence of a clear and solid legal basis for land use planning and governance;
- Territorial land use planning, in order to ensure that land uses are located appropriately within the landscape;
- Inter-institutional and cross-sector coordination and harmonization, in order to reduce the risks of sector actors operating at cross purposes and undermining their respective initiatives and objectives.

**Output 1.1.1 National Sector development policies and plans defined in accordance with land-use policy and plans, including concept of landscape sustainability, and based on roots cause analysis**

172. The Project will work with multiple actors in both public and private sectors in the formulation of development plans for the target sectors, that will provide frameworks for the application of public-private partnerships, landscape-level planning, governance, financial mechanisms, market instruments and producer support that will allow the development of the sectors to be compatible with environmental and social sustainability, landscape stability and biological connectivity. Different groups including women and young people will be consulted on their needs and interests. The commodity platforms, to be supported by the project under Output 1.2.1, will play a key role for the multi-stakeholder formulation of these plans.

173. It will also support the formulation of the Nationally Appropriate Mitigation Actions (NAMAs), for which outlines have been developed and which will provide the strategic framework for sector development policies and integrated development in the Amazon.

**Output 1.1.2 2 Regional and 10 local development plans aligned with NAMAs, Forest and Climate Change Strategy, and land use plans**

174. The project will support regional and local governments (GOREs and GOLOs) in the incorporation of provisions for environmental sustainability into their policies and development plans covering the target areas, focusing for example on instruments including *Planes de Desarrollo Concertados* (negotiated development plans), local development plans, 5-year plans and annual budgets. This support will focus in particular on promoting compatibility and synergies between the goals of economic development and environmental sustainability, taking into account demographic trends, climate change and the differential needs of different sectors of the population (including indigenous groups and women), with the aim of promoting stable landscape mosaics. It will take into account, in particular, the potential implications of plans for land use dynamics at a landscape scale: for example, the potential for sectoral or infrastructural development to attract additional immigration by people hoping for employment or for economic opportunities in the service sectors associated with the sector in question, with corresponding indirect impacts on natural resources.

**Output 1.1.3 Microzoning (covering 100,000ha) that clearly defines areas for forest conservation, restoration and sustainable use plans**

175. The appropriate location, at both macro and micro levels, of different forms of resource management in the landscape, reflecting spatial variations in the potential and vulnerability of natural resources, is a key determinant of the sustainability of resource management.

176. There is a significant baseline level of investment in more macro-level land use zoning (*ordenamiento territorial*), Ecological and Economic Zoning (ZEE), forest zoning and planning, by institutions including regional governments and SERFOR, with support from cooperation agencies including the Andean Foment Corporation (CAF) and KfW. ZEE has already been developed (pending approval) over the entirety of the target landscapes (2.17 million ha), and it is projected that *ordenamiento territorial* will have been completed by partner institutions by project end.

177. The project will build on this baseline by investing in more fine-grained micro-zoning, which will allow the definition of appropriate areas for alternative approaches to land management including conservation, restoration and sustainable use.

178. Particular attention will be paid to ensuring that this micro-zoning includes variables related to environmental sustainability and the status of environmental values of global importance, as well as considering the implications of zoning decisions taken in individual land units for broader landscape dynamics (for example in relation to connectivity between ecosystem remnants, and the landscape-scale advance of productive sector initiatives towards protected areas or indigenous territories).

179. The micro-zoning will be carried out with the direct involvement of GOREs and GOLOs, as well as national institutions such as the General Directorate for Land use Planning (DGOT) of MINAM, with the aim of maximizing their "buy-in" to the processes and their results, and also of leaving them with a legacy of capacities and resources in the form of, for example, GIS equipment, databases, procedural instruments and trained staff. The project will also support processes of communication in order to help the diverse stakeholders in the target regions to understand the complex institutional and regulatory framework related to titling, planning and zoning, and buy into these processes, recognizing the importance of women's land rights and the different interest and opinions of young people, indigenous people and others.

**Output 1.1.4 12 additional indigenous life plans elaborated, sensitive to gender and including approach of landscape sustainability**

180. Support will also be provided to the development of gender responsive Life Plans by indigenous communities within the target localities. Attention will be paid, through the provision of facilitation and advisory support, to ensuring that these incorporate considerations of ecosystem vulnerability, the spatial dynamics of threats, and interactions between livelihood support activities and ecosystem conditions, and that they include provisions for the kinds of community-based sustainable livelihood support options to be supported by the project under Output 3.1.2. Particular attention will also be paid to working with women's organizations and groups in these processes, and also to integrating women's voices with those of other members of the communities.

**Outcome 1.2: Landscape governance and participation strengthened for public policy development, sustainable land use management and participatory and inclusive decision making**

181. Actions and outputs in support of this outcome will focus on promoting constructive relations between the individual and institutional actors with interests in, or impacts on, the management of the target landscapes. "Governance" in this context is understood to include aspects such as constructive, non-conflictive dialogue between interest groups; consensus-based decision-making; effective and equitable representation of interest groups in decision-making structures; the effective enforcement, where necessary, of the rule of law; and the capacity of government entities at different levels to carry out activities in support of the interests of local stakeholders and the natural resources on which they depend.

182. In order to maximize efficiency and social acceptance, and avoid duplication, the project will take advantage wherever possible (subject to orientation and supervision by MINAM) of existing multi-stakeholder entities for coordination and dialogue, including REDD+ Platforms, Regional Indigenous REDD+ Platforms, Technical Commissions for Ecological Economic Zoning and Territorial Planning (ZEE-OT), Regional Environmental Commissions (CAR), Municipal Environment Commissions (CAM), Forestry Platforms and Civil Defence Committees;

183. Particular attention will be paid to promoting the participation and empowerment of traditionally marginalized groups, especially indigenous groups, poor people (both indigenous and colonists) and women (addressing typical intra-community and intra-family inequities), taking into account women's roles in land administration including the promotion of appropriate methodologies to know their interests and proposals. Attention to such issues is important not only from the perspective of social justice (and the development goals of the Government and UNDP) but also of the social sustainability of the resource management models that are proposed.

**Output 1.2.1 National commodity platforms established**

184. UNDP has commenced activities in Peru through its global Green Commodities Programme (GCP), with support from the UN-REDD Programme and the Swiss State Secretariat for Economic Affairs (SECO), aimed at tackling the causes of deforestation and forest degradation associated with agricultural activities and in particular with the functioning of global commodity markets. This support is based on the establishment and

strengthening of National Commodities Platforms (NCPs) for coffee, cocoa and oil palm; in line with GCP's global approach, these NCPs constitute forums where all stakeholder groups in a commodity sector meet, and through plenary meetings and specialist working groups establish a consensus on issues that must be solved: through dialogue, the stakeholders agree on priorities and action they must take to make a sector more sustainable, and coordinate roles and responsibilities in the process, resulting in the joint preparation and implementation of National Action Plans for the targeted commodities.

185. The project will work with GCP in expanding and consolidating these advances, including the facilitation of the formulation of strategic plans for the establishment and consolidation of platforms, together with rules and procedures for their functioning. As a result, by project end Joint Action Plans will have been developed with broad participation from actors representing at least 50% of national production of coffee, cocoa and oil palm sectors, and officially endorsed by the State.

186. The platforms will play a vital role in the delivery of the project's different thematic outcomes, functioning as spaces for multi-stakeholder discussions, analyses and negotiations regarding key issues related to the sustainability of landscapes in the Peruvian Amazon, with particular importance in relation to the project's influence on policy, planning and financial instruments. In addition to supporting the delivery of project outputs during its lifetime, the aim is that the platforms will be established as permanent forums for discussion and negotiation of policy and market issues; at the same time, provision will be made for their purpose and functioning to evolve over time in response to lessons learned, as well as to changes in emerging priority issues. Importance will be given to ensuring the role of the platforms as accessible and impartial forums, in order to avoid the risk of them becoming converted into lobbying mechanisms dominated by specific interest groups.

187. Gender-related issues are tightly related to agricultural commodities and sustainable development of agricultural sector. The project will support the National Commodities Platforms in mainstreaming gender to ensure inclusive development and to institutionalize the long-term sustainability performance of agricultural commodities. NCPs are particularly suitable environments to promote equal participation (using appropriate methodology to take into account their interest and proposals), to raise awareness, discuss gender related issues and to reach agreement on actions to take to address mens' and womens' special needs and challenges.

**Box 1. Building on the RSPO in Peru [21]**

Support will build upon experiences to date with the platform for the Round Table on Sustainable Palm Oil (RSPO) in Peru, and the national coffee sector platform. The RSPO initiative in Peru has had some success but has been largely industry-dominated and has had limited effectiveness as a forum for multi-stakeholder representation and dialogue.

The global Roundtable for Sustainable Palm Oil (RSPO) was founded in 2002 in response to consumer concern about palm oil plantations and deforestation in Southeast Asia. The RSPO has grown to represent all major producers, commodity traders, consumer goods manufacturers, retailers, and banks, as well as civil society organizations dedicated to social welfare and environmental conservation. By 2012, 2.2 million hectares of plantations (15% of the global surface area planted) were RSPO-certified, and 16% of global palm oil sales were Certified Sustainable Palm Oil (World Wildlife Fund [WWF], 2012).

In Peru, the smallholder associations OLPESA and OLAMSA are both members, as well as the Peruvian subsidiary of Unilever. Unilever recently made a commitment that 100% of its palm oil will be purchased from sustainable sources by the end of 2015. Unilever Peru confirmed this commitment in its 2013 Sustainability Report (Unilever, 2014). During 2014, several stakeholder meetings took place to make RSPO more operational in Peru; however, the level of engagement remains low, and a national interpretation of the RSPO Principles and Criteria is still pending. One key outstanding area for RSPO on a global level is certification for smallholder producers; this certification is currently the focus of an ongoing review of the certification principles and criteria.

**Box 2. National Commodities Platforms: closing the gender gap**

National Commodity Platforms (NCPs) offer more neutral space for multi-stakeholder dialogue to design collective action for sustainable agricultural commodities at a national level. National Commodity Platforms seek positive impact on commodity sectors through promoting policy reforms and better enforcement, improved extension services and economic incentives for sustainable production. All these outcomes can and must contribute to reducing gender inequalities. In parallel, reducing gender inequalities also supports

the achievements of these objectives and so are mutually reinforcing. Reducing the gender gaps in these fields will help promote sustainable agriculture, and vice versa.

1. Policy reform/enforcement: certain policy reforms can help remove barriers impeding women participation in specific economic activities and address constraints that reduce their productivity.
2. Extension services: extension services are a key mechanism to improve producers' capacity to adopt best practices. There is currently a huge gap in terms of capacity between women and men and access to capacity-building mechanisms. Improving and strengthening extension services with a specific focus on offering this equally to men and women will help improve women's capacity to adopt best practices and can reduce the capacity gender gap.
3. Economic incentives and access to finance is another key element to mainstream sustainability production within commodities sectors that can/should help reduce gender inequalities. Lack of access to finance and economic incentives are key drivers of unsustainable production practices, especially for smallholders. As women generally have even less access than men to finance, special attention should be given to ensuring equal access to the mechanisms developed to incentivize sustainable production
4. Intra-and inter-sector coordination: The most direct outcome for national commodity platforms is to improve coordination between stakeholders directly or indirectly involved in a commodity sector and to increase their level of knowledge on key issues.

**Output 1.2.2 Territorial governance platforms strengthened**

188. The sustainable management of the target landscapes also requires the existence of adequate conditions of social governance, which allow for effective representation and equal participation, coordination and dialogue between the different stakeholder groups with diverse interests in how the landscapes and their natural resources are managed, resulting where possible in consensus-based decision-making, the effective application of socially-sanctioned controls on activities with implications for the conditions of natural resources, and the management of inter-stakeholder conflicts regarding the management of natural resources. The intended result is the maximization of buy-in by stakeholders, across the board, to the sustainable and stable management of the landscapes.

189. This support will involve a wide range of actors: of particular importance will be regional and local governments (GOREs and GOLOs), given their autonomous responsibilities for overseeing natural resource governance, as well as sector-based and territorial planning.

190. Wherever possible, the project's support to environmental governance will seek to strengthen existing governance mechanisms such as Regional and Municipal Environment Committees (CARs and CAMs), associations of municipalities, and watershed management committees where these exist rather than establishing new mechanisms with potentially questionable social and institutional sustainability.

191. The project's support in this regard will be based on an initial, detailed analysis of governance conditions and inter-stakeholder relations, going beyond that carried out during the PPG phase to identify key capacity deficiencies and bottlenecks for effective governance, with particular attention paid to cultural norms and sensibilities and how these vary between stakeholder groups according to factors such as their ethnicity, gender, historical background and economic status. Support will then focus on analyzing and developing the capacities of the different governance mechanisms, including the clarification of their visions, strategic plans, roles and procedures; and on supporting specific governance processes such as conflict management, the development of community-based norms, the oversight of compliance with norms and multi-stakeholder inputs into spatial planning processes. Care will be taken when supporting these processes to the project in the role of facilitation, in order not to supplant the role of local actors and create unsustainable dependence.

**Output 1.2.3 Strengthened, gender sensitive community level governance structures**

192. Through this output, particular attention will be paid to strengthening governance conditions in indigenous communities. A specific differentiated approach is required in indigenous communities given their particular social and cultural conditions, with an emphasis (in contrast to non-indigenous communities) on community-based rather than individual resource management, decision-making and governance. Project support in this regard will be defined on the basis of detailed, participatory analyses and consultations with the target communities and their representative organizations, in order to ensure its relevance, cultural appropriateness and effectiveness. This support will contribute to the effectiveness of the enforcement of rules and regulations

on resource management, and the corresponding reduction in frequency of infractions. This Output will be articulated with the support to Life Plan development described under 1.1.4.

**Output 1.2.4 Technical and institutional capacities developed in at least 60 public and private institutions at national, regional and local levels in support of sustainable landscape management**

193. The effective application and sustainability of the actions proposed under the planning frameworks to be supported by the project under Outcome 1.1 will be dependent on the existence of corresponding implementation capacities in Government agencies at central, regional and local levels. The project will provide consultancy support for the realization of institutional capacity development needs analyses, identifying the critical areas in which strengthening is needed in order for the integrated, multi-faceted model of landscape management that is proposed by the project to work and be sustainable, and proposing specific strategies for the delivery of capacity development support. The project will also provide consultancy support to key entities at all of these levels, for the development of the technical and procedural instruments required for them to carry out their roles effectively in areas including planning, technical support, government and the implementation of investment projects.

**Outcome 1.3 Monitoring and enforcement capacities strengthened**

**Output 1.3.1 Effective and transparent land-use change approval mechanism**

194. The project will support the relevant entities of central governments (including MINAM, MINAGRI and SERFOR) and provincial governments in unifying and harmonizing existing mechanisms for the approval of land use change applications. This will help to ensure consistency of approaches and criteria, thereby reducing the risk of conflicts regarding decisions on land-use changes with potential inter-sector impacts, such as forest clearance for commercial agriculture, which may be in the interests of productive sector development but at the expense of environmental values. Multi-stakeholder involvement in these mechanisms will also help to ensure confidence in the transparency of the process, in the face of possible concerns about corruption in decision-making.

**Output 1.3.2 Real-time, transparent monitoring and analysis system to detect illegal deforestation and land-use change, integrated with control mechanisms**

195. The project will build on the existing GEOBOSQUES satellite-based monitoring system of MINAM, which includes an on-line platform that generates alerts of deforestation, and on support by entities such as Global Forest Watch/USAID to spectral tagging, and by JICA to monitoring in community forest areas in Ucayali using RADAR integrated with LANDSAT. Key improvements may include:

- A move towards more fine-grained detection of land use changes, allowing distinction to be made between different types of agriculture. This will be an important improvement given that different types of agriculture (for example annual food crops, diverse plantations of coffee and cacao, and oil palm plantations) have different implications for global environmental values and landscape dynamics, and so require different responses.
- Improvements in the frequency and rapidity of detection, allowing corresponding improvements in the rapidity of response and therefore giving more opportunity for prevention of damage.
- Cross-referencing of data on land use conditions and changes, generated by remote sensing, with data on land ownership, in order to help authorities to determine whether detected land use changes are authorized or not.
- Linkage to governance, in order to ensure that GOREs respond adequately to information/alerts.
- Improvements of in capacities for analyzing and interpreting the information received.
- Training of public and private decision-makers in using the monitoring and analysis tools.

196. In the short term, it is expected that this support will result in an increase in the frequency of reported infractions of regulations related to environmental management and land use change, due to improved detection; subsequently, this increase will tail off and reverse as a result of parallel support by the project to improvements in conditions of governance, enforcement and incentives.

**Output 1.3.3 Inspection and enforcement capacities to address violations in land-use regulation**

197. A cornerstone of the project's approach to reducing deforestation will be to ensure that the "softer" elements such as market-based instruments, productive capacities and planning are backed up by effective enforcement. The project will in particular support regional forest authorities and Local Governments in carrying out their enforcement roles, allowing them to respond effectively to infractions, including those detected through the monitoring and analysis system to be developed under Output 1.3.3, and reports from local

populations (either from individuals or from environmental oversight structures such as watershed management committees. Project support will focus, for example, on helping these entities in designing and implementing protocols that will guide their responses to reports of infractions, including collaboration as necessary with other institutions and with the police. This will be accompanied with the provision of equipment and facilities aimed at consolidating their technical, logistical and operational capacities and enabling them to carry out field inspections.

**Output 1.3.4 Community-based monitoring mechanisms**

198. As described above with community-based governance, particular attention will also be paid to strengthening the capacities of indigenous communities (including women) in carrying out environmental monitoring. This support will focus specifically on strengthening the organizational and logistical capacities of community-based environmental supervision groups: this model is well-recognised by Government and by the communities themselves and by their local federations and regional organizations.

**Outcome 1.4 Public finance flows increased to sustain effective territorial governance with zero deforestation**

199. The project will support the development and/or application of financial instruments that actively promote environmentally-sustainable forms of production. The aim will be to generate a mix of complementary public and private sources of funding.

200. The intended result of the process of analysis and communication proposed under Output 1.4.1 will be firm commitments by public sector institutions to increase budgetary allocations. To this end, the project will identify and target key "entry points" for the messages developed under Output 1.4.1, including predetermined regular budgeting processes, the reform of sector development or public investment instruments, as well as the sector platforms, at both central and regional levels, described under Output 1.2.1. The project may also support travel by policy makers to participate in interchanges of experiences, enabling them to appreciate firsthand the nature and magnitude of the potential returns from budgetary investments.

201. Subject to the results of the detailed analyses proposed under Output 1.4.1, key areas in which it is expected that these processes will result in increased budgetary support will include:

- Environmental enforcement (by entities including the Forest Service SERFOR, the Environmental Protection Division of the National Police, the Organism for the Supervision of Forestry and Wildlife Resources OSINFOR and the Office for Environmental Evaluation and Fiscalization OEFA),
- Territorial land use planning (by regional and municipal governments).

The analyses to be carried out under Output 1.4.1 will also serve to orient priorities for the development and application of financial incentive mechanisms based on either public funds or international carbon markets.

**Output 1.4.1 Financing gaps identified for the implementation of policies**

202. A key requirement for the assignation of resources by public and private actors in support of sustainable natural resource management is that they are aware of the returns that can expected from such investments. The project will fund the realization of technical studies, including the use of cutting edge methodologies for the economic valuation of environmental benefits (learning for example from other GEF-funded initiatives such as project 9429 in Cuba on "Incorporating Multiple Environmental Considerations and their Economic Implications into the Management of Landscapes Forests and Production Sectors in Cuba"), and analyses of the types and levels of investment required to generate the expected benefits, using approaches including targeted scenario analysis (TSA), Cost Benefit Analysis (CBA), and/or adaptations of the UNDP/BIOFIN methodology.

203. The effective communication of the results of the studies to decision-makers, in objective and credible yet easily digestible terms, will be ensured through the knowledge management and communication activities proposed under Outcome 3.3.

**Output 1.4.2 Public finance incentives for regional and local governments in support of sustainable landscape management**

204. The project will build on and collaborate with BIOFIN in supporting the design and introduction of incentives for public bodies to contribute to the reduction of deforestation in their areas of influence. Advisory support will be provided to processes of budget allocation to regional and local governments, including the results of the economic analyses proposed under Output 1.4.1 above, with the aim that these allocations will be made in ways that favour forms of development that reduce deforestation. The project will also advise MINAM, MEF and MINAGRI (again on the basis of the economic analyses proposed under Output 1.4.1) on the long term economic and environmental benefits of providing additional results-based budget allocations, and/or reduced interest rates on investments, to regional governments that are able to show effectiveness in reducing

deforestation. Where appropriate, the project will support the strengthening and application of existing public finance incentives, such as the Municipal Incentives Program administered by the MEF, with the aim of incorporating incentives aimed at reducing deforestation.

***Component 2. Market and incentive mechanisms promote sustainable production practices***

**Outcome 2.1: Green commodity trade and supply chains have provided incentives to farmers for sustainable production**

205. The expansion of crops directly linked to and driven by global commodity markets (especially coffee, cacao and oil palm) constitutes one of the most significant drivers of deforestation in the target areas. Conversely, there are significant opportunities to turn commodity sectors into drivers of positive rural development: by applying better practices, most producers can considerably increase both yields and product quality, reduce environmental impact and improve social conditions for themselves and their workers; and by diversifying production systems, they can improve income, food security and resilience to climate change.

206. The project will adopt a pragmatic approach to working with supply chains for the target commodities with the aim of influencing producer behaviour towards the application of sustainable practices. On the one hand, it will support the application of market-based instruments that take advantage of consumers' and traders' willingness to favour and reward products coming from production systems that respect principles of environmental sustainability, while recognizing the demonstrated limitations of some such market-based instruments in terms of consumers' limited willingness to pay price premiums, and high administrative and compliance costs for producers. On the other, it will work with demand-side actors in the private sector, to motivate them to dedicate financial resources in support of the development of the technical and organizational capacities needed among producers to be able to supply increasing levels of demand for commodities in a reliable, consistent and profitable manner, in accordance with standards of quality and environmental sustainability. This will be based on two considerations:

- The increasing pressures for actors participating in global commodity markets to be able to demonstrate social and environmental responsibility. Most of the coffee and cocoa from the Amazon basin is exported and therefore inserted into such commodity markets, meaning that there is potential for these considerations to influence companies' behaviour; most of the country's palm oil production is for the domestic market, but there is also scope for this form of influence here, given that the major national companies involved in the value chain have commercial links with multinational companies who require their national partners to have clean social and environmental records.
- The importance to companies of ensuring reliable and sustainable sources of supply of products such as cocoa, coffee and oil palm nuts. Sound environmental management in production systems is a major determinant of productive sustainability: the use of sustainable land management practices contributes to the productive life of plantations and at the same time reduces the need to open new areas for cultivation; high structural and compositional diversity, meanwhile, contributes to the resilience of production systems to stresses such as climate change and diseases, and at the same time is favourable for biodiversity.

**Box 3. Growing emphasis on Green value chains for cocoa worldwide [**26]

Debenham (2014) reports a growing emphasis on corporate responsibility in cocoa value chains worldwide, focusing on issues such as the avoidance of the use of child labour, promoting farmers' livelihood sustainability and ensuring adequate working conditions, and also on longer term issue such as sustainability of supply and mitigation of environmental impacts. This has led to priority being given to identifying sustainable sources of supply that comply with criteria of social responsibility, environmental management, economic viability, governance and traceability (ICCO, 2014b).

Dalberg Global Development Advisors (2012: 6) conclude that the principal motivation for this tendency is brand sustainability, which depends on satisfying consumer demand for fair trading practices and environmental protection; business growth and protection based ensuring continuity of supply; diversification and traceability of the value chain (productivity, quality, food security, commitment and strengthening of producer capacities); and the adoption of a defensive position with the management of external risks.

To ensure that supplies come from sources that comply with principles of fair trade, chocolate companies also require certification and are prepared to pay rice premia accordingly. The largest companies have committed to sourcing only certified chocolate from 2020 (Debenham, 2014).

**Output 2.1.1 Strategies for market certifications, jurisdictional certification, companies' sustainable procurement policies**

207. The project will build on a range of experiences to date in Peru with market-based certification, including the regional GEF project 2371 (Biodiversity Conservation in Coffee: Transforming Productive Practices in the Coffee Sector by Increasing Market Demand for Certified Sustainable Coffee) in support of Rainforest Alliance Certification in the coffee sector, and USAID support to social/environmental certification in the cocoa sector. It will contribute by strengthening links between producers and potential purchasers, for example by increasing awareness among purchasers on the availability of certified products, providing information to producers on the range of certification schemes available (including Rainforest, Utz, Organic and emerging industry-based schemes such as Cocoa Life), and helping to strengthen links between international purchasers and their national level traders/suppliers in sourcing certified products.

208. Opportunities will also be explored and supported for the introduction of regional market-based certification schemes, in which regions or landscapes are certified as having made substantial progress in tackling deforestation and products from such areas are labelled accordingly, as a marketing instrument. The project will support feasibility analyses of this approach, and subject to the results of these studies will provide support to regional governments in establishing the corresponding systems, including means of verification, dissemination mechanisms and relations with purchasers and their corporate responsibility programmes.

209. Thirdly, the project will assist and advise companies in developing and applying sustainable procurement policies for the target commodities, within the context of their corporate responsibility programmes.

**Output 2.1.2 Alliances with private sector and supply-chain actors to support adoption of sustainable practices in landscapes**

210. The project will also assist private sector actors in putting their sustainability principles and financial commitments into practice, through the formulation and implementation of programmes of technical, organizational and business development support to the producers that supply them, and the incorporation of provisions for this support into the companies' business plans to ensure that it becomes part of their normal way of doing business. Some cooperatives and palm oil processing companies already provide a certain level of technical support to their producers: the project will build and support the expansion of this baseline. To maximize interest and uptake amongst both the companies and their producers, this support will focus principally on issues of productivity and productive efficiency, but at the same time the project will take advantage of the opportunity to promote and advise on the inclusion of considerations of environmental sustainability. This will be "sold" on the basis of its importance for productive sustainability and risk avoidance, but at the same time it will generate global environmental benefits in relation to biodiversity status, the sustainability of land management and the effectiveness of carbon capture.

**Outcome 2.2 Other sustainable economic activities in landscapes supported and linked to markets**

**Output 2.2.1 Strategies to promote the development of sustainable deforestation-free economic activities, linked to markets**

211. In addition to the commodities themselves (particularly cocoa, oil palm and coffee) on which the project will work under Outcome 2.1, it will promote the development of other economic activities which contribute to local development and livelihoods without causing deforestation, or which act as active incentives or vehicles for forest conservation. Examples of such activities include the sustainable management of non-timber forest products (NTFPs) and ecotourism, both of which satisfy these criteria as their success and sustainability depend on the conservation of the forest resources on which they are based. Under this output, the project will provide technical assistance and facilitation support to analyses by Government entities, civil society organizations, farmers and indigenous communities to identify opportunities for such activities in their areas, and to formulate strategic plans for their development.

**Output 2.2.2 Linkages of activities with market, financial and public incentives**

212. Once the sustainable economic activities have been identified and strategic plans formulated for their development, the project will provide advisory and facilitation support to producers (individuals and organisations) to help them to identify and insert their products into favourable markets, and to identify and access opportunities for finance support under favourable conditions, in the form of both credit from the private financial sector and in the form of incentives from public institutions and programmes.

**Outcome 2.3: Land users access finance to support conservation and sustainable resource management.**

**Output 2.3.1 Credit and insurance schemes designed and implemented to benefit sustainable land practices aligned with National Forest and CC Strategy (farmers, communities etc).**

213. In addition to the provision of external financial support to producers, from public and private sources, as proposed above, it is necessary for producers to have sustainable access to sources of credit that meet their needs and the nature of their business models. Much of the existing portfolio of credit available to producers has timeframes that do not match those of the production cycles and return periods of perennial crops such as coffee, cacao and oil palm, or requires forms of guarantees that producers of these kinds of crops are unable to provide (Agrobanco, for example, typically applies interest rates of between 18 and 21%; private sector banks may offer lower rates but with shorter payback periods or more demanding eligibility criteria).

214. The project will help to open up the portfolio of credit options available to producers by carrying out analyses of the credit needs and financial viability or creditworthiness of the target production systems, and communicating this information to selected financial institutions, highlighting the commercial potential of broadening their portfolios to include the target cropping systems, and developing proposals of the structure, functioning, conditions and nature of the credit mechanisms that would be required to meet these producers' needs.

215. A complementary form of financial incentive to be explored and promoted through the project will be the provision of insurance to producers at favourable rates, subject to the application of criteria of environmental sustainability, on the basis that sound environmental management will reduce the exposure of production systems to risks such as extreme climate events or pests.

216. Emphasis will be placed on proposing the inclusion, in the criteria for eligibility to credits and insurance, of requirements for environmental sustainability and compliance with environmental legislation and the provisions of land use zoning and local and regional development plans. The inclusion of such criteria would help to reduce the risk profile of the production systems, in relation to impacts from environmental shocks, social conflicts and legal challenges, and therefore improve their creditworthiness.

**Output 2.3.2 Cost-Benefit Analyses of sustainable practices developed**

217. In collaboration with Government, private sector and civil society organisations and producers, the project will fund the realization of economic analyses of the sustainable practices and systems that are proposed, to determine their economic viability and their suitability for support, using tools such as the UNDP Targeted Scenario Analysis methodology. This will include analyses of the internal profitability of the practices and systems from the farmers' perspectives, with a farm-level perspective that considers their relations with and implications for other elements of the farm economy (for example, the opportunity cost of investing limited resources of labour and capital in the proposed practices rather than in alternative options such as other production systems or off-farm employment). These analyses will be of utility to the farmers themselves in deciding how to manage their farms, and also to finance providers in order to determine the creditworthiness of the systems. Economic analyses will also be carried out of the off-farm costs or benefits generated by the production practices and systems, such as flows of environmental impacts and services to other actors in the landscape; this broader vision will enable public entities to determine to what extent the practices and systems warrant external financial support in favour of the common good.

**Output 2.3.3 PES and incentive systems promoted to compensate land users for the implementation of sustainable economic practices and sustainable ecosystem management**

218. There is a sound legal framework for the application of schemes of Payment for Environmental Services (PES) in Peru (see Box 9), and advances have been made in exploring their potential (Box 10). The project will support further feasibility studies of a range of alternative PES models, including voluntary carbon payments, results-based payments, and payment for watershed protection by downstream water users, rewarding either reforestation/restoration or avoided deforestation. Such schemes may either involve direct payments to land managers or, in order to reduce transaction costs, payments to local organisations that work with producers to enable these to provide support to the producers in the application of the management practices required for the generation of the environmental services. Subject to the results of these studies, it will also provide support to the design of such schemes, facilitation support to their implementation, and support to the establishment of measurement, reporting and verification (MRV) mechanisms.

**Box 4. Law of mechanisms for retribution of ecosystem services [9]**

Law No. 30215 has as its objective the promotion, regulation and supervision of mechanisms for the retribution of ecosystem services. This law does not regulate the issuing of natural resource use nor of enabling titles (*títulos habilitantes*) provided for in the Forestry Law. It allows farm families to enter into agreements and contracts with the aim of developing initiatives for the payment for ecosystem services (PES) and the sale of carbón credits, which can be associated with other productive activities such as agroforestry systems and plantations, and conservation. Access to these schemes, depending on the complexity of their implementation and the norms, may act as very appropriate incentives for small and medium scale farmers with *títulos habilitantes* for carryng out forestry and agroforestry activities.

***Component 3: Technical capacity installed to restore and sustain ecosystem services in target landscape***

219. This component will be focused on improving the management of production landscapes and sectors at local level, through actions carried out in selected critical localities. These actions will be carried out within areas of the Peruvian Amazon, focused principally on the "*selva alta*" of the eastern slopes and foothills, identified as being most affected by processes of land use change and deforestation, but also where appropriate including priority areas of lowland forest (*selva baja*), especially when linked to the *selva alta* by ecological and/or socioeconomic dynamics.

220. As far as possible, the project will work in partnership with sector development initiatives supported by other agencies, such as the investment of USD25 million by the Peru Cocoa Alliance nationwide in the development of the cocoa sector, and investments by DEVIDA in the development of economic alternatives to coca; GEF incremental support will complement such investments, with a focus on mainstreaming environmental considerations into management practices and productive systems. Working through and in collaboration with these partners in this way will allow GEF incremental support to generate environmental benefits in a much more efficient and focused manner than if the GEF project were working alone.

221. Project actions under this component will result in three outcomes:

- Sustainable production and natural resource management practices will be demonstrated in pilots in both indigenous and non-indigenous areas, with a focus on practices that have the potential to constitute viable long-term components of their farming systems;
- The capacities of farmers will be developed for applying the practices, together with institutional capacities for providing ongoing extension and technical support to farmers;
- Direct investments will be made in ecosystem restoration activities, focusing on practices that have the potential to generate flows of environmental benefits beyond the land units where they are applied, but may not offer sufficient economic benefits to local people to ensure spontaneous uptake and scaling-up.

**Outcome 3.1: Sustainable and inclusive production models demonstrated to enable scaling-up to landscape level**

222. Actions under this outcome will contribute to the landscape-wide uptake of sustainable production systems by supporting the establishment of pilot sites throughout the target landscape. The production systems to be piloted will be selected on the basis of their productive and economic viability, their compatibility with the productive potential of the land, their reduced impacts on soil and water resources, their contribution to landscape stability by allowing farmers to continue using the same land units indefinitely without the need to advance into forest areas, and their habitat and connectivity value for biodiversity. These practices will normally involve the responsible use of agricultural chemicals, integrated pest management, the avoidance of clearance of natural vegetation, the inclusion of a substantial number of diverse woody perennials, the application of soil conservation measures, and integrated fire management.

223. The project will adopt a farming systems approach, considering not only the viability and sustainability of individual production systems but rather of integrated farm systems and farm family livelihoods as a whole. As such, its support may include productive activities which on their own do not necessarily directly deliver environmental benefits, but which contribute to the sustainability of the farm and the family as a whole, such as small scale aquaculture or food processing. Activities supported under this outcome may be implemented through the micro-grant modality, appropriate to foster ownership and organizational capacity strengthening of local farmers and community-based organizations.

224. Particular attention will also be paid to identifying and promoting production systems or other forms of related economic activities which have potential to generate specific benefits for women by virtue of their compatibility with their capacities and their other roles and responsibilities; in all cases, the systems and activities will be subject to gender analyses in order to ensure that they avoid negative effects on women and that women are enabled to take an active part in decision-making and benefit distribution. The gender specialist on the project team will help to identify such opportunities, based on a review of past experiences in the country and elsewhere, complemented by consultations with women's groups. Such options may include, for example, plant nurseries and the production of medicinal plants.

225. Box 11, Box 12 and Box 13 (see Additional Annex L) provide some examples of candidate production systems that have already been tested in similar conditions to those of the project localities, and which may be included in the pilots, subject to participatory analysis and planning with the target farmers during the implementation phase. The design of the production systems to be piloted and promoted will also be based on the results of academic research carried out in Peru or elsewhere in the region (e.g. Leon and Harvey (2006) regarding live fences, and Perfecto et al (1996) regarding coffee shade [27]).

**Output 3.1.1 Pilots covering 500ha demonstrating sustainable management practices to 1,000 actors with potential to replicate and/or disseminate them**

226. Pilots will be located and designed in such a way as to maximize visibility for other producers, and the participating farmers will be selected on the basis of their representativeness and also their capacity for leadership and projection. The localities, management approaches, and organization and governance arrangements for the pilots will be defined in consultation with producers and their organisations, in order to maximize buy-in.

227. The project will contribute to the initial investment and labour costs for the establishment and management of the pilots, and will also provide technical and organizational advice, although emphasis will be placed on maintaining the participating farmers' ownership of the pilots and their management. It will also advise on the formulation, with the participation of the farmers, of strategies for demonstration, communication, training, scaling-up and sustainability of the pilots.

228. In order to maximize the value of the pilots as centres for demonstration and dissemination, data will be collected on a regular basis on key variables related to the productive and economic viability of the farming systems that are demonstrated there, in addition to their impacts on environmental variables such as soil conditions.

**Output 3.1.2 Pilots of community-based sustainable livelihood support options in indigenous areas**

229. Sustainable production systems and livelihood support options will also be piloted and demonstrated in indigenous areas, but with a differentiated approach given the predominantly communal nature of resource management in these communities.

**Outcome 3.2: Farmers and communities enabled to implement more sustainable practices**

**Output 3.2.1 Technical assistance systems, tools, methodologies and capacities for delivery of technical support integrating principles of gender sensitivity**

230. Under this output, the project will invest in developing the capacities of local institutions, including regional and local governments, NGOs, private sector and producer organisations, to provide technical support to producers in the long term. This will help to ensure that producers have continued access to the ongoing support they may need in order to troubleshoot management issues that may arise beyond the life of the project, and to adapt to changing circumstances such as the emergence of pests, vagaries in the profitability of specific crops, or climatic variations.

231. The specific methodologies for the delivery of technical support will be negotiated with both the partner institutions at local level and with the producers themselves, and will be adapted to the types of capacities which it is proposed to deliver, on the basis of the analyses proposed above. The definition of the methodologies will also take into account best practices and lessons learned both in Peru and elsewhere, and wherever possible emphasis will be placed on participatory approaches, 'learning through doing' and farmer-based experimentation (such as the farmer field school model) in order to maximize relevance and ownership. These proposals will be formalized in the form of extension strategy and methodology documents, agreed with the partner institutions.

**Output 3.2.2 Technical assistance programs rolled out in alliance with supply-chain actors and local/regional governments, to deliver support to green commodity producers, integrating principles of gender equity**

232. Under this output, the project will fund the provision, during its lifetime, of technical support to producers through partnerships with other projects, programmes, institutions (including regional and local Governments) or organisations that already have established presence and extension structures in the target localities.

233. These forms of support will include a number of complementary elements:

- Technical analyses of the environmental implications of the target production systems and of the management practices applied in each, in order to confirm the management modifications on which the producer support will need to focus in order to optimize the delivery of global environmental benefits.
- Landscape-wide and site-specific analyses to identify how to tailor management modifications and the delivery of technical support to site conditions, while maximizing global environmental benefits by providing for connectivity, habitat value and landscape stabilization.
- Participatory analyses of needs and options for the modification of their production systems, with the target farmers and resource managers, in order to maximize the potential for uptake
- Analyses of the capacity development needs of the producers in question, in order to identify crucial constraints (technical, financial, organizational and/or entrepreneurial) to their abilities to apply the proposed management systems, and for the systems to be sustainable, profitable and compatible with their social contexts and overall livelihood support systems.

234. Technical support, focused mainly on agronomic issues, will be complemented by support to capacities and plans for enterprise development and organizational consolidation by producer groups, resulting in increased productivity, efficiency and quality at the production, post-harvest, processing and marketing stages; and to supporting increased access to finance for the application of improved productive practices, together with capacities for financial planning and management.

235. These different forms of support will lead directly to improvements in the economic benefits generated by farmers' production systems, as well as to increased environmental sustainability, and will also help to ensure farmers' abilities to meet the requirements (in terms of product quality, reliability of supply and environmental compliance) of purchasers, particularly the actors in the global commodity supply chains with which the producers will be connected.

**Outcome 3.3 Ecological restoration and conservation programs with public and private stakeholder participation**

**Output 3.3.1 Local restoration initiatives in priority localities, covering 4000ha of degraded landscapes**

236. The project will support community-managed ecosystem restoration activities, subject to the results of case-by-case analyses of their potential to contribute to the generation of environmental benefits, and their social and institutional sustainability. Technical studies will be carried out into their environmental justification and management feasibility, while their social and institutional sustainability will be considered through participatory analyses by local communities and producer organisations. Particular attention will be paid in these analyses to identifying the ongoing needs for maintenance and protection of the restored areas once established, and defining how to ensure that these needs are met in a sustainable manner in order to minimise the risk of the loss of the initial investment.

237. Strategies to be considered in order to address these concerns may include strengthening the organisational and management capacities of existing community-based, watershed protection or producer organisations; awareness-raising campaigns regarding the community benefits achievable from the restoration such as the protection of water sources; and the facilitation of linkages between the communities and sources of financial support such carbon payment schemes or Government incentive programmes. Initial support to be provided by the project, in addition to the needs and feasibility analyses, will include technical advice and the financing of initial investment costs, for example for the purchase of planting material and the establishment of nurseries, and labour costs for nursery management, tree planting and weeding.

238. Prospects for the uptake and sustainability of restoration will also be furthered through the use of appropriate restoration models, with an emphasis on those that have low levels of technical complexity and are undemanding in terms of initial investment and maintenance, such as assisted natural regeneration as opposed to more conventional tree planting.

239. Technical options for restoration are summarized in Additional Annex M.

**Output 3.3.2 Local conservation initiatives in priority localities, covering 4,000ha**

240. The project will provide advisory, facilitation and investment support to locally-managed conservation initiatives in the form of, for example, conservation agreements, regional and local conservation areas, and private conservation areas. This support may be provided through microgrants to local communities, supported and supervised by project technicians, enabling them to carry out the planning required for the establishment of these initiatives, and also to make the investments required to ensure effective protection, for example in the form of fencing and signage.

**Outcome 3.4: Knowledge effectively managed in support of the sustainable management of productive landscapes throughout the Peruvian Amazon**

241. Effective knowledge management will be essential in ensuring the continued relevance and impacts of the project, as well as allowing the scaling-up of its results elsewhere in the Peruvian Amazon, thereby maximizing impact as well as addressing the risk of "leakage" in the form of possible displacement of the impacts tackled by the project in its own area to other areas.

**Output 3.4.1 Systematization of best practices, lessons learned and case studies, including evidence of the special contribution of women and indigenous peoples to the sustainability of Amazonian landscapes**

242. A first step will be to ensure that the project builds on existing knowledge: to this end, it will build on the studies and consultations carried out during the PPG phase, by carrying out further reviews of previous and emerging academic literature, as well as reports of experiences gained and lessons learned by previous projects, as well as carrying out participatory consultations and diagnostics with the target population. This will focus on, for example, validating and detailing understandings of the main components of the 'drivers, pressures, state, impacts and response' (DPSIR) analytical framework as they relate to the degradation and management of natural resources and biodiversity in the project area; validating effective and sustainable options for natural resource management; and defining how to integrate the delivery of social benefits (especially for indigenous people and women) and environmental benefits.

**Output 3.4.2 Communications products developed and disseminated**

243. Communications products will be developed and disseminated throughout the life of the project. These will include:

- Informative materials on the project, its approach and proposals, in order to generate interest in collaboration, as well as to prepare target audiences to receive and take on board subsequent messages and results;
- Briefing documents for policy makers, in order to stimulate discussion and serve as inputs for policy influence;
- Technical documents on specific natural resource management and conservation strategies;
- Dissemination materials aimed at communicating project results to decision makers, institutional actors and project managers beyond the project area, in order to contribute to scaling-up;
- Awareness raising and communication materials related to gender issues and the project's approach and impacts in relation to gender equality.
- Communications materials aimed at local and regional stakeholders, with aim to support project's in engaging and raising awareness regarding project objectives.

**Output 3.4.3 System for adaptive management and learning to inform landscape management approaches by decision makers**

244. In addition to its own adaptive management and monitoring evaluation systems, the project will support the development of capacities and systems for adaptive management among key institutional actors at national, regional and local levels. The aim of this will be that processes of decision-making, planning, management and formulation of regulatory and policy instruments, managed by these actors, will respond appropriately to relevant, accurate and up-to-date information on the condition of key variables, such as the status of natural resources, trends in threats and drivers, available management options and their effectiveness, the institutional landscape and policy and regulatory frameworks. This output will thereby constitute a key link between the systems and capacities for monitoring proposed under Outcome 1.3, and the processes of planning, zoning, policy formulation, dialogue and financing proposed under Outcomes 1.1, 1.2 and 1.4. Project support will consist of, for example, training and advisory support regarding information access and management, and support in the design of adaptive management systems. This output will also be achieved through the project

staff's active participation in international Communities of Practice related to sustainable productive landscapes, including those organized by the UNDP GCP, as well as other international learning and exchange opportunities.

**Partnerships:**

245. The project will build on and complement a number of other GEF-funded projects aimed at strengthening Peruvian Landscapes, which include aspects of community development, indigenous management and sustainable use (please see also the description of the project's relevance to other initiatives in the previous section).

- GEF/UNDP Full-Sized Project 5080 "Transforming Management of Protected Area/Landscape Complexes to Strengthen Ecosystem Resilience" to alleviate the direct and indirect impacts of climate change (CC) on globally significant biodiversity and ecosystem functionality, which the implementation period of the present project will coincide most closely, and with which it will establish the closest collaborative links.
- GEF/UNDP Full-Sized Project (3276) on Promoting Sustainable Land Management in Las Bambas will provide a valuable source of lessons for this project regarding the sustainable management of high altitude camelid pastures, as will the regional GEF/UNEP (1918) on Conservation of the Biodiversity of the Paramo in the Northern and Central Andes.
- GEF/UNDP project on Biodiversity Conservation in Coffee (2371), which has succeeded in promoting uptake of BD-friendly shade coffee in the yungas ecosystem, through supporting producers' insertion into global markets that reward sustainability.

246. The project will also complement Amazon Ecosystem-based Adaptation project on Integrated Management of Climate Change in Communal Reserves, funded by Germany´s Federal Ministry of Environment, Nature Conservation, Nuclear Safety and Public Works (BMUB) and co-implemented by UNDP and SERNANP.

247. The project will add value to the extensive portfolio of projects funded by GEF and other agencies in relation to BD conservation (including the strengthening of the PA system), sustainable land management and sustainable forest management, by introducing three innovative elements: i) a highly integrated landscape approach to natural resource management in the Amazon, which takes into account the biological, physical and productive interrelations, ii) the importance of landscape as a critical requirement for the sustainable delivery of environmental benefits in the long term, under conditions of climatic, as well as economic and demographic change (most of the projects to date have been based on static assumptions regarding their biophysical contexts), and ii) as part of Peru's overall contribution to the Amazon Basin Programme, on addressing directly and indirectly the spatial dynamics of deforestation and habitat degradation.

248. Specific opportunities for collaboration with the projects mentioned in the previous section including the following:

- **GEF/MINAM PA Resilience project:** joint planning of operations in 2017 in relation to activities supporting territorial planning and the provision of technical assistance, in order to achieve synergies and complementarity in the landscapes surrounding the protected areas targeted by the PA Resilience project.
- **GCP/SECO Coffee Platform initiative:** this Project will build upon and consolidate the work of the GCP project in support of the national coffee platform, helping to extend it to include cacao as well as the establishment of similar platforms for the other target sectors (oil palm and livestock). The GCP project will help to develop strategic and technical capacities for the improvement of the coffee value chain, reducing the level of input required by this project and allowing them to be focused more on the other target sectors.
- **Joint Declaration of Intent (DCI) Peru/Norway/Germany:** joint planning of operations in 2017, particularly in relation to common areas of activity including the consolidation of sector platforms, and local and regional planning. The DCI will be considered as co-financing: this will be both in parallel (e.g. land regularization, titling and registration of native communities and categorization of forest uses) and direct (e.g. the design and implementation of NAMAs, with application of pilots with producers and companies in the project's target areas). This will allow the project to reduce the investment of GEF funds in support of NAMAs.

- **UN REDD+:** there are opportunities for collaboration in the establishment of a pilot working on productive aspects in indigenous communities within the project's target areas.
- **Forest Investment Programme (FIP)**; this large programme will be an important source of co-financing, including the opportunity for concrete collaboration in the strengthening of institutional capacities at national and regional levels in relation to environmental governance.

**Stakeholder engagement:**

249. The stakeholders of the project at local level will include all of the inhabitants of the target area whose livelihoods and productive activities have implications for the condition of the targeted global environmental values, those whose livelihoods might potentially be affected by the proposed conservation strategies, and those with the potential to participate in the conservation strategies (for example, through the adoption of BD-friendly production systems). These actors will therefore include both indigenous people who are native to the areas, and colonists who are either mixed-race or indigenous but from other parts of the country (the highlands and other parts of Amazonia).

250. A significant proportion of the project area is inhabited by indigenous people: in Peru, the land rights of native communities are recognised through property titles on land that is suitable for agriculture or grazing, and usufruct rights on forest land. In order to facilitate the participation of indigenous people in project design, the project will take advantage where possible and relevant of the various organisations that represent their interests at national and local levels.

251. The project will endeavour to take a similar approach with non-native colonists. With these actors, attention will be paid to working with sector-based organizations to which they may belong (particularly organisations of cacao, coffee or palm producers), and to production cooperatives.

252. Regional and local governments will play a particularly significant role as facilitators of the participation of different local stakeholder groups, and will be important partners of the project in this regard.

**Mainstreaming gender and intercultural issues:**

253. The project mainstreams gender and inter-cultural issues throughout its entire cycle, based on the premise that besides ensuring participation of women (and their organizations) in the spaces generated by the project, it will contribute to their effective empowerment as social actors. The project recognizes the ethno-cultural characteristics of the relevant groups (e.g. settlers, and yaneshas, cacatiabo and shipibo indigenous groups), the role of the family in production and income generation, the socio-economic differences between men and women, and the differences between the environment-related knowledge in each case.

254. The project has developed a gender strategy that links the most important gaps identified in relation to its components, the proposed interventions, and the country´s policies and commitments toward gender equality. The gaps identified in the gender analysis and which are considered in the gender strategy that include:

1) Each output was analyzed to include the necessary elements to ensure reducing the identified gaps and establishing positive actions when necessary.

2) Specific activities have been included addressing the empowerment of women and youth, especially indigenous peoples (capacities, economic empowerment and access to planning processes).

3) Indicators have been included in each project outcome to contribute to measure progress in this field and which will be monitored as part of the M&E process.

4) A budget has been included to guarantee the measures and actions to be undertaken.

5) Improving the capacities of the project team to manage gender mainstreaming has been considered.

255. Overall, gender perspectives and the unique contribution of Indigenous people have been assessed through UNDP Social and Environmental Screening, more specifically under Principle 2 Gender Equality and Women´s Empowerment, Standard 4 Cultural Heritage and Standard 6 Indigenous Peoples, identifying associated risks and corresponding measures that have been incorporated in project design. For further information, please refer to Section V.iii Social and Environmental Safeguards below and the Social and Environmental Screening Checklist in Annex XII F.

## V. FEASIBILITY

**Cost efficiency and effectiveness:**

256. Cost-effectiveness will be maximized by:

- Delivering environmental benefits through the promotion of socioeconomically and environmentally sustainable production systems. This will help to maintain and improve the biodiversity value of the landscape as a whole and to reduce productive and extractive pressures affecting remnant ecosystems, thereby reducing the need for measures based on control and punishment, which would incur higher and more long term costs than the initial investments in capacity development required by the approach based on production systems.
- Involving the private sector and developing value chains that favour the production of commodities in accordance with principles of environmental sustainability, which will allow the benefits of environmentally-sustainable production to be internalized by the actors along the market chain who receive them (including commodity traders and consumers) rather than being met by public funds.
- The development of sustainable financial instruments to reward and facilitate environmentally-sustainable forms of production, again allowing costs and benefits to be internalized by those who experience them and thereby reducing dependence on public funds.
- The development and strengthening of partnerships with multiple entities at local and regional levels, in the public and private sectors and in civil society, for the delivery of support to resource managers, thereby taking advantage in a cost-effective manner of their existing capacities and social and institutional structures, as well as their niche capacities, instead of investing from scratch in the establishment of new delivery mechanisms.

**Risk Management:**

| Project risks | | | | | |
|---|---|---|---|---|---|
| **Description** | **Type** | **Impact & Probability** | **Mitigation Measures** | **Owner** | **Status** |
| Resistance among producers and policy makers to the introduction of environmental considerations into target sectors | Social, productive and political | P = 3<br>I = 3 | Awareness raising regarding the market benefits of environmental production in terms of access to global commodity markets<br>Consolidation of mechanisms and capacities to ensure that producers have sustained long-term access to the support services they require to be able to meet the environmental requirements of global commodity markets<br>Support to the functioning of national commodity platforms in order to ensure that producers' interests are effectively represented<br>Evidence-based awareness raising regarding the benefits of incorporating environmental considerations in terms of productive sustainability (particularly important in the case of oil palm, which is principally aimed at national markets rather than global commodity markets). | MINAM/ PMU | Reducing |
| Climate change places additional stressors on the target ecosystems and undermines the viability of productive alternatives supported by the project | Environ-mental and productive | P = 5<br>I = 2 | Focus on improved structural and compositional diversity in production systems, to increase their resilience to climatic change and variability; this resilience benefit may incidentally help to motivate the introduction of such modifications with resulting benefits for BD, SLM and SFM.<br>Application of an adaptive approach to technology generation and transfer to enable farmers to adapt their practices to changing conditions | MINAM/ PMU | Increasing |

| Project risks | | | | | |
|---|---|---|---|---|---|
| **Description** | **Type** | **Impact & Probability** | **Mitigation Measures** | **Owner** | **Status** |
| Poor land tenure and governance conditions in already disturbed or deforested areas leads producers to colonize primary forest | Social and political | P = 3<br>I = 3 | Support to complementary measures to replace expansion into primary forest with expansion in already-deforested areas (governance, community-based forest management in "local forests", technical assistance, financial incentives, market-based incentives) | MINAM/ PMU | Reducing |
| Climate related disasters affect livelihoods | Environ-mental | P=2<br>I=2 | The project will promote measures to decrease vulnerability of negative impact of climate related events through the improved ecosystem services associated with disaster risk reduction. For example, the reforestation and restoration of degraded areas will prevent "huaycos" (landslides) and/or decrease their impact. | PMU | Increasing |
| **Risk 1.5:** duty-bearers do not have the capacity to meet their obligations | Institutional | I = 4<br>P = 2 | - The project will facilitate legal support to attend to land tenure issues that could affect the establishment of the Conservation Areas.<br>- The Project will adopt an approach of poverty reduction focused on food security, sustainable production and the conservation of natural resources.<br>- The Project will strengthen mechanisms for participation, dialogue and governance between actors.<br>- The Project will strengthen work with indigenous peoples and women, related to the implementation of Life Plans including concepts of sustainability, interests and basic needs.<br>- The project will promote and provide technical advice on land use planning and zoning through participatory and inclusive processes.<br>- The Project will support indigenous peoples in issues of territorial security related to activities of community-based control and vigilance. | PMU | Reducing |
| **Risk 1.7:** local communities or individuals, given the opportunity, have raised human rights concerns during the stakeholder engagement | Social | I = 1<br>P = 1 | - During PPG, workshop and mission were held to facilitate local communities and individual participation. Concrete provisions will be made to ensure that target groups are engaged in decision making for the project. | PMU | Reducing |
| **Risk 2.2** the Project would potentially reproduce discriminations against women based on gender | Social | I = 3<br>P = 1 | - Gender Strategy has been developed during PPG phase<br>- Women perspectives will be considered in Life Plans and development plans.<br>- The Project includes positive actions for women, based on their expressed interests, such as work on non-timber forest products and agroforestry | PMU | Increasing |
| **Risk 2.3** women's groups/leaders have raised gender equality concerns regarding the | | I = 2<br>P = 1 | - The PPG have promoted women participation through specific workshops and exchanges of experiences.<br>- Gender analysis has been carried out to identify gender gaps, Gender strategy has been developed during PPG | PMU | Increasing |

| Project risks | | | | | |
|---|---|---|---|---|---|
| **Description** | **Type** | **Impact & Probability** | **Mitigation Measures** | **Owner** | **Status** |
| Project during the stakeholder engagement process | | | - The Project Results Framework has a gender equity approach<br>- The project also takes into account youth and the opportunity to engage youth in restoration activities, as well as economic diversification.<br>- The project takes measures to ensure cross-cutting gender issues | | |
| **Risk 3.1.2:** Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas | Environ-mental | I = 3<br>P = 1 | - The Project will support actions to control adverse Land use changes and reducing deforestation of productive activities, and promote compatible activities and forest conservation on buffer areas of NPA.<br>- The Project will carry out analyses and actions in support of the implementation of good practices to reduce agricultural frontier.<br>- The Project will ensure the involvement of competent authorities and of key actors in the definition of restrictions on Access to resources, in order to minimise impacts on stakeholders' interests.<br>- The Project will be associated with recognised organizations specialised in issues of protected areas. | PMU | Increasing |
| **Risk 3.1.6;** the Project involves harvesting of natural forests, plantation development, or reforestation | Environ-mental | I = 3<br>P = 2 | - The Project will support land use planning, sectorial plans and natural resource management with ecosystem approach, in order to minimise restrictions on land and resource uses on which local livelihoods depend.<br>- The Project will emphasise environmental sustainability within sectorial policies and actions, and the inclusion of good practices in the management of products such as palm and cocao, in order to avoide promoting land use change.<br>- Pilots models to be applied will be based on productive sustainability<br>- Sectorial policies to be supported will include approaches considering socioenvironmental safeguards.<br>- The Project includes actions related to the use, management and restoration of forests, which may limit access to forest areas and reduce opportunities for informal actors to use them as means of livelihood support. | PMU | Increasing |
| **Risk 6.1** indigenous peoples are present in the Project area (including Project area of influence) which could be affected by project activities? | Social | I = 3<br>P = 4 | - The Project will advise relevant sectors and decision makers, through analyses and studies to support decisions on technical aspects and related to compliance with socioenvironmental safeguards.<br>- The Project will organize working groups to support dialogue on the interests of key stakeholders.<br>- The project will support design and implementation of life plan of indigenous communities, gender responsive<br>- The project will apply an intercultural approach | PMU | Increasing |
| **Risk 6.2** It is likely that the Project or portions of the Project will be | Social | I = 2<br>P = 4 | - Studies and activities will be implemented to support Kakataibo declaration, taking into account socioenvironmental safeguards.<br>- The UNDP/GEF PA Resilience project is implemented in the area and plans to provide technical assistance to secure the protection of the | PMU | Reducing |

| Project risks | | | | | |
|---|---|---|---|---|---|
| **Description** | **Type** | **Impact & Probability** | **Mitigation Measures** | **Owner** | **Status** |
| located on lands and territories claimed by indigenous peoples | | | Kakataibo Indigenous Reserve, a process promoted by the Ministry of Culture.<br>- The project will support the design and implementation of life plans of indigenous communities, gender responsive | | |
| **Risk 6.3** the Project would potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples | Social | I = 4<br>P = 2 | - The public policies will include socioenvironmental criteria and equal participation, to ensure rights of stakeholders, especially indigenous peoples and women.<br>- Studies and activities will be implemented to support Cacatiabo declaration, taking into account socioenvironmental safeguards.<br>- The project will support design and implementation of life plan of indigenous communities, gender responsive<br>- Dialogue Platforms and working groups will be support to ensuere legal frameworks and equitue rights of indigenous peoples and ther territories<br>- Land use and forest planning will include inter-sector, participatory and inclusive models for all key stakeholders, respecting socioenvironmental safeguards of IIPP territories<br>- Where applicable and in response to specific requests, the relevance of the application of processes of Free, Prior and Informed Consent will be considered.<br>- The project will support design and implementation of life plan of indigenous communities, gender responsive | PMU | Increasing |
| **Risk 6.5** The proposed Project involves the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples | Social | I = 3<br>P = 1 | - The Project will implement, promote and include issues of social, environmental and cultural sustainability in the application of Life Plans gender responsive.<br>- The Project will guarantee the effective and significant participation of indigenous peoples, through their representative organizations. | PMU | Increasing |
| **Risk 6.9** The Project would potentially affect the Cultural Heritage of indigenous peoples, | Social | I = 1<br>P = 2 | - The project will promote activities and practices identified by the indigenous people themselves (such as non-timber forest product management), which contribute to the preservation and safeguarding of traditional knowledge.<br>- Project activities could use ancestral knowledge for the development of productive projects in the area, giving them added value and contributing to the sustainability of communities.<br>- Mechanisms for the protection of ancestral knowledge will be established by coordination with communities and indigenous organizations.<br>- If necessary, coordination with the Office of Indigenous Policies – and its Committee for the protection of ancestral knowledge - of the Ministry of Culture, will be established. | PMU | Increasing |

**Social and environmental safeguards:**

257. The project risk has been categorized as moderate. Please see Social and Environmental Risk Screening in Annex F. Environmental and social grievances will be reported to the GEF in the annual PIR.

**Sustainability and Scaling Up:**

258. The project will be innovative at national and global levels because it will combine several approaches that have previously be applied in other initiatives, thereby offering a more integrated and complete solution to complex and interrelated factors that threaten global environmental values, and will deliver multiple environmental benefits spanning multiple focal areas. Of particular significance will be the combination of a market focused approach, targeting a selection of key commodities and their value chains, with farm-level strategies that reflect the complexity and diversity of farming and livelihood systems and recognize that farmers' decision-making in relation to the management of natural resources is rarely if ever determined solely by financial considerations. Also innovative will be the insertion of farm- and commodity-based management considerations into the context of whole landscape management, recognizing that farmers' decisions are typically influenced by the dynamics of their surroundings (for example, colonist farmers may cluster in the vicinity of areas of commercial crops in order to take advantage of infrastructure and employment opportunities, while on the other hand the dominance of secondary landscapes by commercial crops may displace subsistence farmers to environmentally sensitive areas).

259. Environmental sustainability will be ensured through the mainstreaming of environmental considerations into production systems, for example through the promotion of diverse tree shade in coffee and cacao plantations, capable of maintaining and promoting nutrient and hydrological cycles while protecting the soil against degradation. Support to such production systems will in all cases be subject to environmental analysis, in order to avoid the generation of "perverse incentives" for environmental degradation, for example through the expansion of shade coffee into areas of primary forest.

260. Financial and economic sustainability will be ensured through the project's market-based approach, which will help to ensure that the incorporation of environmental considerations into production systems will be rewarded by market access (but not necessarily price premia). Furthermore, the incorporation of provisions for environmental sustainability and integrated approaches to management into production systems (especially in the cases of coffee and cacao) will contribute to productive and therefore financial sustainability, due to reductions in the risk of crop failures related to environmental variability and to pests such as "roya". The introduction of similar improved management practices has also been shown to lead to significant improvements in the sustainable production of oil palm plantations.

261. Social sustainability will be ensured through the project's integrated focus on farm livelihoods, rather than solely on specific crops: this will help to avoid the risk of cash crops assuming increased importance at the expense of food security, livelihood risk avoidance or gender equity. The project will also adopt a participatory approach to the definition of the proposed modifications to production and livelihood support options, working where possible with community-based organisations representing the interests of indigenous and colonist groups, as well as women and specific interest groups within communities.

262. The project has potential for scaling up throughout the Amazon region or Peru, and also in Bolivia, Colombia and Ecuador, especially the rupa-rupa and yunga belt of the eastern slopes of the Andes, between 400m and 3,600m above sea level. The threats to be addressed by the project in the target area, in the form of the expansion of colonist agriculture and the establishment of coffee, cacao and oil palm, are widely repeated throughout this zone, although they vary in nature and relative importance. The project will not specifically address cattle ranching, which is a threat in some parts of the region, but in such areas the overall approach of landscape management and biodiversity mainstreaming is still relevant and largely replicable.

263. As shown in Additional Annex A Figure 9, the climatic conditions in the target area are similar to those found over a large proportion of Central and South America, making it probable that the productive solutions piloted in the project area have the potential to be similarly widely replicated, subject to the existence of favourable enabling conditions.

Exit Strategy

264. The project will provide for a smooth phase-out that will maximise the durability of its impacts through the following strategies:

- Under Outcome 1.2, strengthening the capacities of local and community-based organizations to carry out environmental governance roles in the long term, following the withdrawal of project support, with a strong focus on real and effective stakeholder participation in the capacity strengthening process in order to maximise the sociocultural relevance and acceptance of the organizations.
- Under Outcomes 1.4 and 2.3, promoting the development and application of financial instruments to ensure the long term availability of the financial resources required to sustain institutional and resource management frameworks once project support has been withdrawn.
- Under Component 2, promoting value chain linkages to ensure the provision of technical and financial support by private sector commodity purchasers to producers once the technical support provision by the project has been withdrawn.

265. This will be reflected in the inter-annual distribution of project budget, which will feature a progressive phase-out as national and local capacities are developed to take over from the project, with 8%, 20%, 22%, 21%, 19% and 9% of the total budget being assigned in years 1-6 respectively.

**South-South and Triangular Cooperation (SSC/TrC)**

266. Given that Brazil, Colombia and Peru are engaged in the GEF Amazon Program PFD, with activities similar in scope as those to be developed under this Project, during the implementation phase UNDP and MINAM will look for and realize opportunities for south - south collaboration with related child projects.

## VI. PROJECT RESULTS FRAMEWORK

**This project will contribute to the following Sustainable Development Goal (s):** Goal 2 (End hunger, achieve food security and improved nutrition and promote sustainable agriculture), 5 (Achieve gender equality and empower all women and girls), 12 (Ensure sustainable consumption and production patterns) and 15 (Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss)

**This project will contribute to the following country outcome included in the UNDAF/Country Programme Document:** **Outcome 1:** Growth and development are inclusive and sustainable and incorporate productive capacities that create jobs and livelihoods for the poor and those excluded from CPD 2017-2021

**This project will be linked to the following outcome / output of the UNDP Strategic Plan:**
Outcome 1.5: Hectares of land that are managed sustainably under *in-situ* conservation, sustainable use, and/or Access and Benefits Sharing (ABS) regime.
Output 1.3: Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste.

| Vertical logic | Indicator | Baseline value | Mid-term Target | Target value | Assumptions |
|---|---|---|---|---|---|
| **Objective:** To generate multiple global environmental benefits through the application of an integrated approach to the management of Amazonian landscape | **1.** Total area of landscapes covered by improved planning and governance frameworks[20] | ZEE has been developed at meso level (pending approval) over the whole landscape (2.17 million ha)<br>No area is yet covered by territorial land use planning (*ordenamiento territorial*) or microzoning<br>See ProDoc for detail. | 40% of area of target landscapes (0.9 million ha) | 80% of area of target landscapes (1.8 million ha) covered by a combination of management, planning and governance instruments, incorporating considerations of biodiversity conservation and sustainable use:<br>- ZEE, territorial land use planning<br>- Microzoning and forest zoning in selected areas<br>- Regional and local development plans<br>- Monitoring and governance mechanisms and capacities | Political will of institutions to enforce the regulatory frameworks, monitor compliance, allocate resources and incentives to mainstream landscape approach and promote sustainable production and conservation. |
| | **2.** Area of of farming systems in the target landscapes managed to | Baseline area figures not available: 191 farmers (1.9% of the total) had organic | 200ha in pilots<br>2,500ha elsewhere | 500ha through support in pilots<br>10,000ha elsewhere in the target landscapes as a result of awareness | Stakeholders willingly engage in complying |

[20] ***Indicator 9.1*** *Production landscapes and seascapes that integrate biodiversity conservation and sustainable use into their management, supported by objective data.*

<table>
<tr><th>Vertical logic</th><th>Indicator</th><th>Baseline value</th><th>Mid-term Target</th><th>Target value</th><th>Assumptions</th></tr>
<tr><td></td><td>favour biodiversity, sustainable land management and ecosystem services (including reductions in carbon emissions)[21]</td><td>certification in 2012 (156 in cacao, 15 in coffee, 13 in oil palm).<br>Numbers of farms with Rainforest Alliance, Utz and other forms of certification to be determined at project start.</td><td></td><td>and capacity development, strengthening of technical support systems, improved access to market and financial incentives, and improved private sector support to producers.</td><td rowspan="4">with the regulations, adopting best practices and participating in sustainable and deforestation free supply chains.<br>International markets favor sustainable production<br>Pressures from climate change and natural disasters do not exceed the coping limits of the target production systems<br>Underlying governance and demographic conditions remain manageable</td></tr>
<tr><td>3. Reduction in rates of loss of forest cover in the target area, by forest type[22][23]</td><td>Without project conversion of forest to annual crops, cacao, oil palm and pasture, mid-2017 to mid-2023:<table><tr><th>Forest type</th><th>ha</th></tr><tr><td>Primary</td><td>99,060</td></tr><tr><td>Logged</td><td>89,791</td></tr><tr><td>Secondary</td><td>30,893</td></tr><tr><td>Total</td><td>219,744</td></tr></table></td><td>Avoided conversion of forest to annual crops, cacao, oil palm and pasture:<table><tr><th>Forest type</th><th>ha</th></tr><tr><td>Primary</td><td>10,000</td></tr><tr><td>Logged</td><td>10,000</td></tr><tr><td>Secondary</td><td>2,000</td></tr><tr><td>Total</td><td>22,000</td></tr></table></td><td>Avoided conversion of forest to annual crops, cacao, oil palm and pasture, mid-2017 to mid-2023:<table><tr><th>Forest type</th><th>ha</th></tr><tr><td>Primary</td><td>22,592</td></tr><tr><td>Logged</td><td>19,627</td></tr><tr><td>Secondary</td><td>6,179</td></tr><tr><td>Total</td><td>48,398</td></tr></table></td></tr>
<tr><td>4. Net avoided emissions in the target area, resulting from avoided deforestation and degradation, and the improved management of production systems[24][25]</td><td>Without project carbon balance over project period: 58,687,336t$CO_2$eq net GHG loss (based on ExACT)</td><td>Net avoided emissions as a result of the project: 7,000,000t$CO_2$eq</td><td>Net avoided emissions as a result of the project: 15,796,553t$CO_2$ (based on ExACT)</td></tr>
<tr><td>5. Number of people (by gender and ethnicity) obtaining net livelihood benefits as a result of the application of sustainable forms of production and</td><td>To be confirmed through household surveys and focus groups.<br>In the target area, the number of farmers or “producers” is</td><td>- 2,000 small producers<br>- 300 members of indigenous communities</td><td>Increased levels of livelihood benefits as a result of the increased application of practices that contribute to environmental sustainability and landscape stability, in:<br>- 6,000 small producers</td></tr>
</table>

[21]Area of farms managed in an integrated manner and providing for sustainability through e.g. responsible use of agricultural chemical, IPM, avoidance of clearance of natural vegetation, maintenance of diversity on farm, soil conservation, integrated fire management.

[22]*SFM1/1* ***Indicator 1*** *Area of high conservation value forest maintained.*

[23] From Additional Annex N, Table 4, Page 228.

[24]*BD Corporate Indicator Amount of GHG emissions avoided; UNDP Peru IRRF indicator 1.3.A.1.1*

[25] From ExACT Results table (see Additional Annex N, Table 9, Page 230).

| Vertical logic | Indicator | Baseline value | Mid-term Target | Target value | Assumptions |
|---|---|---|---|---|---|
| | resource management[26] | approximately 16,100 (2012) and the population of inhabitants of indigenous communities is 5,000 (2015). | | - 700 members of indigenous communities | |
| **Component 1:** Improved policy planning and governance to reduce deforestation and enhance sustainable production | **Outcome 1.1: Land-use policy and planning strengthened and aligned, including the approach of landscape sustainability, resilience and inclusiveness** | | | | |
| | **6.** Number of land-use policy and planning instruments developed and aligned, including the approach of landscape sustainability, resilience and inclusiveness[27][28] | Mesolevel zoning completed<br>No forestry zoning<br>No microzoning to date<br>10 indigenous life plans<br>Regional Development Plans, Local Development Plans and Sector Development Plans make reference to environmental issues but do not specifically provide for an integrated approach to the management of production landscapes | - 1 Regional Development Plans,<br>- 7 Local Development Plans, covering the whole project area<br>- 2 Sector Development Plans<br>- 65,000 ha covered by microzoning<br>- 8 additional indigenous life plans | - 2 Regional Development Plans and<br>- 10 Local Development Plans, covering the whole project area<br>- 2 Sector Development Plans<br>- 100,000 ha covered by microzoning, focused on priority localities<br>- 12 additional indigenous life plans | Commitment to planning processes at national, regional and local levels |
| | **Outputs:**<br>1.1.1 National Sector development policies and plans defined in accordance with land-use policy and plans, including concept of landscape sustainability, and based on root cause analyses<br>1.1.2 2 Regional and 10 local development plans aligned with NAMAs, Forest and Climate Change Strategy, and land use plans<br>1.1.3 Microzoning (covering 100,000ha) that clearly defines areas for forest conservation, restoration and sustainable use plans<br>1.1.4 12 additional indigenous life plans elaborated, sensitive to gender and including approach of landscape sustainability | | | | |
| | **Outcome 1.2: Landscape governance strengthened for public policy development, land use management and participatory decision making** | | | | |
| | **7.** Degree of implementation of sector action plans developed by | N/A | Two sector action plans with at least 25% achievement of targets | Two sector action plans with at least 50% achievement of targets related to environmental sustainability | Underlying cultural and governance conditions permit |

[26] Relates to UNDP IRRF Indicator 2: # of jobs and livelihood options created through the management of natural resources, ecosystem services, chemicals and wastes, by sex and urban/rural location); in this case, the quantitative target refers to numbers of people with improved livelihoods, not necessarily the number of new jobs or livelihood options.

[27] **SFM1/1 Indicator 1** Area of high conservation value forest identified

[28] BD4/9 **Indicator 9.2** The degree to which sector policies and regulatory frameworks incorporate biodiversity considerations and implement the regulations; CC2/4 **Indicator 5.** Degree of support for low GHG development in the policy, planning and regulatory framework

| Vertical logic | Indicator | Baseline value | Mid-term Target | Target value | Assumptions |
|---|---|---|---|---|---|
| | public and private sector multi-stakeholder platforms[29] | | related to environmental sustainability | | effective participation of stakeholders<br>Private sector actors recognise and are willing to respond to issues of environmental sustainability, and invest accordingly |
| | **8.** Levels of direct participation of different stakeholder groups (including women and indigenous people) in participation structures at regional and local levels taking decisions related to the sustainable, integrated and inclusive management of landscapes | *Baseline value to be determined at project start* | | *Target to be defined at project start* | |
| | **9.** Multistakeholder capacities improved for the planning and sustainable management of landscapes | Institutional capacities are weak<br>CAR, CAM are not activated or not performing their role<br>*Specific capacities per institution will be evaluated at project start* | Capacities of 40 stakeholders being strengthened | At least 60 public and private stakeholders at national, regional and local levels with strengthened capacities in support of sustainable landscape management, including Ministries, regional and local governments in the Amazon basin, natural resource authorities, CAR, CAM, native communities, producer organizations, technical support entities and academic bodies.<br>*Target capacities per institution will be specified and measures defined through a capacity scorecard to be developed at project start.* | |
| | **Outputs:**<br>1.2.1 National green commodity platforms established<br>1.2.2 Territorial governance platforms strengthened<br>1.2.3 Strengthened, gender sensitive community level governance<br>1.2.4 Technical and institutional capacities developed in at least 60 public and private institutions at national, regional and local levels in support of sustainable landscape management | | | | |

[29]Relates to *UNDP Peru IRRF indicator 1:* Number of collaboration mechanisms for the sustainable management of natural resources

| Vertical logic | Indicator | Baseline value | Mid-term Target | Target value | Assumptions |
|---|---|---|---|---|---|
| | **Outcome 1.3: Monitoring and enforcement capacities strengthened** | | | | |
| | **10.** Implementation of land-use change approval process according to zoning and transparently | Land-use change approval process is not in TUPA of Ucayali and Huanuco regions<br><br>Authorities are not fully aware of the process and their competencies, resulting in illegal deforestation, especially in large areas. | Land-use change approval process is in TUPA of Ucayali and Huanuco regions | MINAM/ARRFS/ATTFFS/SERFOR/ MINAGRI have the tools, procedures and capacity to apply land-use change approval process adequately, lowering the risk of illegal (or wrongly approved) land-use change | Political will and commitment to combat illegal land use change |
| | **11.** % of the unauthorised land use changes detected with monitoring system that result in effective institutional responses | Forestry infractions between 2010 and 2016: Ucayali: 197; Huanuco: 330.<br>Source: http://www.serfor.gob.pe/centro-de-informacion/registros-nacionales/registro-nacional-de-infractores<br><br>*To be confirmed at project start from SERFOR, OSINFOR and regional governments* | 10% increase over baseline percentage | 30% increase over baseline percentage | Underlying levels of governance, transparency and commitment to combat environmental infractions |
| | ***Outputs***:<br>1.3.1 Effective and transparent land-use change approval mechanism<br>1.3.2 Real-time, transparent monitoring and analysis system to detect illegal deforestation and land-use change, integrated with control mechanisms<br>1.3.3 Inspection and enforcement capacities to address violations in land-use regulation<br>1.3.4 Community-based monitoring | | | | |
| | **Outcome 1.4: Public finance flows increased to sustain effective territorial governance** | | | | |
| | **12.** Amount of public funds at national and regional levels committed and disbursed in support of sustainable landscape management, including biodiversity conservation, ecosystem services and | Regional and local governments in the target area have investment projects related to production chains for a value of US$49 million, of which US$33 million is yet to be executed | In the Amazon in general:<br>- US$100 million committed<br>US$4 million disbursed | In the Amazon in general:<br>- US$200 million committed<br>US$12 million disbursed | Economic conditions remain favourable, allowing governments to invest |

| Vertical logic | Indicator | Baseline value | Mid-term Target | Target value | Assumptions |
|---|---|---|---|---|---|
| | sustainable agricultural production models[30] | | | | |
| | ***Outputs***:<br>1.4.1 Financing gaps identified for the implementation of policies<br>1.4.2 Public finance incentives for regional and local governments in support of sustainable landscape management | | | | |
| Component 2: Financial mechanisms and market incentives promote sustainable production practices | **Outcome 2.1: Green commodity value chains have provided incentives to farmers for sustainable production** | | | | |
| | **13.** Volume of products commercialized in the target landscapes that respond to sustainable production criteria, measured by compliance with sustainability criteria agreed by sector platforms and/or third party certification | - Sustainability criteria not yet agreed<br>- 191 farms (1.2% of total) with organic certification in 2012 (CENAGRO) | - 10% of cocoa, oil palm and coffee production in the target landscape complies with platform criteria<br>- 30% increase in volume of cocoa, oil palm and coffee with some form of third party certification (e.g. organic, Rainforest Alliance, Utz, Landscapes) | - 20% of cocoa, oil palm and coffee production in the target landscape complies with platform criteria<br>- 50% increase in volume of cocoa, oil palm and coffee with some form of third party certification (e.g. organic, Rainforest Alliance, Utz, Landscapes) | Private sector actors recognise and are willing to respond to issues of environmental sustainability, and to participate in dialogue |
| | ***Outputs*:**<br>2.1.1 Strategies for promoting market certifications, jurisdictional certification, companies' sustainable procurement policies<br>2.1.2 Alliances with private sector and supply-chain actors to support adoption of sustainable practices in landscapes | | | | |
| | **Outcome 2.2 Other sustainable economic activities in landscapes supported and linked to markets** | | | | |
| | **14.** Number of viable business plans for sustainable economic activities developed and implemented | 0 | Viable business plans implemented for at least three sustainable economic activities, with benefits for men and women. | Viable business plans developed and implemented for at least three sustainable economic activities, with benefits for men and women. | Market conditions are favourable for target products |
| | 2.2.1 Strategies to promote the development of sustainable deforestation-free economic activities, linked to markets<br>2.2.2 Linkages of activities with market, financial and public incentives | | | | |
| | **Outcome 2.3: Land users access finance to support conservation and sustainable resource management.** | | | | |
| | **15.** Volume of credit, incentives and insurance, | To be determined at project start (there are two REDD | US$15 million in the Peruvian Amazon as a | US$40 million in the Peruvian Amazon as a whole; numbers of farmers and | Finance providers are receptive and |

[30] LD3/4 Indicator 3.3 Increased resources flowing to INRM and other land uses from divers sources

| Vertical logic | Indicator | Baseline value | Mid-term Target | Target value | Assumptions |
|---|---|---|---|---|---|
| | by number of farmers and area covered, disbursed to benefit sustainable resource management practices or subject to criteria of environmental sustainability[31] | projects covering the project area but no conditional direct tranferss) | whole; numbers of farmers and gender breakdown to be determined at project start | gender breakdown to be determined at project start | supportive of sustainable resource management practices |
| | ***Outputs*:**<br>2.3.1 Credit and insurance schemes promoted to benefit sustainable land practices aligned with National Forest and CC Strategy (farmers, communities etc).<br>2.3.2 Cost-Benefit Analyses of sustainable practices developed<br>2.3.3 PES and incentive systems promoted to compensate land users for the implementation of sustainable economic practices and sustainable ecosystem management | | | | |
| Component 3: Technical capacity installed to restore and sustain ecosystem services in target landscape | **Outcome 3.1: Sustainable and inclusive production models demonstrated to enable scaling-up to landscape level** | | | | |
| | **16.** Number of actors that learn about sustainable management practices and their benefits as a result of the pilots[32] | 0 | Experiences, including those developed by women, demonstrated in pilots to 500 actors with potential to replicate and/or disseminate them | Experiences, including those developed by women, demonstrated in pilots to 1,500 actors with potential to replicate and/or disseminate them | Producers are receptive to messages of environmental sustainability and prepared to modify practices |
| | *Outputs:*<br>3.1.1 Pilots covering 500ha demonstrating sustainable management practices to 1,000 actors with potential to replicate and/or disseminate them<br>3.1.2 Pilots of community-based sustainable livelihood support options in indigenous areas | | | | |
| | **Outcome 3.2: Farmers and communities enabled to implement more sustainable practices** | | | | |
| | **17.** Numbers of farmers (male and female) in target areas receiving technical and financial support for the application of sustainable management | In 2012 (CENAGRO):<br>- There are 16,120 farmers in the target area<br>- In 2012 2,488 male farmers (18.9% of the total) and 531 women (18% of women farmers) received technical | - 2,000 farmers receive technical assistance (1,640 men and 360 women) for the application of sustainable management practices | - 4,550 farmers receive technical assistance (3,350 men and 1,200 women) for the application of sustainable management practices<br>- 3,000 farmers receive financial assistance for the application of sustainable management practices | Providers of technical and financial support are receptive to messages of environmental sustainability and |

[31]SFM1/2 **Indicator 2:** Number of incentive mechanisms to avoid the loss of high conservation value forests implemented.

[32]LD3/4 **Indicator 3.1** Demonstration results strengthening cross-sector integration of SLM

| Vertical logic | Indicator | Baseline value | Mid-term Target | Target value | Assumptions |
|---|---|---|---|---|---|
| | practices[33], and applying enterprise and organizational development plans necessary for these practices to be viable and sustainable | training or business advice<br>- 1,961 farmers were receiving finance | - 1,000 farmers receive financial assistance for the application of sustainable management practices<br>- 5,000 farmers are implementing necessary enterprise and organizational development plans | - 1,000 farmers are implementing necessary enterprise and organizational development plans<br>- | prepared to adjust support accordingly |
| | **18.** Number of farmers (of those who receive technical assistance), by area and gender, with increases in per hectare productivity levels due to the application of the sustainable management practices promoted by the project | Productivity levels in agricultural commodities are low due to inadequate technology and investment<br>*Baseline productivity levels for participating farmers to be determined at project start.* | 40% of supported producers (male and female) are applying sustainable practices | 25% of supported farmers (male and female) increase their productivity by at least 20% (in terms of productivity or profitability) | Direct support is provided by technical and financial institutions. |
| | 3.2.1 TA systems, tools, methodologies and capacities for delivery of technical support integrating principles of gender equity<br>3.2.2 Technical assistance programs rolled out in alliance with supply-chain actors and local/regional governments, to deliver support to green commodity producers, integrating principles of gender equity | | | | |
| | **Outcome 3.3: Ecological restoration and conservation programmes with public and private stakeholder participation** | | | | |
| | **19.** Area of degraded landscapes subject to restoration and/or conservation in order to restore ecosystem services, with provisions for sustainability of management[34] | Restoration: 0ha<br>Conservation:<br>- 125,000ha of PAs<br>- 25,000ha of conservation concessions<br>- 128 ha of private conservation areas<br>- 9,000 ha of regional | Restoration: 1,500ha<br>Conservation: 1,500ha increase | Restoration: 4,000ha<br>Conservation: 4,000ha increase | Local actors and communities are committed to environmental restoration and conservation<br>Public investment projects are willing to |

[33]With specific reference to e.g. responsible use of agricultural chemical, IPM, avoidance of clearance of natural vegetation, maintenance of diversity on farm, soil conservation, integrated fire management.

[34] SFM3/5 **Indicator 5:** Area of forest resources restored in the landscape, stratified by forest management actors; CC2/4 **Indicator 4.** Deployment of low GHG technologies and practices; IRRF 1.5.A.1.1 Number of hectares under in situ conservation regime.

| Vertical logic | Indicator | Baseline value | Mid-term Target | Target value | Assumptions |
|---|---|---|---|---|---|
| | | conservation areas proposed | | | receive technical assistance |
| | ***Outputs:***<br>3.3.1 Local restoration initiatives in priority localities, covering 4000ha of degraded landscapes<br>3.3.2 Local conservation initiatives in priority localities, covering 4,000ha | | | | |
| | **Outcome 3.4 Knowledge effectively managed in support of the sustainable management of productive landscapes throughout the Peruvian Amazon** | | | | |
| | **20.** Numbers of institutions that receive publications and communications products aimed at improving knowledge and practices of sustainable management of Amazonian landscapes | 0 | 40 institutions | 100 institutions | Receptiveness among institutions to messages related to environmental sustainabilty in production landscapes |
| | 3.4.1 Systematization of best practices, lessons learned and case studies, including evidence of the special contribution of women and indigenous peoples to the sustainability of Amazonian landscapes<br>3.4.2 Communications products developed and disseminated<br>3.4.3 System for adaptive management and learning to inform landscape management approaches by decision makers | | | | |
| PM | **21.** Numbers of project work plans, internal project planning meetings and project board meetings in which specific use is made of reliable data on indicator status | N/A | All project work plans, minutes of internal project planning meetings and minutes of project board meetings make reference to the specific use of reliable data on indicator status as a guide to planning and decision making | | |

## VII. MONITORING AND EVALUATION (M&E) PLAN

267. The project results as outlined in the project results framework will be monitored annually and evaluated periodically during project implementation to ensure the project effectively achieves these results. The project monitoring and evaluation plan will also facilitate learning and ensure knowledge is shared and widely disseminated to support the scaling up and replication of project results.

268. Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP and UNDP Evaluation Policy. While these UNDP requirements are not outlined in this project document, the UNDP Country Office will work with the relevant project stakeholders to ensure UNDP M&E requirements are met in a timely fashion and to high quality standards. Additional mandatory GEF-specific M&E requirements (as outlined below) will be undertaken in accordance with the GEF M&E policy and other relevant GEF policies[35].

269. In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed during the Project Inception Workshop and will be detailed in the Inception Report. This will include the exact role of project target groups and other stakeholders in project M&E activities including the GEF Operational Focal Point and national/regional institutes assigned to undertake project monitoring. The GEF Operational Focal Point will strive to ensure consistency in the approach taken to the GEF-specific M&E requirements (notably the GEF Tracking Tools) across all GEF-financed projects in the country. This could be achieved for example by using one national institute to complete the GEF Tracking Tools for all GEF-financed projects in the country, including projects supported by other GEF Agencies.[36]

**M&E Oversight and monitoring responsibilities:**

270. Project Manager: The Project Manager will be responsible for day-to-day project management and regular monitoring of project results and risks, including social and environmental risks. The Project Manager will ensure that all project staff maintain a high level of transparency, responsibility and accountability in M&E and reporting of project results. The Project Manager will inform the Project Director, the Project Board, the UNDP Country Office and the UNDP-GEF RTA of any delays or difficulties as they arise during implementation so that appropriate support and corrective measures can be adopted.

271. The Project Manager will develop annual work plans based on the multi-year work plan included in Annex A, including annual output targets to support the efficient implementation of the project. The Project Manager will ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality. This includes, but is not limited to, ensuring the results framework indicators are monitored annually in time for evidence-based reporting in the GEF PIR, and that the monitoring of risks and the various plans/strategies developed to support project implementation (e.g. gender strategy, KM strategy etc.) occur on a regular basis.

272. Project Board: The Project Board will take corrective action as needed to ensure the project achieves the desired results. The Project Board will hold project reviews to assess the performance of the project and appraise the Annual Work Plan for the following year. In the project's final year, the Project Board will hold an end-of-project review to capture lessons learned and discuss opportunities for scaling up and to highlight project results and lessons learned with relevant audiences. This final review meeting will also discuss the findings outlined in the project terminal evaluation report and the management response.

273. Project Implementing Partner: MINAM will be the Implementing Partner (IP) of the project. The IP will be responsible for providing any and all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary and appropriate. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes, and is aligned with national systems so that the data used by and generated by the project supports national systems.

[35] See https://www.thegef.org/gef/policies_guidelines
[36] See https://www.thegef.org/gef/gef_agencies

274. UNDP Country Office: The UNDP Country Office will support the Project Manager as needed, including through annual supervision missions. The annual supervision missions will take place according to the schedule outlined in the annual work plan. Supervision mission reports will be circulated to the project team and Project Board within one month of the mission. The UNDP Country Office will initiate and organize key GEF M&E activities including the annual GEF PIR, the independent mid-term review and the independent terminal evaluation. The UNDP Country Office will also ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality.

275. The UNDP Country Office will be responsible for complying with all UNDP project-level M&E requirements as outlined in the UNDP POPP. This includes ensuring the UNDP Quality Assurance Assessment during implementation is undertaken annually; that annual targets at the output level are developed, and monitored and reported using UNDP corporate systems; the regular updating of the ATLAS risk log; and, the updating of the UNDP gender marker on an annual basis based on gender mainstreaming progress reported in the GEF PIR and the UNDP ROAR. Any quality concerns flagged during these M&E activities (e.g. annual GEF PIR quality assessment ratings) will be addressed by the UNDP Country Office and the Project Manager.

276. The UNDP Country Office will retain all M&E records for this project for up to seven years after project financial closure in order to support ex-post evaluations undertaken by the UNDP Independent Evaluation Office (IEO) and/or the GEF Independent Evaluation Office (IEO).

277. UNDP-GEF Unit: Additional M&E and implementation quality assurance and troubleshooting support will be provided by the UNDP-GEF Regional Technical Advisor and the UNDP-GEF Directorate as needed.

**Audit:**
278. The project will be audited according to UNDP Financial Regulations and Rules and applicable audit policies on NIM implemented projects.[37]

**Additional GEF monitoring and reporting requirements:**
279. Inception Workshop and Report: A project inception workshop will be held within two months after the project document has been signed by all relevant parties to, amongst others:

a) Re-orient project stakeholders to the project strategy and discuss any changes in the overall context that influence project strategy and implementation;
b) Discuss the roles and responsibilities of the project team, including reporting and communication lines and conflict resolution mechanisms;
c) Review the results framework and finalize the indicators, means of verification and monitoring plan;
d) Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP in M&E;
e) Update and review responsibilities for monitoring the various project plans and strategies, including the risk log; Environmental and Social Management Plan and other safeguard requirements; the gender strategy; the knowledge management strategy, and other relevant strategies;
f) Review financial reporting procedures and mandatory requirements, and agree on the arrangements for the annual audit; and
g) Plan and schedule Project Board meetings and finalize the first year annual work plan.

280. The Project Manager will prepare the inception report no later than one month after the inception workshop. The inception report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board.

281. GEF Project Implementation Report (PIR): The Project Manager, the UNDP Country Office, and the UNDP-GEF Regional Technical Advisor will provide objective input to the annual GEF PIR covering the reporting period July (previous year) to June (current year) for each year of project implementation. The Project Manager will ensure that the indicators included in the project results framework are monitored annually in advance of the PIR submission deadline so that progress can be reported in the PIR. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR.

[37] See guidance here: https://info.undp.org/global/popp/frm/pages/financial-management-and-execution-modalities.aspx

282. The PIR submitted to the GEF will be shared with the Project Board. The UNDP Country Office will coordinate the input of the GEF Operational Focal Point and other stakeholders to the PIR as appropriate. The quality rating of the previous year's PIR will be used to inform the preparation of the subsequent PIR.

283. Lessons learned and knowledge generation: Results from the project will be disseminated within and beyond the project intervention area through existing information sharing networks and forums. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to the project. The project will identify, analyse and share lessons learned that might be beneficial to the design and implementation of similar projects and disseminate these lessons widely. There will be continuous information exchange between this project and other projects of similar focus in the same country, region and globally.

284. GEF Focal Area Tracking Tools: The following GEF Tracking Tool(s) will be used to monitor global environmental benefit results:

- BD (Objective 4, Programmes 9 and 10)
- LD (Objective 3, Programme 4)
- SFM (Objectives 1 and 3)
- CC (Objective 2, Programme 4)

285. The baseline/CEO Endorsement GEF Focal Area Tracking Tool(s) – submitted as Annex D to this project document – will be updated by the Project Manager/Team (not the evaluation consultants hired to undertake the MTR or the TE) and shared with the mid-term review consultants and terminal evaluation consultants before the required review/evaluation missions take place. The updated GEF Tracking Tool(s) will be submitted to the GEF along with the completed Mid-term Review report and Terminal Evaluation report.

286. Independent Mid-term Review (MTR): An independent mid-term review process will begin after the second PIR has been submitted to the GEF, and the MTR report will be submitted to the GEF in the same year as the 3rd PIR. The MTR findings and responses outlined in the management response will be incorporated as recommendations for enhanced implementation during the final half of the project's duration. The terms of reference, the review process and the MTR report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the UNDP Evaluation Resource Center (ERC). As noted in this guidance, the evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final MTR report will be available in English and will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and approved by the Project Board.

287. Terminal Evaluation (TE): An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terminal evaluation process will begin three months before operational closure of the project allowing the evaluation mission to proceed while the project team is still in place, yet ensuring the project is close enough to completion for the evaluation team to reach conclusions on key aspects such as project sustainability. The Project Manager will remain on contract until the TE report and management response have been finalized. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the UNDP Evaluation Resource Center. As noted in this guidance, the evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final TE report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board. The TE report will be publically available in English on the UNDP ERC.

288. The UNDP Country Office will include the planned project terminal evaluation in the UNDP Country Office evaluation plan, and will upload the final terminal evaluation report in English and the corresponding management response to the UNDP Evaluation Resource Centre (ERC). Once uploaded to the ERC, the UNDP IEO will undertake a quality assessment and validate the findings and ratings in the TE report, and rate the quality

of the TE report. The UNDP IEO assessment report will be sent to the GEF IEO along with the project terminal evaluation report.

289. Final Report: The project's terminal PIR along with the terminal evaluation (TE) report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

**Mandatory GEF M&E Requirements and M&E Budget:**

| GEF M&E requirements | Primary responsibility | Indicative costs to be charged to the Project Budget[38] (US$) | | Time frame |
|---|---|---|---|---|
| | | GEF grant | Co-financing | |
| **Inception Workshop** | UNDP Country Office | USD 5,000 (USD3,000 venue hire and facilitation, USD2,000 participant travel) | *USD 5,000* | Within two months of project document signature |
| **Inception Report** | Project Manager | None | None | Within two weeks of inception workshop |
| **Standard UNDP monitoring and reporting requirements as outlined in the UNDP POPP** | UNDP Country Office | None | None | Quarterly, annually |
| **Monitoring of indicators in project results framework** | Project Manager | USD 42,000<br><br>(USD 7,000/year) | USD 30,000<br><br>(USD 5,000/year) | Annually |
| **GEF Project Implementation Report (PIR)** | Project Manager and UNDP Country Office and UNDP-GEF team | None | None | Annually |
| **NIM Audit as per UNDP audit policies** | UNDP Country Office | USD 30,000 (Per year: USD5,000) | | Annually or other frequency as per UNDP Audit policies |
| **Monitoring of environmental and social risks, and corresponding management plans as relevant** | Project Manager UNDP CO | None | | On-going |
| **Addressing environmental and social grievances** | Project Manager, UNDP Country Office, BPPS as needed | None for time of project manager, and UNDP CO | | *Costs associated with missions, workshops, BPPS expertise etc. can be charged to the project budget.* |
| **Project Board meetings** | Project Board, UNDP Country Office, Project Manager | *USD 9,000 travel costs (USD1,500/year)* | | At minimum annually |
| **Supervision missions** | UNDP Country Office | None[39] | USD 9,000 | Annually |

[38] Excluding project team staff time and UNDP staff time and travel expenses.

[39] The costs of UNDP Country Office and UNDP-GEF Unit's participation and time are charged to the GEF Agency Fee.

| GEF M&E requirements | Primary responsibility | Indicative costs to be charged to the Project Budget[38] (US$) | | Time frame |
|---|---|---|---|---|
| | | GEF grant | Co-financing | |
| | | | (USD 1,500/year) | |
| **Oversight missions** | UNDP-GEF team | None[39] | USD 9,000 (USD 1,500/year) | Troubleshooting as needed |
| **Knowledge management** | Project Manager | USD182,453 (1% of GEF grant) | | On-going |
| **GEF Secretariat learning missions/site visits** | UNDP Country Office and Project Manager and UNDP-GEF team | None | USD 5,000 | To be determined. |
| ***Mid-term GEF Tracking Tool*** | *Project Manager* | *Included In monitoring of indicators* | USD 9,000 | Before mid-term review mission takes place. |
| ***Independent Mid-term Review (MTR) and management response*** | *UNDP Country Office and Project team and UNDP-GEF team* | *USD45,600 (USD43,000 for international and national consultants, USD2,600 for travel)* | USD 12,000 | Between 2nd and 3rd PIR. |
| **Terminal GEF Tracking Tool** | Project Manager | *Included In monitoring of indicators* | 9,000 | Before terminal evaluation mission takes place |
| **Independent Terminal Evaluation (TE) included in UNDP evaluation plan, and management response** | UNDP Country Office and Project team and UNDP-GEF team | *USD45,600 (USD43,000 for international and national consultants, USD2,600 for travel)* | *USD 12,000* | At least three months before operational closure |
| **Translation of MTR and TE reports into English** | UNDP Country Office | *USD10,000* | *USD 6,000* | |
| **TOTAL indicative COST** Excluding project team staff time, and UNDP staff and travel expenses | | *369,653 (2% of GEF grant )* | *USD 106,000* | |

## VIII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

290. Roles and responsibilities of the project's governance mechanism: The project will be implemented following UNDP's National Implementation modality (NIM), according to the Standard Basic Assistance Agreement between UNDP and the Government of Peru, and the Country Programme. The Ministry of Environment (MINAM) will be the Implementing Partner in this project, given its role in ensuring compliance with environmental standards and defining national territorial planning law and procedures, in coordination with other responsible entities.

291. The United Nations Development Programme (UNDP), as GEF Implementing Agency, will support the implementation of the project by providing the necessary technical and operational assistance. Likewise, it will be responsible for high-level monitoring of the project and all necessary reporting to GEF. All actions will be planned and conducted in close collaboration between MINAM, UNDP, and the other members of the Project Board.

292. UNDP will function as Responsible Party for Outcomes 1.1, 1.2, 2.1, 2.2, 3.3 and 3.4 and for Project Management, and as such will be responsible for the selection, appointment and oversight of consultants and contractors, and for the procurement of other goods and services necessary under these components. For these services, a Letter of Agreement will be signed between UNDP and MINAM, through which the Implementing Partner will request UNDP to put in place and directly oversee the Project Management Unit, and provide the services required for the implementation of activities indicated in the multi-annual work plan. In this context, UNDP's rules and regulations will apply, and will include direct cost recovery; it will charge Direct Project Services (DPS) as shown in the Total Budget and Workplan in Section III.

293. Considering the kind of results, activities and actions proposed, the implementation of the project involves the participation of various public and private institutions: a) the Ministry of Environment (MINAM), b) the National Forest and Wildlife Service (SERFOR), c) Regional governments and Local municipalities, and e) indigenous organizations and non-governmental organizations, among others. The expected participation of each institution in the project's implementation is described below.

294. UNDP GCP will support the project on implementation of National Commodity Platform methodologies and processes, as well as on engagement of and partnerships with companies in commercial supply chains. This includes also farmer support systems and sustainable production models and other themes that are usually included in National Commodity Platforms. The support will be detailed in TORs for GCP involvement, which stipulate the expected deliverables and time commitments. The project will retain individual GCP advisers on LTA consultant rosters to deliver the agreed support. The GCP advisers are already familiar with commodity sectors in Peru, are supporting the platform work of the National Coffee Action Plan, and have been supporting the GEF project design.

### Governance of the Project

295. The project will be governed by a National Steering Committee, known as the Project Board. The Board shall be composed of: the MINAM, UNDP, MINAGRI and the Regional Governments of Huánuco and Ucayali. The Project Board will approve the annual work plan, the budget structure and the reports on project advances. It will meet annually.

296. In addition, an Advisory Committee will be convened for the project, and will include, in addition to the NSC members, national indigenous organizations AIDESEP and CONAP, DEVIDA, the Ministry of Culture, producer organizations, international technical cooperation, the private sector, academia and Civil Society Organizations (CSOs). This Advisory Committee will meet prior to the Project Board meetings and act as a dialogue space to discuss the project implementation strategy and to address issues (complaints or suggestions) related to the project as they come up. As necessary, the Committee could have additional meetings with the Government of Peru and UNDP to further discuss issues of information, dialogue, and incorporation of suggestions.

297. Terms of reference shall frame both Committees' functions and ensure that their focus remains on issues directly associated with the Project.

298. As **GEF implementing agency**, UNDP will be ultimately accountable and responsible for the delivery of results, subject also to their certification by MAE, as Implementing Partner. UNDP shall provide project cycle

management services as defined by the GEF Council (described in Section IV Part XII), that will include the following:

- Providing financial and audit services to the project
- Overseeing financial expenditures against project budgets,
- Ensuring that activities including procurement and financial services are carried out in strict compliance with UNDP/GEF procedures,
- Ensuring that the reporting to GEF is undertaken in line with the GEF requirements and procedures,
- Facilitate project learning, exchange and outreach within the GEF family,
- Contract the project mid-term and final evaluations and trigger additional reviews and/or evaluations as necessary and in consultation with the project counterparts.

299. The **project assurance** role will be provided by the UNDP Country Office Programme Officer. Additional quality assurance will be provided by the UNDP Regional Technical Advisor as needed.

300. Within the UNDP Country Office, the Internal Control Framework is strictly followed, through which roles and responsibilities are explicitly differentiated among staff members. In this sense, at the request of the government of Peru and in accordance with UNDP's Operational Policies and Procedures, UNDP provides operational and programmatic support as described in the Prodoc and LOA. At the same time, UNDP will fulfill its role as project assurance and service provider according to the project's governance structure.

301. The **Implementing Partner** for this project is the Ministry of the Environment (MINAM), which will appoint the chair of the Project Board and the National Project Director (see below). The Implementing Partner (IP) is responsible and accountable for managing this project, including the monitoring and evaluation of project interventions, achieving project outcomes, and for the effective use of UNDP resources.

302. The project will be under the overall leadership of a **National Project Director (NPD)**, who will be a representative of MINAM and will be responsible for orienting and advising the National Project Coordinator on Government policy and priorities. The NPD will also be responsible for maintaining regular communication with the lead institutions in the agriculture and livestock sectors and ensuring that their interests are communicated effectively to the National Project Coordinator. The National Project Director will be represented on the Project Board.

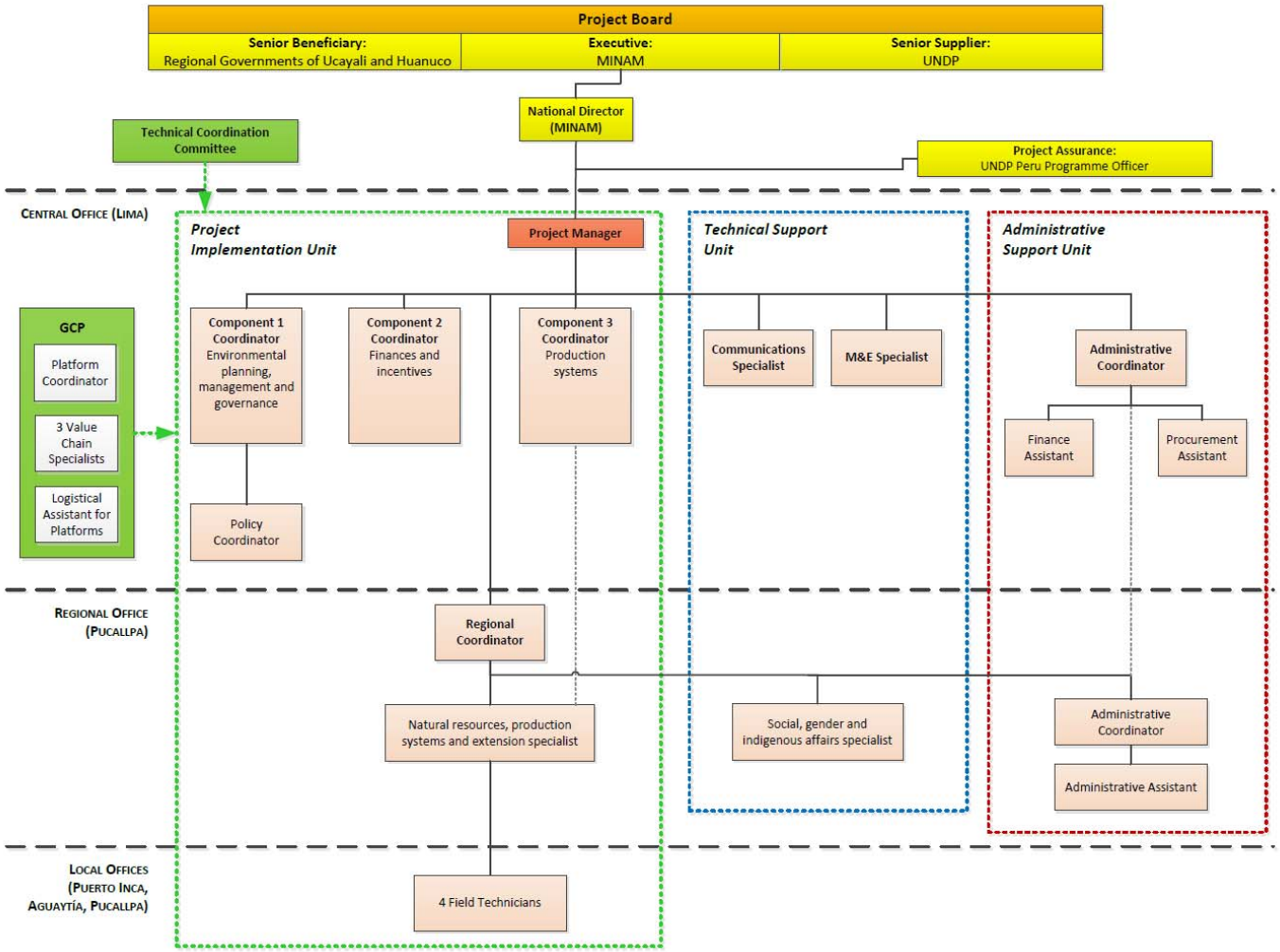
303. The project will be executed in practice, on behalf of the Implementing Partner within the constraints laid down by the Board, by a **Project Management Unit** (PMU)**,** based in the offices of the Ministry of Environment in Lima; there will in addition be a regional office in Pucallpa, Ucayali Province, as well as field offices in Puerto Inca and Aguaytía.

304. The PMU will be led by a **Project Manager,** who will be hired through a competitive process and will coordinate directly with the National Director. The Project Manager (PM) function will end when the final project terminal evaluation report and corresponding management response, and other documentation required by the GEF and UNDP, has been completed and submitted to UNDP (including operational closure of the project).

305. The Project Manager will be responsible for the implementation of the project, providing technical expertise, reviewing and preparing TOR's and reviewing the outputs of consultants and other sub-contractors. The NPC will:

- Ensure the logistical, administrative and financial effectiveness of the IP in fulfilling its roles set out above
- To this end, provide monitoring, supervision and guidance to the technical teams based in the project area
- Promote incidence in and coordination with MINAM, UNDP and the donor agencies that are supporting them.

**Figure 3.** Organisational structure of the project



306. In addition, the PM will manage the following:

1) preparation of project reports, work plans, budgets and accounting records,
2) drafting of TORs, technical specifications and other documents,
3) identification of consultants and supervision of consultants and suppliers,
4) overseeing the implementation of project activities in a timely and efficient way,
5) maintaining contacts with project partners at the national, state and local level,
6) organization of seminars, workshops and field trips which are linked to project activities.

307. The PM will produce in a timely fashion annual work plans and budgets to be approved by the Project Board and quarterly operational and annual progress reports for submission to the Board. The reports will provide details about the progress made, any shortcomings and the necessary adjustments made to achieve project outcomes. The PM will also be responsible for any national or international service provider and the recruitment of specialist services (with due consultation with the Board).

308. The **Project Board** (also called Project Steering Committee) will be the project coordination and decision-making body, responsible for making executive decisions for the project, in particular when guidance is required by the PM. It will meet annually and may be convened extraordinarily by the Chair, on the request of individual members. The responsibility of the Board is to see that project activities lead to the required outcomes as defined in the Project Document. It will play a critical role in facilitating inter-ministerial coordination, project monitoring and evaluations by quality assuring these processes and products, and using evaluations for performance improvement, accountability and learning. The Board will oversee project implementation, approve work plans and budgets as supplied by the Project Manager, approve any major changes in project plans, approve major project deliverables, arbitrate any conflicts which might arise, and be responsible for the overall evaluation of the project. In order to ensure UNDP's ultimate accountability, Project Board decisions will be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. In case a consensus cannot be reached within the Board, final decision shall rest with the UNDP Programme Manager.

309. The Project Board will be comprised as follows (the make-up and TORs of the Board will be finalized in the Project Inception Workshop):

- The Executive, who will chair the Board. This role will be filled by a representative of MINAM.
- A representative of the Senior Supplier, who will provide guidance regarding the technical feasibility of the project. This role will be filled by UNDP.
- The Project Manager, who will have voice but no vote.
- Senior Beneficiaries, who will represent the interests of those who will ultimately benefit from the project and ensure the realization of project results from the perspective of project beneficiaries. This role will be filled by representatives of the regional governments of Ucayali and Huanuco.

310. The Project Management Unit will be advised by a **Technical Coordination Committee**, responsible for promoting coordination and articulation of project activities in order to ensure their alignment with Peruvian Government operative plans. The TCC will be composed of representatives of MINAM, MINAGRI-SERFOR, Regional Governments of Ucayali and Huanuco, as well as UNDP. The TCC will be convened quarterly by the Project Manager and its terms of reference will be defined at project start, in consultation with MINAM.

<u>Governance role for project target groups</u>:

311. The project will make concrete provisions to ensure that target groups are engaged in decision making for the project. The stakeholders of the project at local level will include all of the inhabitants of the target area whose livelihood support and productive actions have implications for the condition of the targeted global environmental values, those whose livelihoods might potentially be affected by the proposed conservation strategies, and those with the potential to participate in the conservation strategies (for example, through the adoption of BD-friendly production systems). These actors will therefore include both indigenous people who are native to the areas, and colonists who are either mixed-race or indigenous but from other parts of the country (the highlands and other parts of Amazonia).

312. 11. A significant proportion of the project area is inhabited by indigenous people: in Peru, the land rights of native communities are recognised through property titles on land that is suitable for agriculture or grazing, and usufruct rights on forest land. In order to facilitate the participation of indigenous people in project design, the project will coordinate where possible and relevant with the various organisations that represent their interests at national and local levels, including the Interethnic Association for the Development of the Peruvian

Jungle (AIDESEP), the Centre for the Development of Amazonian Indigenous People (CEDIA), the Coordinator of Indigenous Organizations of the Amazon Basin (COICA), and the Confederation of Amazonian Nationalities of Peru (CONAP).

313. The project will endeavour to take a similar approach with non-native colonists. With these actors, attention will be paid to working with sector-based organizations to which they may belong (particularly organisations of cocoa, coffee or palm producers), and to production cooperatives.

314. Regional and Local Governments will play a particularly significant role as facilitators of the participation of different local stakeholder groups, and will be important partners of the project in this regard.

315. At the request of the Government of Peru, UNDP shall also provide Direct Project Services (DPS) specific to project inputs according to its policies and convenience. These services, and the costs thereof, are specified in the Letter of Agreement in Section IV Part XII. In accordance with GEF requirements, the costs of these services will be part of the executing entity's Project Management Cost allocation identified in the project budget. UNDP and the Government of Peru acknowledge and agree that these services are not mandatory and will only be provided in full accordance with UNDP policies on recovery of direct costs.

316. Agreement on intellectual property rights and use of logo on the project's deliverables and disclosure of information**:** In order to accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper acknowledgement to the GEF. Information will be disclosed in accordance with relevant policies notably the UNDP Disclosure Policy[40] and the GEF policy on public involvement[41].

**Table 5. Responsible parties and political partners, by outcome**

| Components and Outcomes | Executing party | Political partners |
|---|---|---|
| **COMPONENT 1. Improved policy planning and governance to reduce deforestation and enhance sustainable production** | | |
| 1.1: Land-use policy and planning strengthened and aligned across sectors at national, regional and local levels | UNDP | MINAM, MINAGRI, GoP |
| 1.2: Landscape governance strengthened for public policy development, land use management and participatory decision making | UNDP | MINAM, MINAGRI, GoP, GoRes, Golos |
| 1.3: Monitoring and enforcement capacities strengthened | GoP | MINAGRI, GoRes, MINAM |
| 1.4: Public finance flows increased to sustain effective territorial governance with zero deforestation | MINAM | GoRe, Golos, MEF |
| **COMPONENTE 2 Financial mechanisms and market incentives promote sustainable production practices** | | |
| 2.1: Green commodity value chains have provided incentives to farmers for sustainable production | UNDP | MINAGRI, MINAM, PRODUCE, MINCETUR, PROMPERÚ |
| 2.2: Land users access finance to support conservation and sustainable resource management. | UNDP | MINAGRI, MINAM, PRODUCE, MINCETUR, PROMPERÚ |
| 2.3: Land users access finance to support conservation and sustainable resource management. | MINAM | |
| **COMPONENT 3 Technical capacity installed to restore and sustain ecosystem services in target landscape** | | |
| 3.1 Sustainable and inclusive production models demonstrated to enable scaling-up to landscape level | MINAM | MINAGRI, GoRes |
| 3.2 Farmers and communities enabled to implement more sustainable practices | UNDP | MINAGRI, MINAM, GoRes, GoLo |
| 3.3: Ecological restoration and conservation programmes with public and private stakeholder participation | GoP | MINAM, GoRes, GoLos, SERNANP |
| 3.4 Knowledge effectively managed in support of the sustainable management of productive landscapes throughout the Peruvian Amazon | UNDP | MINAM, MINAGRI |

[40] See http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/
[41] See https://www.thegef.org/gef/policies_guidelines

## IX. FINANCIAL PLANNING AND MANAGEMENT

317. The total cost of the project is USD147,346,927. This is financed through a GEF grant of USD18,346,927, USD79,000,000 in cash co-financing to be administered by UNDP and USD50,000,000 in-kind co-financing. UNDP, as the GEF Implementing Agency, will be responsible for the execution of the GEF resources and the cash co-financing transferred to UNDP bank account only.

318. The actual realization of project co-financing will be monitored during the *mid-term review* and terminal evaluation process and will be reported to the GEF.

**Table 6. Cofinancing description**

| Co-financing source | Co-financing type | Co-financing amount | Planned Activities/Outputs |
|---|---|---|---|
| Ministry of Environment | In kind[42] | 50,000,000 | Budgetary assignment to cover actions of diverse Directorates, projects and the PNCB |
| Ministry of Agriculture | Grant | 25,000,000 | Rural Land Titling and Registration Project, Third Phase (PTRT3), renewal of coffee plantations and recurrent budget |
| USAID | Grant | 35,000,000 | Various projects including the Cacao Alliance |
| Provincial government of Puerto Inca | Grant | 10,000,000 | Joint Declaration of Intent (Peru, Norway and Germany), UN-REDD, SECO |
| UNDP | Grant | 9,000,000 | UNDP funding for UN-REDD, Swiss funding for the GCP and funding from Norway for the Joint Declaration of Intent |

319. Budget Revision and Tolerance: As per UNDP requirements outlined in the UNDP POPP, the project board will agree on a budget tolerance level for each plan under the overall annual work plan allowing the project manager to expend up to the tolerance level beyond the approved project budget amount for the year without requiring a revision from the Project Board. Should the following deviations occur, the Project Manager and UNDP Country Office will seek the approval of the UNDP-GEF team as these are considered major amendments by the GEF: a) Budget re-allocations among components in the project with amounts involving 10% of the total project grant or more; b) Introduction of new budget items/or components that exceed 5% of original GEF allocation.

320. Any over expenditure incurred beyond the available GEF grant amount will be absorbed by non-GEF resources (e.g. UNDP TRAC or cash co-financing).

321. Refund to Donor: Should a refund of unspent funds to the GEF be necessary, this will be managed directly by the UNDP-GEF Unit in New York.

322. Project Closure: Project closure will be conducted as per UNDP requirements outlined in the UNDP POPP.[43] On an exceptional basis only, a no-cost extension beyond the initial duration of the project will be sought from in-country UNDP colleagues and then the UNDP-GEF Executive Coordinator.

323. Operational completion: The project will be operationally completed when the last UNDP-financed inputs have been provided and the related activities have been completed. This includes the final clearance of the Terminal Evaluation Report (that will be available in English) and the corresponding management response, and

[42] Consists of budgetary resources supporting the actions of diverse Directorates and projects of MINAM, as well as the National Programme for Forest Conservation (PNCB): MINAM policy requires this to be denominated "in-kind" rather than "grant" co-financing

[43] see https://info.undp.org/global/popp/ppm/Pages/Closing-a-Project.aspx

the end-of-project review Project Board meeting. The Implementing Partner through a Project Board decision will notify the UNDP Country Office when operational closure has been completed. At this time, the relevant parties will have already agreed and confirmed in writing on the arrangements for the disposal of any equipment that is still the property of UNDP.

324. Financial completion: The project will be financially closed when the following conditions have been met: a) The project is operationally completed or has been cancelled; b) The Implementing Partner has reported all financial transactions to UNDP; c) UNDP has closed the accounts for the project; d) UNDP and the Implementing Partner have certified a final Combined Delivery Report (which serves as final budget revision).

325. The project will be financially completed within 12 months of operational closure or after the date of cancellation. Between operational and financial closure, the implementing partner will identify and settle all financial obligations and prepare a final expenditure report. The UNDP Country Office will send the final signed closure documents including confirmation of final cumulative expenditure and unspent balance to the UNDP-GEF Unit for confirmation before the project will be financially closed in Atlas by the UNDP Country Office.

# X. TOTAL BUDGET AND WORKPLAN

| Total Budget and Work Plan | | | |
|---|---|---|---|
| Atlas[44] Proposal or Award ID: | 00087272 | Atlas Primary Output Project ID: | 00094356 |
| Atlas Proposal or Award Title: | Sustainable Productive Landscapes in the Peruvian Amazon | | |
| Atlas Business Unit: | PER10 | | |
| Atlas Primary Output Project Title: | Sustainable Productive Landscapes in the Peruvian Amazon | | |
| UNDP-GEF PIMS No.: | 5629 | | |
| Implementing Partner: | Ministry of Environment (MINAM) | | |

| GEF Outcome / Atlas Activity | Responsible party | Fund ID | Donor Name | ERP/ATLAS Budget Description/ Input | Atlas Code | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Total | Budget Notes (see table below) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | US$ | US$ | US$ | US$ | US$ | US$ | US$ | |
| 1.1 | UNDP | 62000 | GEF TF | Salary & Post Adj Cst-IP Staff". | 61300 | - | 20,494 | 20,493 | 13,663 | 6,830 | - | 61,480 | 1 |
| | | | | International Project Staff | 62300 | - | 6,831 | 6,831 | 4,552 | 2,277 | - | 20,491 | 2 |
| | | | | International Project Staff | 63300 | - | 6,831 | 6,831 | 4,554 | 2,277 | - | 20,493 | 3 |
| | | | | Local Consultants | 71300 | 43,000 | 109,000 | 109,000 | 109,000 | 40,000 | 20,000 | 430,000 | 4 |
| | | | | Contractual Services - Individual | 71400 | 88,663 | 136,569 | 136,569 | 136,568 | 136,568 | 88,665 | 723,602 | 5 |
| | | | | Travel | 71600 | 11,646 | 33,291 | 33,291 | 33,291 | 33,291 | 11,646 | 156,456 | 6 |
| | | | | Contractual services - companies | 72100 | 10,000 | 18,333 | 18,333 | 18,333 | 18,333 | - | 83,332 | 7 |
| | | | | Equipment and Furniture | 72200 | 35,431 | 1,095 | 1,094 | 1,095 | 1,094 | 729 | 40,538 | 8 |
| | | | | Supplies | 72500 | 1,614 | 3,152 | 3,153 | 3,153 | 3,153 | 1,540 | 15,765 | 9 |
| | | | | Grants | 72600 | 30,000 | 60,000 | 60,000 | - | - | - | 150,000 | 10 |
| | | | | Rental and Maintenance - Premises | 73100 | 6,262 | 6,262 | 6,262 | 6,262 | 6,262 | 6,262 | 37,572 | 11 |
| | | | | Miscellaneous expenses | 74500 | 472 | 471 | 471 | 471 | 471 | 471 | 2,827 | 12 |
| | **GEF Subtotal Outcome 1.1** | | | | | **227,088** | **402,329** | **402,328** | **330,942** | **250,556** | **129,313** | **1,742,556** | |
| 1.2 | UNDP | 62000 | GEF TF | Salary & Post Adj Cst-IP Staff". | 61300 | - | 20,493 | 20,493 | 13,662 | 6,831 | - | 61,479 | 13 |
| | | | | International Project Staff | 62300 | - | 6,831 | 6,831 | 4,554 | 2,277 | - | 20,493 | 14 |
| | | | | International Project Staff | 63300 | - | 6,831 | 6,831 | 4,554 | 2,277 | - | 20,493 | 15 |
| | | | | International Consultants | 71200 | 36,000 | 72,000 | 72,000 | 72,000 | 72,000 | 36,000 | 360,000 | 16 |
| | | | | Local Consultants | 71300 | 165,600 | 331,200 | 331,200 | 331,200 | 331,200 | 165,600 | 1,656,000 | 17 |
| | | | | Contractual Services - Individ | 71400 | 88,665 | 166,569 | 166,569 | 166,569 | 166,569 | 88,665 | 843,606 | 18 |
| | | | | Travel | 71600 | 35,646 | 81,291 | 81,291 | 81,291 | 81,291 | 35,646 | 396,456 | 19 |
| | | | | Equipment and Furniture | 72200 | 60,431 | 6,093 | 6,093 | 6,093 | 6,093 | 5,729 | 90,532 | 20 |

[44] See separate guidance on how to enter the TBWP into Atlas

| GEF Outcome / Atlas Activity | Responsible party | Fund ID | Donor Name | ERP/ATLAS Budget Description/ Input | Atlas Code | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Total | Budget Notes (see table below) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | US$ | US$ | US$ | US$ | US$ | US$ | US$ | |
| | | | | Supplies | 72500 | 4,614 | 9,153 | 9,153 | 9,153 | 9,153 | 4,540 | 45,766 | 21 |
| | | | | Rental and Maintenance - Premises | 73100 | 6,262 | 6,262 | 6,262 | 6,262 | 6,262 | 6,262 | 37,572 | 22 |
| | | | | Miscellaneous expenses | 74500 | 471 | 471 | 471 | 471 | 471 | 470 | 2,825 | 23 |
| | | | | Training | 75700 | 30,000 | 250,000 | 250,000 | 250,000 | 250,000 | 70,000 | 1,100,000 | 24 |
| | **GEF Subtotal Outcome 1.2** | | | | | **427,689** | **957,194** | **957,194** | **945,809** | **934,424** | **412,912** | **4,635,222** | |
| 1.3 | GoP | 62000 | GEF TF | Local Consultants | 71300 | - | 43,000 | 37,000 | - | - | - | 80,000 | 25 |
| | | | | Travel | 71600 | 5,000 | 10,000 | 10,000 | 10,000 | 10,000 | 5,000 | 50,000 | 26 |
| | | | | Supplies | 72500 | 2,500 | 10,000 | 12,500 | 12,500 | 10,000 | 2,500 | 50,000 | 27 |
| | | | | Grants | 72600 | - | 30,000 | 50,000 | 70,000 | 50,000 | - | 200,000 | 28 |
| | | | | Information Technology Equipment | 72800 | - | 20,000 | - | - | - | - | 20,000 | 29 |
| | | | | Audio Visual&Print Prod Costs | 74200 | - | - | - | - | 5,000 | - | 5,000 | 30 |
| | | | | Miscellaneous expenses | 74500 | 1,333 | 1,333 | 1,333 | 1,333 | 1,333 | 1,333 | 7,998 | 31 |
| | | | | Training | 75700 | - | 7,500 | 14,500 | 15,500 | 12,500 | - | 50,000 | 32 |
| | **GEF Subtotal Outcome 1.3** | | | | | **8,833** | **121,833** | **125,333** | **109,333** | **88,833** | **8,833** | **462,998** | |
| 1.4 | MINAM | 62000 | GEF TF | Travel | 71600 | - | 11,520 | 14,400 | 14,400 | 11,520 | 5,760 | 57,600 | 33 |
| | | | | Local consultants | 71800 | - | - | 4,000 | 16,000 | 16,000 | 4,000 | 40,000 | 34 |
| | | | | Contractual services - companies | 72100 | - | 12,000 | 24,000 | 24,000 | - | - | 60,000 | 35 |
| | | | | Audio Visual&Print Prod Costs | 74200 | - | - | - | 1,250 | 2,500 | 1,250 | 5,000 | 36 |
| | | | | Miscellaneous expenses | 74500 | 571 | 571 | 571 | 571 | 571 | 571 | 3,426 | 37 |
| | | | | Training | 75700 | - | - | - | 1,250 | 2,500 | 1,250 | 5,000 | 38 |
| | **GEF Subtotal Outcome 1.4** | | | | | **571** | **24,091** | **42,971** | **57,471** | **33,091** | **12,831** | **171,026** | |
| 2.1 | UNDP | 62000 | GEF TF | Salary & Post Adj Cst-IP Staff". | 61300 | - | 10,247 | 10,247 | 6,831 | 3,416 | 0 | 30,741 | 39 |
| | | | | International Project Staff | 62300 | - | 3,416 | 3,416 | 2,277 | 1,139 | 0 | 10,248 | 40 |
| | | | | International Project Staff | 63300 | - | 3,416 | 3,416 | 2,277 | 1,139 | 0 | 10,248 | 41 |
| | | | | Local Consultants | 71300 | 30,000 | 50,000 | - | - | - | - | 80,000 | 42 |
| | | | | Contractual Services - Individ | 71400 | 148,407 | 263,176 | 263,176 | 263,176 | 263,176 | 148,407 | 1,349,518 | 43 |
| | | | | Travel | 71600 | 5,823 | 31,646 | 31,646 | 31,646 | 31,646 | 5,823 | 138,230 | 44 |
| | | | | Equipment and Furniture | 72200 | 17,715 | 546 | 546 | 546 | 546 | 364 | 20,263 | 45 |
| | | | | Supplies | 72500 | 807 | 1,577 | 1,577 | 1,577 | 1,577 | 770 | 7,885 | 46 |
| | | | | Rental and Maintenance - Premises | 73100 | 3,131 | 3,131 | 3,131 | 3,131 | 3,131 | 3,131 | 18,786 | 47 |
| | | | | Miscellaneous expenses | 74500 | 235 | 234 | 234 | 235 | 235 | 235 | 1,408 | 48 |
| | **GEF Subtotal Outcome 2.1** | | | | | **206,118** | **367,389** | **317,389** | **311,696** | **306,005** | **158,730** | **1,667,327** | |
| 2.2 | UNDP | 62000 | GEF TF | Salary & Post Adj Cst-IP Staff". | 61300 | 0 | 10,247 | 10,247 | 6,831 | 3,416 | 0 | 30,741 | 49 |
| | | | | International Project Staff | 62300 | 0 | 3,416 | 3,416 | 2,277 | 1,139 | 0 | 10,248 | 50 |
| | | | | International Project Staff | 63300 | 0 | 3,416 | 3,416 | 2,277 | 1,139 | 0 | 10,248 | 51 |

| GEF Outcome / Atlas Activity | Responsible party | Fund ID | Donor Name | ERP/ATLAS Budget Description/ Input | Atlas Code | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Total | Budget Notes (see table below) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | US$ | US$ | US$ | US$ | US$ | US$ | US$ | |
| | | | | Local Consultants | 71300 | 24,000 | 56,000 | - | - | - | - | 80,000 | 52 |
| | | | | Contractual Services - Individual | 71400 | 50,907 | 68,176 | 68,176 | 68,176 | 68,176 | 50,907 | 374,518 | 53 |
| | | | | Travel | 71600 | 5,823 | 11,646 | 11,646 | 11,646 | 11,646 | 5,823 | 58,230 | 54 |
| | | | | Equipment and Furniture | 72200 | 17,715 | 546 | 546 | 546 | 546 | 364 | 20,263 | 55 |
| | | | | Supplies | 72500 | 807 | 1,577 | 1,577 | 1,577 | 1,577 | 770 | 7,885 | 56 |
| | | | | Rental and Maintenance - Premises | 73100 | 3,131 | 3,131 | 3,131 | 3,131 | 3,131 | 3,131 | 18,786 | 57 |
| | | | | Miscellaneous expenses | 74500 | 235 | 234 | 234 | 235 | 235 | 235 | 1,408 | 58 |
| | **GEF Subtotal Outcome 2.2** | | | | | **102,618** | **158,389** | **102,389** | **96,696** | **91,005** | **61,230** | **612,327** | |
| 2.3 | MINAM | 62000 | GEF TF | Contractual services - companies | 72100 | 15,000 | 65,000 | 70,000 | - | - | - | 150,000 | 59 |
| | | | | Miscellaneous expenses | 74500 | 857 | 857 | 857 | 857 | 857 | 857 | 5,142 | 60 |
| | **GEF Subtotal Outcome 2.3** | | | | | **15,857** | **65,857** | **70,857** | **857** | **857** | **857** | **155,142** | |
| 3.1 | MINAM | 62000 | GEF TF | Contractual services - companies | 72100 | - | 150,000 | 200,000 | 300,000 | 200,000 | 150,000 | 1,000,000 | 61 |
| | | | | Grants | 72600 | - | 200,000 | 300,000 | 250,000 | 250,000 | - | 1,000,000 | 62 |
| | | | | Miscellaneous expenses | 74500 | 571 | 571 | 571 | 571 | 571 | 571 | 3,426 | 63 |
| | **GEF Subtotal Outcome 3.1** | | | | | **571** | **350,571** | **500,571** | **550,571** | **450,571** | **150,571** | **2,003,426** | |
| 3.2 | UNDP | 620000 | GEF TF | Salary & Post Adj Cst-IP Staff". | 61300 | 0 | 10,247 | 10,247 | 6,831 | 3,416 | 0 | 30,741 | 64 |
| | | | | International Project Staff | 62300 | 0 | 3,416 | 3,415 | 2,279 | 1,137 | 0 | 10,247 | 65 |
| | | | | International Project Staff | 63300 | 0 | 3,416 | 3,415 | 2,277 | 1,137 | 0 | 10,245 | 66 |
| | | | | Contractual Services - Individual | 71400 | 92,757 | 186,451 | 186,451 | 186,451 | 186,451 | 92,757 | 931,318 | 67 |
| | | | | Travel | 71600 | 5,823 | 11,646 | 11,646 | 11,646 | 11,646 | 5,818 | 58,225 | 68 |
| | | | | Contractual services - companies | 72100 | 5,000 | 9,167 | 9,167 | 9,167 | 9,167 | - | 41,668 | 69 |
| | | | | Equipment and Furniture | 72200 | 17,715 | 546 | 546 | 546 | 546 | 364 | 20,263 | 70 |
| | | | | Supplies | 72500 | 807 | 1,577 | 1,577 | 1,577 | 1,577 | 765 | 7,880 | 71 |
| | | | | Rental and Maintenance - Premises | 73100 | 3,131 | 3,131 | 3,131 | 3,131 | 3,131 | 3,131 | 18,786 | 72 |
| | | | | Miscellaneous expenses | 74500 | 235 | 235 | 235 | 235 | 235 | 250 | 1,425 | 73 |
| | | | | Training | 75700 | 30,000 | 337,669 | 544,174 | 628,004 | 519,172 | 217,668 | 2,276,687 | 74 |
| | **GEF Subtotal Outcome 3.2** | | | | | **155,468** | **567,501** | **774,004** | **852,144** | **737,615** | **320,753** | **3,407,485** | |
| 3.3 | GoP | 62000 | GEF TF | Contractual services - companies | 72100 | - | 10,000 | 15,000 | 15,000 | 10,000 | - | 50,000 | 75 |
| | | | | Grants | 72600 | - | 162,000 | 243,000 | 243,000 | 162,000 | - | 810,000 | 76 |
| | | | | Miscellaneous expenses | 74500 | 666 | 667 | 667 | 667 | 667 | 663 | 3,997 | 77 |
| | **GEF Subtotal Outcome 3.3** | | | | | **666** | **172,667** | **258,667** | **258,667** | **172,667** | **663** | **863,997** | |
| 3.4 | UNDP | 62000 | GEF TF | Salary & Post Adj Cst-IP Staff". | 61300 | - | 15,370 | 15,370 | 10,247 | 5,123 | - | 46,110 | 78 |
| | | | | International Project Staff | 62300 | - | 5,123 | 5,123 | 3,416 | 1,708 | - | 15,370 | 79 |
| | | | | International Project Staff | 63300 | - | 5,123 | 5,123 | 3,416 | 1,708 | - | 15,370 | 80 |

| GEF Outcome / Atlas Activity | Responsible party | Fund ID | Donor Name | ERP/ATLAS Budget Description/ Input | Atlas Code | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Total | Budget Notes (see table below) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | US$ | US$ | US$ | US$ | US$ | US$ | US$ | |
| | | | | International Consultants | 71200 | 18,000 | 6,000 | 6,000 | 6,000 | 6,000 | 18,000 | 60,000 | 81 |
| | | | | Local Consultants | 71300 | - | 20,000 | - | - | - | - | 20,000 | 82 |
| | | | | Contractual Services - Individual | 71400 | 84,361 | 157,831 | 157,831 | 157,831 | 157,831 | 84,361 | 800,046 | 83 |
| | | | | Travel | 71600 | 16,234 | 69,969 | 69,969 | 69,969 | 69,969 | 56,233 | 352,343 | 84 |
| | | | | Contractual services - companies | 72100 | 60,000 | 110,000 | - | - | - | - | 170,000 | 85 |
| | | | | Equipment and Furniture | 72200 | 26,573 | 820 | 820 | 820 | 820 | 546 | 30,399 | 86 |
| | | | | Supplies | 72500 | 1,210 | 2,365 | 2,365 | 2,365 | 2,365 | 1,156 | 11,826 | 87 |
| | | | | Rental and Maintenance - Premises | 73100 | 4,696 | 4,696 | 4,696 | 4,696 | 4,696 | 4,696 | 28,176 | 88 |
| | | | | Audio Visual&Print Prod Costs | 74200 | 30,000 | 30,000 | 30,000 | 30,000 | 40,000 | 40,000 | 200,000 | 89 |
| | | | | Miscellaneous expenses | 74500 | 353 | 353 | 353 | 353 | 353 | 353 | 2,118 | 90 |
| | **GEF Subtotal Outcome 3.4** | | | | | **241,427** | **427,650** | **297,650** | **289,113** | **290,573** | **205,345** | **1,751,758** | |
| PM | UNDP | 62000 | GEF TF | Salary & Post Adj Cst-IP Staff". | 61300 | 0 | 2,902 | 2,903 | 1,935 | 968 | 0 | 8,708 | 91 |
| | | | | International Project Staff | 62300 | 0 | 967 | 968 | 645 | 323 | 0 | 2,903 | 92 |
| | | | | International Project Staff | 63300 | 0 | 967 | 968 | 645 | 323 | 0 | 2,903 | 93 |
| | | | | International Consultants | 71200 | - | - | 33,000 | - | - | 33,000 | 66,000 | 94 |
| | | | | Local Consultants | 71300 | - | - | 15,000 | - | - | 15,000 | 30,000 | 95 |
| | | | | Contractual Services - Individ | 71400 | 34,089 | 66,804 | 66,802 | 66,804 | 66,804 | 34,089 | 335,392 | 96 |
| | | | | Travel | 71600 | 3,650 | 3,300 | 8,900 | 3,300 | 3,300 | 7,250 | 29,700 | 97 |
| | | | | Contractual services - companies | 72100 | 28,000 | - | 10,000 | - | - | 10,000 | 48,000 | 98 |
| | | | | Equipment and Furniture | 72200 | 5,019 | 155 | 155 | 155 | 155 | 103 | 5,742 | 99 |
| | | | | Supplies | 72500 | 1,243 | 1,799 | 1,799 | 1,799 | 1,798 | 555 | 8,993 | 100 |
| | | | | Rental and Maintenance - Premises | 73100 | 887 | 887 | 887 | 887 | 887 | 887 | 5,322 | 101 |
| | | | | Professional services | 74100 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 30,000 | 102 |
| | | | | Direct Project Costs | 74596 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 300,000 | 103 |
| | **GEF subtotal project management** | | | | | **127,888** | **132,781** | **196,382** | **131,170** | **129,558** | **155,884** | **873,663** | |
| | **Total project management** | | | | | **127,888** | **132,781** | **196,382** | **131,170** | **129,558** | **155,884** | **873,663** | |
| **Grand Totals** | | | | | | **1,514,794** | **3,748,252** | **4,045,735** | **3,934,469** | **3,485,755** | **1,617,922** | **18,346,927** | |

**Breakdown by responsible party**

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Total |
|---|---|---|---|---|---|---|---|
| UNDP | 1,488,296 | 3,013,233 | 3,047,336 | 2,957,570 | 2,739,736 | 1,444,167 | 14,690,338 |
| MINAM | 16,999 | 440,519 | 614,399 | 608,899 | 484,519 | 164,259 | 2,329,594 |
| GoP | 9,499 | 294,500 | 384,000 | 368,000 | 261,500 | 9,496 | 1,326,995 |
| **Total** | **1,514,794** | **3,748,252** | **4,045,735** | **3,934,469** | **3,485,755** | **1,617,922** | **18,346,927** |

**Budget Notes**

**UNDP**

| Budget note # | Budget code and amount | Budget description and explanation (UNDP) |
|---|---|---|
| **Outcome 1.1** | | |
| | **61300** | **International Project Staff** |
| 1 | 61,480 | Salary and allowances for Chief Technical Advisor: *total annual salary and allowances for CTA (all outputs, all budget codes) = USD75,000* |
| | **62300** | **International Project Staff** |
| 2 | 20,491 | Salary and allowances for Chief Technical Advisor: *total annual salary and allowances for CTA (all outputs, all budget codes) = USD75,000* |
| | **63300** | **International Project Staff** |
| 3 | 20,493 | Salary and allowances for Chief Technical Advisor: *total annual salary and allowances for CTA (all outputs, all budget codes) = USD75,000* |
| | **71300-71800** | **Local Consultants** |
| 4 | 30,000 | Consultancies for drafting/editing sector development plans *(120 person days @ USD250 all inclusive)* |
| | 200,000 | Planning specialists to support development of regional and local development plans *(800 person days @ USD250 all inclusive)* |
| | 200,000 | Design and oversight of microzoning processes *(800 person days @ USD250 all inclusive)* |
| | **71400** | **Contractual Services – Individual** |
| 5 | 81,970 | Salary of Project Coordinator, based in Lima for 6 years *(total = USD60,000/year)* |
| | 171,000 | Salary of Environmental planning, management and governance specialist (Head Component 1), based in Lima for 6 years *(total = USD57,000/year)* |
| | 60,000 | Salary of Coordinator of platform work, based in Lima for 5 years *(total = USD60,000/year)* |
| | 120,000 | Salary of Coordinator of policy work, based in Lima for 5 years (*total = USD48,000/year)* |
| | 65,578 | Salary of cross-cutting Monitoring and evaluation specialist, based in Lima for 6 years (*total = USD48,000/year)* |
| | 30,330 | Salary of administration and logistics coordinator, based in Lima for 6 years (*total = USD42,000/year)* |
| | 19,412 | Salary of Finance assistant based in Lima for 66 months (*total = USD30,000/year*) |
| | 19,412 | Salary of Procurement assistant based in Lima for 66 months (*total = USD30,000/year*) |
| | 47,667 | Regional coordinator based in Pucallpa for 66 months (*total = USD42,000/year)* |
| | 52,599 | Salary of cross-cutting Social/gender/indigenous issues specialist based in Pucallpa for 66 months (*total = USD42,000/year)* |

| Budget note # | Budget code and amount | Budget description and explanation (UNDP) |
|---|---|---|
| | 55,634 | Salary of two administrative and logistical support personnel based in Pucallpa for 5 years (*total = USD30,000 and USD24,000)* |
| | **71600** | **Travel** |
| 6 | 18,033 | Travel by project staff between Lima and Pucallpa *(total = 345 flights @USD230/ticket)* |
| | 98,423 | DSA for project staff |
| | 40,000 | National travel for platform staff and participants *(total 400 person/trips @ USD500/trip including internal flights and DSA)* |
| | **72100** | **Contractual services - companies** |
| 7 | 83,332 | Costs of NGO specialized in biodiversity analyses and monitoring to provide technical advisory support to planning and zoning processes |
| | **72200** | **Equipment and furniture** |
| 8 | 18,216 | Two 4 x 4 vehicles required for mobility of project staff between Pucallpa regional offices and the 10 districts covered by the project (@USD40,000) |
| | 4,099 | 6 motorbikes required for field visits by project field technicians based in district offices throughout the target area (@USD3,000) |
| | 13,662 | Information management hardware and software used by project staff at central and regional levels |
| | 4,561 | Office equipment and furniture required for project operations in Lima and Pucallpa |
| | **72500** | **Supplies** |
| 9 | 15,028 | Fuel and lubricants required for vehicles used by project staff in support of operations |
| | 737 | Office supplies required for the work of project staff in Lima and Pucallpa |
| | **72600** | **Grants** |
| 10 | 150,000 | Microgrants to indigenous organisations for developing life plans. Grants budget will be managed following UNDP Micro-Capital Grants policy. |
| | **73100** | **Rental and Maintenance - Premises** |
| 11 | 37,572 | Rental of project offices in Lima and/or Pucallpa |
| | **74500** | **Miscellaneous** |
| 12 | 2,827 | Vehicle and staff insurance, office utility costs (pro rata). |
| **Outcome 1.2** | | |
| | **61300** | **International Project Staff** |
| 13 | 61,479 | Salary and allowances for Chief Technical Advisor: *total annual salary and allowances for CTA (all outputs, all budget codes) = USD75,000* |
| | **62300** | **International Project Staff** |
| 14 | 20,493 | Salary and allowances for Chief Technical Advisor: *total annual salary and allowances for CTA (all outputs, all budget codes) = USD75,000* |
| | **63300** | **International Project Staff** |
| 15 | 20,493 | Salary and allowances for Chief Technical Advisor: *total annual salary and allowances for CTA (all outputs, all budget codes) = USD75,000* |
| | **71200** | **International Consultants** |
| 16 | 360,000 | Support by Green Commodities Programme to the establishment and functioning of commodities platforms: GCP, through its global senior technical advisor and Platforms design and management specialist, will provide technical advice for the establishment of national commodity platforms in the cocoa and oil palm sectors, and the effective engagement of private and public stakeholders throughout the platform design and implement process. |

| Budget note # | Budget code and amount | Budget description and explanation (UNDP) |
|---|---|---|
| | | GCP will also provide technical advice on how to effectively intervene in different levels of the supply chain of agricultural commodities, and with particular support to engagement of global buyers. |
| | **71300-71800** | **Local Consultants** |
| 17 | 100,000 | Facilitation expert(s) for commodity platforms *(400 person days @ USD250 all inclusive)* |
| | 480,000 | Technical advisory support to the strengthening of governance and institutions in native communities *(1,920 person days @ USD250 all inclusive)* |
| | 500,000 | Technical advisory support to the development of technical and procedural instruments for national, regional and local governments *(2,000 person days @ USD250 all inclusive)* |
| | 576,000 | Technical advisory support to the Institutional strengthening of regional and local governments *(2,304 person days @ USD250 all inclusive)* |
| | **71400** | **Contractual Services – Individual** |
| 18 | 81,973 | Salary of Project Coordinator, based in Lima for 6 years *(total annual salary = USD60,000/year)* |
| | 171,000 | Salary of Environmental planning, management and governance specialist (Head Component 1), based in Lima for 6 years *(total = USD57,000/year)* |
| | 60,000 | Salary of Coordinator of platform work, based in Lima for 5 years *(total = USD60,000/year)* |
| | 120,000 | Salary of Coordinator of policy work, based in Lima for 5 years (*total = USD48,000/year)* |
| | 65,579 | Salary of cross-cutting Monitoring and evaluation specialist, based in Lima for 6 years (*total = USD48,000/year)* |
| | 30,330 | Salary of administration and logistics coordinator, based in Lima for 6 years (*total = USD42,000/year)* |
| | 120,000 | Salary of Logistics assistant for platforms, based in Lima for 4 years (*total = USD30,000/year)* |
| | 19,412 | Salary of Finance assistant based in Lima for 66 months (*total = USD30,000/year*) |
| | 19,412 | Salary of Procurement assistant based in Lima for 66 months (*total = USD30,000/year*) |
| | 47,667 | Regional coordinator based in Pucallpa for 66 months (*total = USD42,000/year)* |
| | 52,599 | Salary of cross-cutting Social/gender/indigenous issues specialist based in Pucallpa for 66 months (*total = USD42,000/year)* |
| | 55,634 | Salary of two administrative and logistical support personnel based in Pucallpa for 5 years (*total = USD30,000 and USD24,000)* |
| | **71600** | **Travel** |
| 19 | 18,034 | Travel by project staff between Lima and Pucallpa *(total = 345 flights @USD230/ticket)* |
| | 98,422 | DSA for project staff |
| | 40,000 | National travel for platform staff and participants *(total 400 person/trips @ USD500/trip including internal flights and DSA)* |
| | 240,000 | Travel for supporting indigenous communities |
| | **72200** | **Equipment and furniture** |
| 20 | 18,216 | Two 4 x 4 vehicles required for mobility of project staff between Pucallpa regional offices and the 10 districts covered by the project(@USD40,000) |
| | 4,099 | 6 motorbikes required for field visits by project field technicians based in district offices throughout the target area (@USD3,000) |
| | 13,662 | Information management hardware and software used by project staff at central and regional levels |
| | 50,000 | Office equipment and furniture for local and regional governments |
| | 4,555 | Office equipment and furniture required for project operations in Lima and Pucallpa |
| | **72500** | **Supplies** |

| Budget note # | Budget code and amount | Budget description and explanation (UNDP) |
|---|---|---|
| 21 | 15,028 | Fuel and lubricants required for vehicles used by project staff in support of operations |
| | 30,000 | Fuel and lubricants as provisional support to strengthening of the capacities of regional and local government for field operations |
| | 738 | Office supplies required for the work of project staff in Lima and Pucallpa |
| | **73100** | **Rental and Maintenance - Premises** |
| 22 | 37,572 | Rental of project offices in Lima and/or Pucallpa |
| | **74500** | **Miscellaneous** |
| 23 | 2,825 | Vehicle and staff insurance, office utility costs (pro rata). |
| | **75700** | **Training** |
| 24 | 300,000 | Training of local government teams to develop capacities for implementation of implement plans, including elaboration of public budgets |
| | 600,000 | Workshops for strengthening of commodity platforms |
| | 200,000 | Facilitation, orientation and capacity strengthening support to local environmental governance mechanisms |

**Government of Peru**

| Budget note # | Budget code and amount | Budget description and explanation (Government of Peru) |
|---|---|---|
| **Outcome 1.3** | | |
| | **71300** | **Local Consultants** |
| 25 | 40,000 | Consultancy to propose improvements to land use change approval mechanisms and guidelines (160 person days @ USD250 all inclusive) |
| | 10,000 | Consultancy to design dissemination strategy and materials on land use change mechanisms (40 person days @ USD250 all inclusive) |
| | 20,000 | Consultancy to design monitoring and information management system (80 person days @ USD250 all inclusive) |
| | 10,000 | Consultancies to carry out diagnostic studies of community-based monitoring systems and strengthening needs (40 person days @ USD250 all inclusive) |
| | **71600** | **Travel** |
| 26 | 50,000 | DSA for local government field inspections and enforcement |
| | **72500** | **Supplies** |
| 27 | 50,000 | Fuel and lubricants as provisional support to environmental authorities for field inspections and enforcement |
| | **72600** | **Grants** |
| 28 | 200,000 | Microgrants to support the operation of community-based monitoring systems in indigenous communities. Grants budget will be managed following UNDP Micro-Capital Grants policy. |
| | | **Information technology equipment** |
| 29 | 20,000 | Software for GIS database integration |
| | **74200** | **Audio Visual&Print Prod Costs** |
| 30 | 5,000 | Dissemination materials on land use change mechanisms |
| | **74500** | **Miscellaneous** |
| 31 | 7,998 | Vehicle and staff insurance, office utility costs (pro rata). |
| | **75700** | **Training** |
| 32 | 20,000 | Consultation and training on land use change approval mechanisms |
| | 20,000 | Training on management of real-time, transparent monitoring and analysis system to detect illegal deforestation and land-use change |
| | 10,000 | Training of members of community-based monitoring systems |
| | | |

**MINAM**

| Budget note # | Budget code and amount | Budget description and explanation (MINAM) |
|---|---|---|
| **Outcome 1.4** | | |
| | **71600** | **Travel** |
| 33 | 57,600 | Travel for exchanges by policy makers on financial support to sustainable production systems |
| | **71800** | **Local Consultants** |
| 34 | 20,000 | Consultancy for the development of proposals for public finance incentives *(80 days @ USD250 all inclusive)* |
| | 20,000 | Consultancy for the generation of recommendations of institutional mechanisms for applying Results-Based Payments *(80 person days @ USD250 all inclusive)* |
| | **72100** | **Contractual services - companies** |
| 35 | 60,000 | Contract with academic/research institution(s) to carry out Economic valuation and Cost-Benefit Analysis studies |
| | **74200** | **Audio Visual&Print Prod Costs** |
| 36 | 5,000 | Dissemination materials on economic valuations and cost-benefit analyses |
| | **74500** | **Miscellaneous** |
| 37 | 3,426 | Vehicle and staff insurance, office utility costs (pro rata). |
| | **75700** | **Training** |
| 38 | 5,000 | Workshops on results of economic valuations and CBA studies |

**UNDP**

| Budget note # | Budget code and amount | Budget description and explanation (UNDP) |
|---|---|---|
| **Outcome 2.1** | | |
| | **61300** | **International Project Staff** |
| 39 | 30,741 | Salary and allowances for Chief Technical Advisor: *total annual salary and allowances for CTA (all outputs, all budget codes) = USD75,000* |
| | **62300** | **International Project Staff** |
| 40 | 10,248 | Salary and allowances for Chief Technical Advisor: *total annual salary and allowances for CTA (all outputs, all budget codes) = USD75,000* |
| | **63300** | **International Project Staff** |
| 41 | 10,248 | Salary and allowances for Chief Technical Advisor: *total annual salary and allowances for CTA (all outputs, all budget codes) = USD75,000* |
| | **71300-71800** | **Local Consultants** |
| 42 | 60,000 | Technical advice for assessment, recommendations, strategies and plans for landscape certification schemes *(240 person days @ USD250 all inclusive)* |
| | 20,000 | Consultancy to support the design of public-private partnerships *(80 person days @ USD250 all inclusive)* |
| | **71400** | **Contractual Services – Individual** |
| 43 | 40,987 | Salary of Project Coordinator, based in Lima for 6 years *(total annual salary = USD60,000/year)* |

| Budget note # | Budget code and amount | Budget description and explanation (UNDP) |
|---|---|---|
| | 120,000 | Salary of Coordinator of platform work, based in Lima for 5 years *(total = USD60,000/year)* |
| | 171,000 | Finance and incentives specialist Head Component 2 (Lima) (*total = USD57,000/year)* |
| | 855,000 | 3 Value chain/industry specialists (Lima) *(total = USD47,500/year)* |
| | 32,788 | Salary of cross-cutting Monitoring and evaluation specialist, based in Lima for 6 years (*total = USD48,000/year)* |
| | 15,165 | Salary of administration and logistics coordinator, based in Lima for 6 years (*total = USD42,000/year)* |
| | 9,706 | Salary of Finance assistant based in Lima for 66 months (*total = USD30,000/year*) |
| | 9,706 | Salary of Procurement assistant based in Lima for 66 months (*total = USD30,000/year*) |
| | 31,778 | Regional coordinator based in Pucallpa for 66 months (*total = USD42,000/year)* |
| | 26,300 | Salary of cross-cutting Social/gender/indigenous issues specialist based in Pucallpa for 66 months (*total = USD42,000/year)* |
| | 37,088 | Salary of two administrative and logistical support personnel based in Pucallpa for 5 years (*total = USD30,000 and USD24,000)* |
| | **71600** | **Travel** |
| 44 | 9,019 | Travel by project staff between Lima and Pucallpa *(total = 345 flights @USD230/ticket)* |
| | 49,211 | DSA for project staff |
| | 80,000 | National travel for platform staff and participants *(total 400 person/trips @ USD500/trip including internal flights and DSA)* |
| | **72200** | **Equipment and furniture** |
| 45 | 9,108 | Two 4 x 4 vehicles required for mobility of project staff between Pucallpa regional offices and the 10 districts covered by the project(@USD40,000) |
| | 2,049 | 6 motorbikes required for field visits by project field technicians based in district offices throughout the target area (@USD3,000) |
| | 6,831 | Information management hardware and software used by project staff at central and regional levels |
| | 2,275 | Office equipment and furniture required for project operations in Lima and Pucallpa |
| | **72500** | **Supplies** |
| 46 | 7,514 | Fuel and lubricants required for vehicles used by project staff in support of operations |
| | 371 | Office supplies required for the work of project staff in Lima and Pucallpa |
| | **73100** | **Rental and Maintenance - Premises** |
| 47 | 18,786 | Rental of project offices in Lima and/or Pucallpa |
| | **74500** | **Miscellaneous** |
| 48 | 1,408 | Vehicle and staff insurance, office utility costs (pro rata). |
| **Outcome 2.2** | | |
| | **61300** | **International Project Staff** |
| 49 | 30,741 | Salary and allowances for Chief Technical Advisor: *total annual salary and allowances for CTA (all outputs, all budget codes) = USD75,000* |
| | **62300** | **International Project Staff** |
| 50 | 10,248 | Salary and allowances for Chief Technical Advisor: *total annual salary and allowances for CTA (all outputs, all budget codes) = USD75,000* |
| | **63300** | **International Project Staff** |
| 51 | 10,248 | Salary and allowances for Chief Technical Advisor: *total annual salary and allowances for CTA (all outputs, all budget codes) = USD75,000* |

| Budget note # | Budget code and amount | Budget description and explanation (UNDP) |
|---|---|---|
| | **71300-71800** | **Local Consultants** |
| 52 | 80,000 | Market analysis and support to market access for NTFPs *(320 person days @ USD250 all inclusive)* |
| | **71400** | **Contractual Services – Individual** |
| 53 | 40,987 | Salary of Project Coordinator, based in Lima for 6 years *(total annual salary = USD60,000/year)* |
| | 170,001 | Finance and incentives specialist Head Component 2 (Lima) (*total = USD57,000/year)* |
| | 32,789 | Salary of cross-cutting Monitoring and evaluation specialist, based in Lima for 6 years (*total = USD48,000/year)* |
| | 16,165 | Salary of administration and logistics coordinator, based in Lima for 6 years (*total = USD42,000/year)* |
| | 9,705 | Salary of Finance assistant based in Lima for 66 months (*total = USD30,000/year*) |
| | 9,705 | Salary of Procurement assistant based in Lima for 66 months (*total = USD30,000/year*) |
| | 31,778 | Regional coordinator based in Pucallpa for 66 months (*total = USD42,000/year)* |
| | 26,300 | Salary of cross-cutting Social/gender/indigenous issues specialist based in Pucallpa for 66 months (*total = USD42,000/year)* |
| | 37,088 | Salary of two administrative and logistical support personnel based in Pucallpa for 5 years (*total = USD30,000 and USD24,000)* |
| | **71600** | **Travel** |
| 54 | 9,019 | Travel by project staff between Lima and Pucallpa *(total = 345 flights @USD230/ticket)* |
| | 49,211 | DSA for project staff |
| | **72200** | **Equipment and furniture** |
| 55 | 9,108 | Two 4 x 4 vehicles required for mobility of project staff between Pucallpa regional offices and the 10 districts covered by the project(@USD40,000) |
| | 2,049 | 6 motorbikes required for field visits by project field technicians based in district offices throughout the target area (@USD3,000) |
| | 6,831 | Information management hardware and software used by project staff at central and regional levels |
| | 2,275 | Office equipment and furniture required for project operations in Lima and Pucallpa |
| | **72500** | **Supplies** |
| 56 | 7,516 | Fuel and lubricants required for vehicles used by project staff in support of operations |
| | 369 | Office supplies required for the work of project staff in Lima and Pucallpa |
| | **73100** | **Rental and Maintenance - Premises** |
| 57 | 18,786 | Rental of project offices in Lima and/or Pucallpa |
| | **74500** | **Miscellaneous** |
| 58 | 1,408 | Vehicle and staff insurance, office utility costs (pro rata). |

**MINAM**

| Budget note # | Budget code and amount | Budget description and explanation (MINAM) |
|---|---|---|
| **Outcome 2.3** | | |
| | **72100** | **Contractual services - companies** |

| Budget note # | Budget code and amount | Budget description and explanation (MINAM) |
|---|---|---|
| 59 | 100,000 | Consultancy to analyse credit needs and financial viability and develop proposals for credit mechanisms |
| | 50,000 | Consultancy to develop recommendation of PES options |
| | **74500** | **Miscellaneous** |
| 60 | 5,142 | Vehicle and staff insurance, office utility costs (pro rata). |
| **Outcome 3.1** | | |
| | **72100** | **Contractual services - companies** |
| 61 | 1,000,000 | Provision of technical assistance to the establishment and management of pilots |
| | **72600** | **Grants** |
| 62 | 1,000,000 | Microgrants to support establishment and management of pilots, including pilots specifically targeted at women and indigenous people. Grants budget will be managed following UNDP Micro-Capital Grants policy. |
| | **74500** | **Miscellaneous** |
| 63 | 3,426 | Vehicle and staff insurance, office utility costs (pro rata). |

**UNDP**

| Budget note # | Budget code and amount | Budget description and explanation (UNDP) |
|---|---|---|
| **Outcome 3.2** | | |
| | **61300** | **International Project Staff** |
| 64 | 30,741 | Salary and allowances for Chief Technical Advisor: *total annual salary and allowances for CTA (all outputs, all budget codes) = USD75,000* |
| | **62300** | **International Project Staff** |
| 65 | 10,247 | Salary and allowances for Chief Technical Advisor: *total annual salary and allowances for CTA (all outputs, all budget codes) = USD75,000* |
| | **63300** | **International Project Staff** |
| 66 | 10,245 | Salary and allowances for Chief Technical Advisor: *total annual salary and allowances for CTA (all outputs, all budget codes) = USD75,000* |
| | **71400** | **Contractual Services – Individual** |
| 67 | 40,987 | Salary of Project Coordinator, based in Lima for 6 years *(total = USD60,000/year)* |
| | 136,800 | Coordinator Component 3 (Lima) *(total = USD57,000/year)* |
| | 32,782 | Salary of cross-cutting Monitoring and evaluation specialist, based in Lima for 6 years (*total = USD48,000/year)* |
| | 15,165 | Salary of administration and logistics coordinator, based in Lima for 6 years (*total = USD42,000/year)* |
| | 9,709 | Salary of Finance assistant based in Lima for 66 months (*total = USD30,000/year*) |
| | 9,709 | Salary of Procurement assistant based in Lima for 66 months (*total = USD30,000/year*) |
| | 31,778 | Regional coordinator based in Pucallpa for 66 months (*total = USD42,000/year)* |
| | 231,000 | Natural resource/production system management and extension specialist (Pucallpa) (*total = USD42,000/year)* |
| | 26,300 | Salary of cross-cutting Social/gender/indigenous issues specialist based in Pucallpa for 66 months (*total = USD42,000/year)* |

| Budget note # | Budget code and amount | Budget description and explanation (UNDP) |
|---|---|---|
| | 37,088 | Salary of two administrative and logistical support personnel based in Pucallpa for 5 years (*total = USD30,000 and USD24,000)* |
| | 360,000 | 4 Field technicians (Puerto Inca, Aguaytía, Pucallpa) (USD15,000/year each) |
| | **71600** | **Travel** |
| 68 | 9,017 | Travel by project staff between Lima and Pucallpa *(total = 345 flights @USD230/ticket)* |
| | 49,208 | DSA for project staff |
| | **72100** | **Contractual services - companies** |
| 69 | 41,668 | Costs of NGO specialized in biodiversity analyses and monitoring to provide technical advisory support to planning and zoning processes |
| | **72200** | **Equipment and furniture** |
| 70 | 9,108 | Two 4 x 4 vehicles required for mobility of project staff between Pucallpa regional offices and the 10 districts covered by the project(@USD40,000) |
| | 2,049 | 6 motorbikes required for field visits by project field technicians based in district offices throughout the target area (@USD3,000) |
| | 6,831 | Information management hardware and software used by project staff at central and regional levels |
| | 2,275 | Office equipment and furniture required for project operations in Lima and Pucallpa |
| | **72500** | **Supplies** |
| 71 | 7,514 | Fuel and lubricants required for vehicles used by project staff in support of operations |
| | 366 | Office supplies required for the work of project staff in Lima and Pucallpa |
| | **73100** | **Rental and Maintenance - Premises** |
| 72 | 18,786 | Rental of project offices in Lima and/or Pucallpa |
| | **74500** | **Miscellaneous** |
| 73 | 1,425 | Vehicle and staff insurance, office utility costs (pro rata). |
| | **75700** | **Training** |
| 74 | 100,000 | Sub-contracts to design TA architecture and content |
| | 500,000 | Contract to train extension agencies and their agents |
| | 1,676,687 | Contracts to deliver training |

**Government of Peru**

| Budget note # | Budget code and amount | Budget description and explanation (Government of Peru) |
|---|---|---|
| **Outcome 3.3** | | |
| | **72100** | **Contractual services - companies** |
| 75 | 50,000 | Institutional contracts or feasibility studies, design and management support to restoration activities |
| | **72600** | **Grants** |
| 76 | 405,000 | Microgrants to support locally-managed restoration programmes. Grants budget will be managed following UNDP Micro-Capital Grants policy. |
| | 405,000 | Microgrants to support locally-managed conservation programmes. Grants budget will be managed following UNDP Micro-Capital Grants policy. |

| | | |
|---|---|---|
| | **74500** | **Miscellaneous** |
| 77 | 3,997 | Vehicle and staff insurance, office utility costs (pro rata). |

**UNDP**

| Budget note # | Budget code and amount | Budget description and explanation (UNDP) |
|---|---|---|
| **Outcome 3.4** | | |
| | **61300** | **International Project Staff** |
| 78 | 46,110 | Salary and allowances for Chief Technical Advisor: *total annual salary and allowances for CTA (all outputs, all budget codes) = USD75,000* |
| | **62300** | **International Project Staff** |
| 79 | 15,370 | Salary and allowances for Chief Technical Advisor: *total annual salary and allowances for CTA (all outputs, all budget codes) = USD75,000* |
| | **63300** | **International Project Staff** |
| 80 | 15,370 | Salary and allowances for Chief Technical Advisor: *total annual salary and allowances for CTA (all outputs, all budget codes) = USD75,000* |
| | **71200** | **International Consultants** |
| 81 | 60,000 | International consultant to advise on the development and implementation of effective communication strategy (100 person days @USD600) |
| | **71300-71800** | **Local Consultants** |
| 82 | 20,000 | National consultant to develop recommendations on how to improve access to information by decision makers |
| | **71400** | **Contractual Services – Individual** |
| 83 | 61,481 | Salary of Project Coordinator, based in Lima for 6 years *(total = USD60,000/year)* |
| | 60,000 | Salary of Coordinator of platform work, based in Lima for 5 years *(total = USD60,000/year)* |
| | 264,000 | Communication specialist Component 1 (Lima) (*total = USD44,000/year)* |
| | 205,200 | Coordinator Component 3 (Lima) *(total = USD57,000/year)* |
| | 49,184 | Salary of cross-cutting Monitoring and evaluation specialist, based in Lima for 6 years (*total = USD48,000/year)* |
| | 22,748 | Salary of administration and logistics coordinator, based in Lima for 6 years (*total = USD42,000/year)* |
| | 14,559 | Salary of Finance assistant based in Lima for 66 months (*total = USD30,000/year*) |
| | 14,559 | Salary of Procurement assistant based in Lima for 66 months (*total = USD30,000/year*) |
| | 31,778 | Regional coordinator based in Pucallpa for 66 months (*total = USD42,000/year)* |
| | 39,449 | Salary of cross-cutting Social/gender/indigenous issues specialist based in Pucallpa for 66 months (*total = USD42,000/year)* |
| | 37,088 | Salary of two administrative and logistical support personnel based in Pucallpa for 5 years (*total = USD30,000 and USD24,000)* |
| | **71600** | **Travel** |
| 84 | 13,526 | Travel by project staff between Lima and Pucallpa *(total = 345 flights @USD230/ticket)* |
| | 73,817 | DSA for project staff |
| | 40,000 | National travel for platform staff and participants *(total 400 person/trips @ USD500/trip including internal flights and DSA)* |
| | 100,000 | Travel costs for project staff to international learning workshops |
| | 100,000 | Travel costs for south-south interchanges |

| Budget note # | Budget code and amount | Budget description and explanation (UNDP) |
|---|---|---|
| | 25,000 | international travel for international comms support |
| | **72100** | **Contractual services - companies** |
| 85 | 120,000 | Systematization and documentation of best practices |
| | 50,000 | Institutional contracts to advise on addressing leakage effects **(Output 3.4.2)** |
| | **72200** | **Equipment and furniture** |
| 86 | 13,662 | Two 4 x 4 vehicles required for mobility of project staff between Pucallpa regional offices and the 10 districts covered by the project(@USD40,000) |
| | 3,074 | 6 motorbikes required for field visits by project field technicians based in district offices throughout the target area (@USD3,000) |
| | 10,247 | Information management hardware and software used by project staff at central and regional levels |
| | 3,416 | Office equipment and furniture required for project operations in Lima and Pucallpa |
| | **72500** | **Supplies** |
| 87 | 11,272 | Fuel and lubricants required for vehicles used by project staff in support of operations |
| | 554 | Office supplies required for the work of project staff in Lima and Pucallpa |
| | **73100** | **Rental and Maintenance - Premises** |
| 88 | 28,176 | Rental of project offices in Lima and/or Pucallpa |
| | **74200** | **Audio Visual&Print Prod Costs** |
| 89 | 200,000 | Communication and printing of dissemination materials |
| | **74500** | **Miscellaneous** |
| 90 | 2,118 | Vehicle and staff insurance, office utility costs (pro rata). |
| **PM** | | |
| | **61300** | **International Project Staff** |
| 91 | 8,708 | Salary and allowances for Chief Technical Advisor: *total annual salary and allowances for CTA (all outputs, all budget codes) = USD75,000* |
| | **62300** | **International Project Staff** |
| 92 | 2,903 | Salary and allowances for Chief Technical Advisor: *total annual salary and allowances for CTA (all outputs, all budget codes) = USD75,000* |
| | **63300** | **International Project Staff** |
| 93 | 2,903 | Salary and allowances for Chief Technical Advisor: *total annual salary and allowances for CTA (all outputs, all budget codes) = USD75,000* |
| | **71200** | **International Consultants** |
| 94 | 66,000 | External project evaluation (mid term and final) *(100 person days @ USD660/day)* |
| | **71300-71800** | **Local Consultants** |
| 95 | 30,000 | National consultants for mid-term and final evaluations, including translation |
| | **71400** | **Contractual Services – Individual** |
| 96 | 11,613 | Salary of Project Coordinator, based in Lima for 6 years *(total annual salary = USD60,000/year)* |
| | 9,290 | Salary of cross-cutting Monitoring and evaluation specialist, based in Lima for 6 years (*total = USD48,000/year)* |
| | 123,097 | Salary of administration and logistics coordinator, based in Lima for 6 years (*total = USD42,000/year)* |

| Budget note # | Budget code and amount | Budget description and explanation (UNDP) |
|---|---|---|
| | 82,500 | Salary of Finance assistant based in Lima for 66 months (*total = USD30,000/year*) |
| | 82,500 | Salary of Procurement assistant based in Lima for 66 months (*total = USD30,000/year*) |
| | 8,556 | Regional coordinator based in Pucallpa for 66 months (*total = USD42,000/year)* |
| | 7,452 | Salary of cross-cutting Social/gender/indigenous issues specialist based in Pucallpa for 66 months (*total = USD42,000/year)* |
| | 10,384 | Salary of two administrative and logistical support personnel based in Pucallpa for 5 years (*total = USD30,000 and USD24,000)* |
| | **71600** | **Travel** |
| 97 | 2,557 | Travel by project staff between Lima and Pucallpa *(total = 345 flights @USD230/ticket)* |
| | 13,943 | DSA for project staff |
| | 2,000 | Travel for participants in inception workshop |
| | 6,000 | Travel for project board meetings |
| | 4,000 | International flights for external evaluators (mid-term and final) *(2 flights @ USD2,000/ticket)* |
| | 1,200 | Domestic flights for external evaluators (mid-term and final) *(5 flights @ USD240/ticket)* |
| | **72100** | **Contractual services - companies** |
| 98 | 40,000 | Institutional contracts for measurement of pending baseline values and periodic re-measurement of indicators (including updating of tracking tools) |
| | 8,000 | Venue, catering and facilitation services for inception workshop |
| | **72200** | **Equipment and furniture** |
| 99 | 2,581 | Two 4 x 4 vehicles required for mobility of project staff between Pucallpa regional offices and the 10 districts covered by the project(@USD40,000) |
| | 581 | 6 motorbikes required for field visits by project field technicians based in district offices throughout the target area (@USD3,000) |
| | 1,935 | Information management hardware and software used by project staff at central and regional levels |
| | 645 | Office equipment and furniture required for project operations in Lima and Pucallpa |
| | **72500** | **Supplies** |
| 100 | 2,129 | Fuel and lubricants required for vehicles used by project staff in support of operations |
| | 6,864 | Office supplies required for the work of project staff in Lima and Pucallpa |
| | **73100** | **Rental and Maintenance - Premises** |
| 101 | 5,322 | Rental of project offices in Lima and/or Pucallpa |
| | **74100** | **Professional services** |
| 102 | 30,000 | External audit |
| | **74596** | **Direct Project Costs** |
| 103 | 300,000 | Budget for Direct Project Costs are estimated for direct project services planned to be carried out by UNDP, such as: recruitment of project personnel, procurement of goods and services, processing travel, payments, logistic support to workshops. |

## XI. LEGAL CONTEXT

326. This document together with the Country Programme Document 2017-2021 signed by the Government and UNDP which is incorporated by reference, constitute together the instrument envisaged and defined in the Supplemental Provisions to the Project attached as Annex J of the Project Document.

327. Consistent with the above Supplemental Provisions, the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP's property in the Implementing Partner's custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:

a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;

b) assume all risks and liabilities related to the Implementing Partner's security, and the full implementation of the security plan.

328. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner's obligations under this Project.Document.

329. The Implementing Partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml. This provision must be included in all sub-contracts or sub-agreements entered into under/further to this Project Document.

330. The UNDP Resident Representative is authorized to effect in writing the following types of revision to this Project Document, provided that he/she has verified the agreement thereto by the UNDP-GEF Unit and is assured that the other signatories to the Project Document have no objection to the proposed changes: (i) revision of, or addition to, any of the annexes to the Project Document; (ii) revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation; (iii) mandatory annual revisions which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility; and (iv) inclusion of additional annexes and attachments only as set out here in this Project Document.

331. Any designations on maps or other references employed in this project document do not imply the expression of any opinion whatsoever on the part of UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries

## XII. MANDATORY ANNEXES

### A. Multi year Workplan

| Outputs | Activities | Y1 | | | | Y2 | | | | Y3 | | | | Y4 | | | | Y5 | | | | Y6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Project inception workshop | | | X | | | | | | | | | | | | | | | | | | | | | | |
| Formulation of monitoring plan | | X | X | | | | | | | | | | | | | | | | | | | | | | |
| Measurement of outstanding baseline values | | | X | X | X | | | | | | | | | | | | | | | | | | | | |

| Outputs | Activities | Y1 | | | | Y2 | | | | Y3 | | | | Y4 | | | | Y5 | | | | Y6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Updating and organization of indicator values in preparation for external review | | | | | | | | | | | | X | | | | | | | | | | | | | |
| Mid Term Evaluation | | | | | | | | | | | | | X | | | | | | | | | | | | |
| Updating and organization of indicator values in preparation for external review | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Final evaluation | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Financial audits | | | | | X | | | | X | | | | X | | | | X | | | | X | | | | X |
| 1.1.1 National Sector development policies and plans defined in accordance with land-use policy and plans, including concept of landscape sustainability, and based on root cause analyses | Studies and workshops to review policies and plans | | | X | X | X | X | X | X | | | | | | | | | | | | | | | | |
| | Support to drafting of plans | | | | | | | | | X | X | X | X | X | X | X | X | | | | | | | | |
| 1.1.2 Regional and local development plans aligned with NAMAs, Forest and Climate Change Strategy, and land use plans | Studies and workshops to review policies and plans | | | X | X | X | X | X | X | | | | | | | | | | | | | | | | |
| | Support to drafting of plans | | | | | | | | | X | X | X | X | X | X | X | X | | | | | | | | |
| 1.1.3 Microzoning that clearly defines areas for forest conservation, restoration and sustainable use plans) | Prioritisation of areas for microzoning | | | X | X | X | X | | | | | | | | | | | | | | | | | | |
| | Planning of microzoning | | | | | | X | X | X | | | | | | | | | | | | | | | | |
| | Microzoning studies | | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | | | | |
| | Analysis and publication of results | | | | | | | | | | | | | | | | | | | | | X | X | X | |
| 1.1.4 Community life plans elaborated, sensitive to gender and including approach of landscape sustainability | Participatory prioritization and planning of process | | | X | X | X | X | | | | | | | | | | | | | | | | | | |
| | Community-based studies and workshops to develop plans | | | | | X | X | X | X | X | X | X | X | | | | | | | | | | | | |
| | Support to drafting and publication of plans | | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | | | | |
| 1.2.1 National commodity platforms established | Socialization and planning of process | | | X | X | X | X | X | X | | | | | | | | | | | | | | | | |
| | Facilitation of meetings of platforms | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| 1.2.2 Territorial governance platforms strengthened | Participatory analyses of existing governance structures | | | X | X | X | X | | | | | | | | | | | | | | | | | | |
| | Participatory planning of strengthening processes | | | | | X | X | X | X | | | | | | | | | | | | | | | | |

| Outputs | Activities | Y1 | | | | Y2 | | | | Y3 | | | | Y4 | | | | Y5 | | | | Y6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| | Strengthening and facilitation of governance structures | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | |
| 1.2.3 Strengthened, gender sensitive community level governance | Participatory analyses of existing governance structures | | | X | X | X | X | | | | | | | | | | | | | | | | | | |
| | Participatory planning of strengthening processes | | | | | X | X | X | X | | | | | | | | | | | | | | | | |
| | Strengthening and facilitation of governance structures | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | |
| 1.2.4 Technical and institutional capacities developed in national, regional and local governments for the implementation of plans, including the elaboration of public budgets | Participatory planning of capacity development processes | | | X | X | | | | | | | | | | | | | | | | | | | | |
| | Capacity development needs analyses | | | | | X | X | X | X | | | | | | | | | | | | | | | | |
| | Capacity development (training, development and strengthening of systems, etc.) | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| 1.3.1 Effective and transparent land-use change approval mechanism | Participatory analyses of existing mechanisms and definition of needs for improvement | | | | | X | X | | | | | | | | | | | | | | | | | | |
| | Negotiated implementation of improvements to mechanisms | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | |
| 1.3.2 Real-time, transparent monitoring and analysis system to detect illegal deforestation and land-use change, integrated with control mechanisms | Review of existing systems, identification of needs and planning of process | | | X | X | X | X | | | | | | | | | | | | | | | | | | |
| | Design of system | | | | | X | X | X | X | | | | | | | | | | | | | | | | |
| | Procurement, and establishment/ strengthening of system | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | |
| 1.3.3 Inspection and enforcement capacities to address violations in land-use regulation | Participatory planning of processes of capacity strengthening | | | X | X | X | X | | | | | | | | | | | | | | | | | | |
| | Capacity development needs analyses | | | | | X | X | X | X | | | | | | | | | | | | | | | | |
| | Procurement of equipment for capacity strengthening | | | | | | | X | X | X | X | | | | | | | | | | | | | | |
| | Capacity development (training, development and strengthening of systems, etc.) | | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |

| Outputs | Activities | Y1 | | | | Y2 | | | | Y3 | | | | Y4 | | | | Y5 | | | | Y6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 1.3.4 Community-based monitoring | Participatory reviews of existing mechanisms, identification of needs for strengthening, planning | | | | | X | X | X | X | | | | | | | | | | | | | | | | |
| | Facilitation of strengthening of mechanisms | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| | Follow-up monitoring and ongoing support | | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| 1.4.1 Financing gaps identified for the implementation of policies | Multi-stakeholder discussion of policy options to be analysed | | | | | X | X | X | X | | | | | | | | | | | | | | | | |
| | Economic studies (Cost Benefit Analyses, Targeted Scenario Analyses) | | | | | | | X | X | X | X | X | X | X | X | | | | | | | | | | |
| | Publication and socialization of results | | | | | | | | | | | | | X | X | X | X | X | X | X | X | X | X | | |
| 1.4.2 Public finance incentives for regional and local governments in support of sustainable landscape management | Analysis of financing needs | | | | | X | X | X | X | | | | | | | | | | | | | | | | |
| | Definition of options of incentives | | | | | | | X | X | X | X | | | | | | | | | | | | | | |
| | Advisory support to design and application of incentives | | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| 2.1.1 Strategies for promoting market certifications, jurisdictional certification, companies' sustainable procurement policies | Studies to analyse options of market-based strategies, including discussions with industry | | | X | X | X | X | | | | | | | | | | | | | | | | | | |
| | Formulation and socialization of strategies | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | | | |
| 2.1.2 Alliances with private sector and supply-chain actors to support adoption of sustainable practices in landscapes | Participatory analyses of supply-chains and of potential benefits of private sector support to sustainable practices | | | X | X | X | X | | | | | | | | | | | | | | | | | | |
| | Advisory and facilitation support to private sector | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| 2.2.1 Strategies to promote the development of sustainable deforestation-free economic activities, linked to markets | Studies and participatory analyses to identify candidate economic activities and market options | | | X | X | X | X | X | X | | | | | | | | | | | | | | | | |
| | Formulation and application of development strategies | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | |
| 2.2.2 Linkages of activities with market, financial and public incentives | Definition of needs and options for market, financial and public incentives | | | X | X | X | X | | | | | | | | | | | | | | | | | | |
| | Facilitation and advisory support | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| 2.3.1 Credit and insurance schemes promoted to benefit | Studies to identify needs for credit and insurance for sustainable management practices | | | X | X | X | X | | | | | | | | | | | | | | | | | | |

| Outputs | Activities | Y1 | | | | Y2 | | | | Y3 | | | | Y4 | | | | Y5 | | | | Y6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| sustainable land management practices aligned with ENBCC | Negotiated development of proposals for credit and insurance schemes | | | | | X | X | X | X | X | X | | | | | | | | | | | | | | |
| | Advisory support to roll-out | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | | | | | | |
| | Ongoing monitoring, advisory and systematization support | | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| 2.3.2 Cost-Benefit Analyses of sustainable practices developed | Participatory identification of practices to be analysed | | | X | X | X | X | | | | | | | | | | | | | | | | | | |
| | Participatory realization of studies, including systematization of previous studies | | | | | X | X | X | X | X | X | X | X | | | | | | | | | | | | |
| | Analysis, systematization and dissemination | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | | | | | | |
| 2.3.3 PES and incentive systems promoted to compensate land users for the implementation of sustainable economic practices and sustainable ecosystem management | Review of existing experiences and studies on PES and incentive systems, and legal framework | | | X | X | X | X | | | | | | | | | | | | | | | | | | |
| | Participatory identification of needs and opportunities for PES and incentive systems | | | | | X | X | X | X | | | | | | | | | | | | | | | | |
| | Negotiated development of proposals for PES and incentive schemes | | | | | | | X | X | X | X | | | | | | | | | | | | | | |
| | Participatory design and implementation of pilots | | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | | | | |
| | Ongoing advisory support | | | | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | | |
| | Monitoring, systematization and dissemination | | | | | | | | | | | | | X | X | X | X | X | X | X | X | X | X | | |
| 3.1.1 Pilot experiences of sustainable agriculture promoted to facilitate scaling-up (including market access) | Participatory identification and prioritization of practices to be included in pilots | | | X | X | | | | | | | | | | | | | | | | | | | | |
| | Participatory selection of locations for pilots | | | X | X | X | X | | | | | | | | | | | | | | | | | | |
| | Selection and induction of partner institutions responsible for management of pilots | | | | | X | X | | | | | | | | | | | | | | | | | | |
| | Training and induction of farmers managing pilot farms, and development of management plans for pilots including identification of target audiences and outreach strategies | | | | | X | X | X | X | | | | | | | | | | | | | | | | |

| Outputs | Activities | Y1 | | | | Y2 | | | | Y3 | | | | Y4 | | | | Y5 | | | | Y6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| | Procurement and investment in facilities in pilots | | | | | X | X | X | X | | | | | | | | | | | | | | | | |
| | Advisory support to management of pilots and realization of demonstration activities | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| | Monitoring, systematization and dissemination | | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| 3.1.2 Pilots of community-based sustainable livelihood support options in indigenous areas | Participatory identification and prioritization of practices to be included in pilots | | | X | X | | | | | | | | | | | | | | | | | | | | |
| | Participatory selection of locations for pilots | | | X | X | X | X | | | | | | | | | | | | | | | | | | |
| | Selection and induction of partner institutions responsible for management of pilots | | | | | X | X | | | | | | | | | | | | | | | | | | |
| | Training and induction of community members managing pilots, and development of management plans for pilots including definition of community-based governance arrangements, and identification of target audiences and outreach strategies | | | | | X | X | X | X | | | | | | | | | | | | | | | | |
| | Procurement and investment in facilities in pilots | | | | | X | X | X | X | | | | | | | | | | | | | | | | |
| | Advisory support to management of pilots and realization of demonstration activities | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| | Monitoring, systematization and dissemination | | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| 3.2.1TA systems, tools, methodologies and capacities for delivery of technical support integrating principles of gender equity | Review of existing TA systems and capacities | | | X | X | X | X | | | | | | | | | | | | | | | | | | |
| | Development of methodologies and plans for capacity development | | | | | X | X | X | X | | | | | | | | | | | | | | | | |
| | Delivery of capacity development and support to the implementation of tools and systems | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| | Monitoring and follow-up support, systematization and dissemination | | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |

| Outputs | Activities | Y1 | | | | Y2 | | | | Y3 | | | | Y4 | | | | Y5 | | | | Y6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 3.2.2 TA assistance programs rolled out in alliance with supply-chain actors and local/regional governments, to deliver support to green commodity producers, integrating principles of gender equity | Negotiation of agreements with TA service providers | | | X | X | X | X | | | | | | | | | | | | | | | | | | |
| | Induction of TA service providers | | | | | X | X | X | X | | | | | | | | | | | | | | | | |
| | Delivery of TA by service providers | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| | Monitoring and quality assurance | | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| | Dissemination of lessons learnt | | | | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | | |
| 3.3.1 Local restoration initiatives in priority localities | Technical studies to prioritise and define restoration initiatives | | | X | X | X | X | | | | | | | | | | | | | | | | | | |
| | Participatory negotiation and planning of restoration initiatives | | | | | X | X | X | X | | | | | | | | | | | | | | | | |
| | Implementation of restoration initiatives | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| | Dissemination of lessons learnt | | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| 3.3.2 Local conservation initiatives in priority localities | Technical studies to prioritise and define conservation initiatives | | | X | X | X | X | | | | | | | | | | | | | | | | | | |
| | Participatory negotiation and planning of conservation initiatives | | | | | X | X | X | X | | | | | | | | | | | | | | | | |
| | Implementation of conservation initiatives | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| | Dissemination of lessons learnt | | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| 3.4.1 Systematization of best practices, lessons learned and case studies, including evidence of the special contribution of women and indigenous peoples to the sustainability of Amazonian landscapes | Definition of systematization protocols and training of staff members | | X | X | X | X | X | | | | | | | | | | | | | | | | | | |
| | Systematization and dissemination | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| | Generation of systematization compendia for project reviews | | | | | | | | | | X | X | | | | | | | | | | X | X | | |
| 3.4.2 Communications products developed and disseminated | Development of communication strategy and plan | | X | X | X | | | | | | | | | | | | | | | | | | | | |
| | Development and dissemination of communication products | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |
| 3.4.3 System for adaptive management and learning to inform landscape management | Development of adaptive management and learning system | | | X | X | X | X | | | | | | | | | | | | | | | | | | |
| | Training/induction of decision makers | | | | | X | X | X | X | | | | | | | | | | | | | | | | |

| Outputs | Activities | Y1 | | | | Y2 | | | | Y3 | | | | Y4 | | | | Y5 | | | | Y6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| approaches by decision makers | Implementation of adaptive management and learning system | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |

**B. Monitoring Plan**

| Monitoring | Indicator Description | Data source/Collection Methods | Frequency | Responsible for data collection | Means of verification | Assumptions and Risks |
|---|---|---|---|---|---|---|
| **Project objective:** To generate multiple global environmental benefits through the application of an integrated approach to the management of Amazonian landscape | 1. Total area of landscapes covered by improved planning and governance frameworks | *GOREs (PDRC, PEI)*<br>*c) PDLC*<br>*d) Micro ZEE*<br><br>*Planning process is articulated with support of the project*<br><br>*Documents retrieved* | a, b and c: Updates with new administrations: *2019 and 2023*<br>*d) Annually* | *Project monitoring specialist* | *Published document of each district and regional government*<br>*Websites of GOREU and GOREHCO.*<br><br>*Municipalities* | *Documents are completed timely by subnational governments*<br><br>*Micro ZEE is developed through 2018-2019s* |
| | 2. Area of farming systems in the target landscapes managed to favour biodiversity, sustainable land management and ecosystem services (including reductions in carbon emissions) | *a) area from the pilots developed by the project (georeferenced)*<br>*plus b) area that replicates improved practices in the target landscapes (surveys of producers and reports)* | *Annually* | *Project regional coordinator and monitoring specialist* | *-Field reports*<br>*- Maps*<br>*- Surveys*<br>*-Annual reports*<br>*- Project's monitoring system* | *Enabling conditions support replication and scaling-up* |
| | **3.** Reduction in rates of loss of forest cover, by forest type in the target area | *MINAM's GEOBOSQUES platform*<br>*Methodology of University of Maryland* | *Annually* | *MINAM* | *GEOBOSQUES reports at district level*<br>*http://geobosques.minam.gob.pe:81/geobosque/view/* | *Current monitoring methodology uses Landsat images, with certain limitations. It is expected that images with much higher resolution will be available for monitoring by 2018.* |
| | 4. Net avoided emissions in the target area, resulting from avoided deforestation and degradation, and the improved management of production systems | *EXACT TOOL* | at start, midterm and final year | *MINAM MRV*<br><br>*Forest carbon specialist* | *EXACT TOOL*<br>*MINAM MRV*<br>*- Project's monitoring system* | *Droughts and forest fires can exacerbate deforestation* |

| Monitoring | Indicator Description | Data source/Collection Methods | Frequency | Responsible for data collection | Means of verification | Assumptions and Risks |
|---|---|---|---|---|---|---|
| | 5. Number of people (by gender and ethnicity) obtaining net livelihood benefits as a result of the application of sustainable forms of production and resource management | *Field reports based on household surveys and focus groups, disaggregated by gender and ethnicity [obtain direct or indirect benefit (i.e. in terms of food security; income; diversification; productivity; clean environment; access to technical assistance, to finance, to market)]* | *at midterm and final year* | - *Social/gender specialist*<br>- Project *monitoring specialist* | - *Field reports*<br>- *project's monitoring system* | Producers are willing to collaborate and share detailed information |
| **Project Outcome 1:** Improved policy planning and governance to reduce deforestation and enhance sustainable production | 6. *Number of land-use policy and planning instruments developed and aligned, including the approach of landscape sustainability, resilience and inclusiveness* | *a) Regional Development Plans*<br>*b) Local Development Plans*<br>*c) Commodities sectorial plans*<br>*d) area covered by microzoning*<br>*e) native communities life plans*<br>*f) public investment projects* | *a, b) 2019 and 2023*<br>*c) 2019*<br>*d,e) annually*<br>*f) at midterm and final year* | *Coordinator of Component 1, Project monitoring specialist* | *Published document of each district and regional government*<br>*Websites of GOREU and GOREHCO.*<br>*Microzoning maps and documentation*<br>*Landscape monitoring system*<br>*Municipalities* | *Planning process is articulated with project support* |
| | 7. Degree of implementation of sector action plans developed by public and private sector multi-stakeholder platforms | *sector action plans of agricultural commodities platforms (activities implemented)* | *at midterm and final year* | *Coordinator of Component 1* | *sector action plans*<br>*Platforms reports* | *stakeholders commit to implementation of sector action plans* |
| | 8. Levels of direct participation of different stakeholder groups (including women and indigenous people) in participation structures at regional and local levels taking | *Participation analysis of diverse groups, including women and indigenous groups* | *Annually* | *Regional coordinator*<br>*Monitoring specialist* | *Participation lists in consultation processes*<br>*Participation* | |

| Monitoring | Indicator Description | Data source/Collection Methods | Frequency | Responsible for data collection | Means of verification | Assumptions and Risks |
|---|---|---|---|---|---|---|
| | decisions related to the sustainable, integrated and inclusive management of landscapes | | | | *specialists in CAR, CAM, regional and local platforms and committees* | |
| | 9. Multistakeholder capacities improved for the planning and sustainable management of landscapes | *Specific capacities evaluated by capacity scorecard* | at start, midterm and final year | *Monitoring specialist* | *Capacity scorecard* | |
| | 10. Implementation of land-use change approval process according to zoning | *Zoning maps*<br>*TUPA (regional administrative procedure)*<br>*Forest monitoring system*<br>*Land-use changes requests* | *Annually* | *Project regional coordinator* | *TUPA and region's reports /websites*<br>*Zoning maps*<br>*Forest monitoring system* | *Political will and commitment to harmonise instruments* |
| | 11. % of unauthorised land use changes detected with monitoring system that result in effective institutional responses | *Research on authorities infractions databases and reports*<br><br>*Queries on forest monitoring system* | *Annually* | *Project regional coordinator* | *Forest monitoring system*<br>*Forest and environmental authorities infractions databases and reports* | *Forest monitoring system is in place* |
| | 12. Amount of public funds at national and regional levels committed and disbursed in support of sustainable landscape management, including biodiversity conservation, ecosystem services and sustainable agricultural production models | *Research on public investment project databases (MEF, regional and local governments); policies; incentives; programs*<br>*Authorities and expert interviews* | *Annually* | *Project coordinator* | *Databases, interviews* | *Detailed information is available* |
| **Project Outcome 2:** | 13. Volume of products commercialized in the target landscapes that respond to | *Sector platforms CENAGRO* | *Annually CENAGRO:* | *Project markets specialist* | *Sector plans reports* | *Trade information at district level is* |

| Monitoring | Indicator Description | Data source/Collection Methods | Frequency | Responsible for data collection | Means of verification | Assumptions and Risks |
|---|---|---|---|---|---|---|
| Market and incentive mechanisms promote sustainable production practices | sustainable production criteria, measured by compliance with sustainability criteria agreed by sector platforms and/or third party certification | | *2022* | | | *available* |
| | 14. Number of viable business plans for sustainable economic activities developed and implemented | *PPS project*<br>*Business plan financial analysis* | Annually | *Value chain specialist* | *Business plan document*<br>*Business reports*<br>*Project annual reports* | *Sustainability conditions for business and investment exist* |
| | 15. Volume of credit, incentives and insurance, by number of farmers and area covered, disbursed to benefit sustainable resource management practices or subject to criteria of environmental sustainability | *Agrobanco; rural banks; REDD+ and results-based payments; PSA; MINAM-PNCBCC; regional* | at start, midterm and final year | *Value chain specialists and project coordinator* | *Institutions reports and databases* | *Detailed information is available* |
| **Project Outcome 3:** Technical capacity installed to restore and sustain ecosystem services in target landscape | 16. Number of actors that learn about sustainable management practices and their benefits as a result of the pilots | *Registration of all visits to pilot projects and dissemination/ exchange of experiences on pilots* | *Annually* | *Regional coordinator* | *Lists of visits*<br>*List of actors informed about pilots benefits* | *Pilots are accessible* |
| | 17. Numbers of farmers (male and female) in target areas receiving technical and financial support for the application of sustainable management practices, and applying enterprise and organizational development plans necessary for these practices to be viable and sustainable | *Regional and local governments; DEVIDA; INEI (CENAGRO); PPS project* | *Annually* | *Extension specialiist* | *Databases and organisations reports*<br><br>*project monitoring system* | |
| | 18. Number of farmers (of those who receive technical assistance), by area, with increases in per hectare productivity levels due to the application of the sustainable management practices promoted by the project | *Productivity measurements* | at TA start, midterm and final year | *Extension specialist* | *Field research reports* | |
| | 19. Area of degraded landscapes subject to | *maps; regional ZEE; forest* | at start, | *Regional coordinator* | *restoration maps* | *Restoration* |

| Monitoring | Indicator Description | Data source/Collection Methods | Frequency | Responsible for data collection | Means of verification | Assumptions and Risks |
|---|---|---|---|---|---|---|
| | restoration and/or conservation in order to restore ecosystem services, with provisions for sustainability of management | *zoning; microzoning* | midterm and final year | | *and reports* | *objectives are for ecosystem services* |
| | 20. Numbers of institutions with publications and communications products aimed at improving knowledge and practices of sustainable management of Amazonian landscapes | *Publications* | Annually | *Project coordinator* | *PPS project website Comunication products dissemination lists and letters* | |
| **Project Outcome 4:** Project Management | 21. Numbers of project work plans, internal project planning meetings and project board meetings in which specific use is made of reliable data on indicator status | N/A | Annually | *Project monitoring specialist* | Minutes and reports | |
| ***Mid-term GEF Tracking Tool*** | N/A | Standard GEF Tracking Tool available at www.thegef.org Baseline GEF Tracking Tool included in Annex. | After 2nd PIR submitted to GEF | | Completed GEF Tracking Tool | |
| **Terminal GEF Tracking Tool** | N/A | Standard GEF Tracking Tool available at www.thegef.org Baseline GEF Tracking Tool included in Annex. | After final PIR submitted to GEF | | Completed GEF Tracking Tool | |
| ***Mid-term Review*** | N/A | To be outlined in MTR inception report | Submitted to GEF same year as 3rd PIR | Independent evaluator | Completed MTR | |
| **Environmental and Social risks and management** | N/A | Updated SESP and management plans | Annually | Project Manager UNDP CO | Updated SESP | |

| Monitoring | Indicator Description | Data source/Collection Methods | Frequency | Responsible for data collection | Means of verification | Assumptions and Risks |
|---|---|---|---|---|---|---|
| **plans, as relevant.** | | | | | | |
| **Quality Assurance** | N/A | Updated QA | Annually | UNDP CO | Updated QA | |

**C. Evaluation Plan**

| Evaluation Title | Planned start date Month/year | Planned end date Month/year | Included in the Country Office Evaluation Plan | Budget for consultants | Other budget (i.e. travel, site visits etc.) | Budget for translation |
|---|---|---|---|---|---|---|
| **Mid Term Evaluation** | | | | USD43,000 | USD2,600 | USD5,000 |
| **Terminal Evaluation** | *Add date: 3 months before operation closure* | *Add date: To be submitted to GEF within three months of operational closure* | Yes/No *Mandatory* | USD43,000 | USD2,600 | USD5,000 |
| | | | **Total evaluation budget** | USD101,200 | | |

**D. GEF Tracking Tool (s) at baseline**

Please see separate excel files.

## E. Terms of Reference

### 1) Chief Technical Advisor

**I. III. FUNCTIONS / KEY RESULTS EXPECTED**

**Summary of Key Functions:**

- Provision of high-level policy advice to the SPL PMU and the Government of Peru, related to ecosystems, climate change and sustainable development
- Provide coordination and implementation support to the Sustainable Productive Landscapes initiative
- Provide support and advisory services to the PMU and partners in efforts to strengthen strategic partnerships with other stakeholders supporting sustainable productive landscapes, and develop new relationships to mobilize additional financial resources
- Facilitate knowledge management

**1. Provision of high-level policy advice to the SPL PMU and the Government of Peru, related to ecosystems, climate change and sustainable development:**

- Provide high quality technical advice to the sustainable productive landscapes initiative, with emphasis on aspects of environmental governance and finance mechanisms and Ecosystem-based Mitigation and Adaptation strategies, to ensure that results are consistent with the project document and Annual Work Plans, and UNDP's rules and procedures established in the POPP;
- Ensure strategic planning of the SPL's activities / interventions such that they complement and create synergies with activities and interventions of the UNDP environment portfolio as well as of other thematic areas of UNDP to ensure integrated approaches to environmental sustainability and climate change management;
- Provide strategic technical advice to the PMU and project partners, including through the preparation of policy briefs, and recommendations and support in favor of strategic initiatives and partnerships that enhance the results and impacts of the SPL initiative.

**2. Provide coordination and implementation support to the Sustainable Productive Landscapes initiative:**

- Maintain regular contact with UNDP country office on the SPL project's implementation issues;
- Liaise with the project PMU, the Ministry of Environment and other actors at the national and sub national levels to mobilize co-financing contributions in favor of the project's expected results;
- Supervise project staff contracted by UNDP to implement the SPL project;
- Ensure accuracy of the SPL project activities regarding the annual work plans, prepare the annual work plan review, and TORs of project evaluation if necessary;
- Work with the PMU and UNDP country office to prepare terms of references for national and international consultants;
- Carry out technical review of technical studies and products developed in the context of the SPL project, ensuring quality control;
- Support Monitoring of SPL project, in coordination with the PMU and UNDP country office;
- Prepare and manage the implementation of agreements with project partners, in coordination with the National Project Coordinator;

- Ensure that information flow, discussions and feedback from various stakeholders are properly done;
- Provide technical and backstopping support to guarantee that periodic monitoring reports are prepared for the project boards, as well as donors;
- Ensure the devolution of coordination mechanisms for the SPL project, from national to field level and ensure the organization of regular thematic meetings (climate change adaptation, biodiversity conservation, sustainable economic activities, environmental finance) through creating / building on existing mechanisms for information sharing.

**3. Provide support and advisory services to the PMU and partners in efforts to strengthen strategic partnerships with other stakeholders supporting sustainable productive landscapes, and develop new relationships to mobilize additional financial resources through:**

a. In collaboration with PMU staff, UNDP CO and government of Peru, seek and identify partnership and funding opportunities; and oversee the preparation of presentations in support of financial sustainability strategies for sustainable productive landscapes;

b. Build strategic partnerships in favor of ecosystems and climate change management by supporting the visibility of the current SPL initiative.

**4. Facilitate knowledge management focusing on the achievement of:**

- Establish / maintain methodology for knowledge sharing / dissemination within thematic domain of sustainable productive landscapes;
- Demonstrate thought leadership in sustainable productive landscapes, providing strategic guidance and knowledge transfer to the PMU, UNDP CO and project counterparts and partners;
- Share knowledge, train and provide technical and management coaching related to climate change and ecosystems, to national and sub national counterparts;
- Contribute to the documentation of above-mentioned project findings, impacts and learned lessons.
- Guide and coordinate cross-thematic exchange of knowledge related to sustainable development by collaborating with CO colleagues as well as Regional and HQ teams and drawing on knowledge-based tools and guidance to help influence/advance policy dialogue.

**Corporate Competencies:**

- ❑ Demonstrates integrity by modeling the UN's values and ethical standards
- ❑ Promotes the vision, mission, and strategic goals of UNDP
- ❑ Displays cultural, gender, religion, race, nationality and age sensitivity and adaptability
- ❑ Treats all people fairly without favoritism

**Core Competencies**

**Ethics and Values**

- ❑ Reliably delivers on promises and honors commitments, holding himself/herself accountable for actions taken
- ❑ Takes the initiative to report on any deviations from established norms/practices
- ❑ Demonstrates and promotes the highest standard of integrity, impartiality, fairness and incorruptibility in all matters affecting his/her work and status
- ❑ Recognizes ethical dilemmas and/or conflicts of interest and seeks advice or support to resolve them

- Strives to build and support a diverse team and takes full advantage of the perspectives brought by people regardless of gender, culture or religion
- Identifies conflicts of interest between stakeholder groups and works to keep UN/UNDP from inappropriate involvement in such situations

**Functional Competencies:**

**Developing and Empowering people/Coaching and Mentoring**

- Integrates himself/herself into the work unit, taking responsibility for own contribution to achieving team results
- Takes initiative and seeks opportunities to initiate action
- Helps peers to identify their unique strengths and weaknesses, training and development needs

**Communicating Information and Ideas**

- Facilitates open exchange of information and ideas encouraging team members to share their views, thoughts and feelings
- Uses tact and sensitivity when delivering sensitive information or resolving delicate issues

**Building strategic alliances**

- Identifies and prioritizes opportunities and obstacles in the political scene (government, civil society, parliamentarians, pressure groups) to advance UNDP's agenda Identifies common interests and goals and carries out joint initiatives with partners
- Makes effective use of UNDP's resources and comparative advantage to strengthen partnerships
- Builds partnerships with non-traditional sectors by translating UNDP's agenda into messages that reflect the pertinence of their values and interests
- Creates networks and promotes initiatives with partner organizations
- Leverages the resources of governments and other development partners

**Advocacy/Advancing a Policy-Oriented Agenda**

- Advocates for the inclusion of UNDP's focus areas in the public policy agenda
- Brings visibility and sensitizes decision makers to relevant emerging issues
- Builds consensus concerning UNDP's strategic agenda with partners on joint initiatives
- Leverages UNDP's multidisciplinary expertise to influence the shape of policies and programmes
- Demonstrates political/cultural acumen in proposing technically sound, fact based approaches/solutions
- Dialogues with national counterparts and other stakeholders to strengthen advocacy efforts, incorporating country, regional and global perspectives
- Demonstrates cultural sensitivity, political savvy and intellectual capacity in handling disagreements with UNDP's policy agenda in order to promote and position UNDP in complex environments

**Client Orientation: Meeting long-term client needs**

- Anticipates constraints in the delivery of services and identifies solutions or alternatives
- Proactively identifies, develops and discusses solutions for internal and external clients, and persuades management to undertake new projects or services
- Consults with clients and ensures their needs are represented in decision-making processes
- Advises and develops strategic and operational solutions with clients that add value to UNDP programmes and operations

**Promoting Accountability and Results-Based Management**

- Ensures compliance with the organizational standards for audit, monitoring and evaluation and results-based management and promotes and monitors their application

| | |
|---|---|
| | ❑ Promotes a culture of accountability in the organization<br>❑ Develops, disseminates and promotes the use of sound methodologies and tools to assist organizational units in carrying out results-based monitoring and evaluation<br>❑ Analyses evaluation and policy application review results, extracts key elements and prepares proposals to address areas of weakness in the organization's performance |

| **V. Recruitment Qualifications** | |
|---|---|
| Education: | • Master's degree in Environmental Management, Environmental Sciences, or other relevant area. |
| Experience: | • Relevant experience of at least seven (7) years with progressive responsibility in management of environmental management programs.<br>• Professional work experience in Peru and other developing countries is desirable.<br>• Demonstrated experience in integrating gender and rights-based programming.<br>• Experience in the design and management of climate change management, ecosystem conservation, and environmental finance-related initiatives.<br>• Demonstrated experience in the provision of technical assistance to diverse stakeholder groups (communities, sub national and national governments).<br>• Knowledge of climate finance instruments and mechanisms at the international and national levels.<br>• Experience in developing and managing partnerships and coordination mechanisms with cooperation agencies and other partner organizations.<br>• Knowledge and familiarity with the multi donor's environment and their respective mandates will be an advantage.<br>• Excellent writing, facilitation and presentation skills. Experience in the use of computers is required. |
| Language requirements: | Fluency in Spanish and English (mandatory). |

**2) <u>Project Coordination Manager</u>**

Under the supervision of UNDP's Technical Advisor on Ecosystems and Climate Change, and in coordination with the National Project Directorate (DNP) at MINAM, the Project Coordination Manager will be responsible for conducting the management of its implementation, monitoring, advocacy and communications.

***<u>Duties and Responsibilities:</u>***

**Project Planning**:

- Lead the Project Implementation Unit (PIU) technical team, which is composed of Sectorial specialists, and subnational coordination specialist and field technicians.
- Together with MINAM, UNDP and the project team, in a dialogue with local stakeholders, prepare the Annual Work Plans (AWP) and the Annual Budget on a timely basis for their review and approval by the Project Steering Committee and the UNDP/GEF unit.
- Make recommendations to the Project Steering Committee on program and/or budget reviews.
- Define and lead jointly with the Project Steering Committee the implementation strategy, proposing joint activities and the pursuit of program synergies.
- Act as technical secretary of the Project Steering Committee.
- Supervise the activities of the technical members at the Project Management Unit (PMU), ensuring their relevance, effectiveness and efficiency.
- Ensure optimum performance of contractual and security aspects at the Project Implementation Unit (PIU) technical team, defining team objectives, as well as individual objectives, in order to favor the achievement of results.
- Participate in joint activities under the UNDP's Environmental Sustainability Thematic Area.

**Project Implementation Coordination:**

- Coordinate the implementation of project actions according to the Annual Work and Budget Plans with the counterparts and other relevant stakeholders.
- Guide the execution of activities and guide the work of the technical team at the (PIU) to ensure relevance, effectiveness and efficiency.
- With the support of project management staff, ensure the efficient and transparent execution of financial and physical resources in accordance with government provisions, GEF and UNDP rules and procedures, including budget monitoring, good accountability, etc.
- Provide necessary technical inputs for the different components, including preparation of the terms of reference for external consultancies hired by the project; supervise and coordinate their work, and review and approve their outputs.
- Ensure that the project is implemented with the full participation of local actors and that mechanisms exist to ensure that their interests are taken into account, communicated and reflected in the implementation of the project.
- Alert the Project Steering Committee of difficulties regarding progress and compliance with the work plan.
- Promote the coordinated participation of governmental institutions and NGOs at central and local levels during project implementation.
- Prepare and supervise the operational manuals for project execution.
- In communication with the National Project Directorate and the UNDP Technical Advisor, ensure that the project is implemented in accordance with MINAM's policies and plans as part of the implementation, and the United Nations Development Assistance Framework (UNDAF) in Peru and the UNDP Country Program.
- Identify and promote opportunities for action by other agencies of the United Nations system in the project areas.
- Ensure the implementation of the PPS Gender Strategy.
- Support and promote gender equity and social inclusion in project activities, as well as among team members and ensure gender mainstreaming in project actions.
- Promote the necessary coordination mechanisms for the articulation between the different actors and between the different activities, outputs and outcomes.
- Facilitate the resolution of disputes between partners and resolve obstacles to timely and efficient implementation of outcomes.
- Promote coordinated participation of Government institutions and NGOs, at central and local levels, in project implementation.
- Identify and promote opportunities for actions by other agencies of the UN system in the project areas.
- Ensure that a cross-cutting gender focus is incorporated into the project's actions.

**3) <u>Monitoring and Evaluation Specialist (M&E)</u>**

- Ensure implementation and follow-up of the Project Monitoring and Evaluation Plan.
- Coordinate and monitor agreements with counterparts that facilitate project execution and local monitoring.
- Organize and support independent external evaluations of the project.
- Facilitate and coordinate field visits of the Project Steering Committee members and monitoring visits of the counterpart and country office
- Facilitate decision-making on corrective actions and their implementation, as a result of the M&E findings and ensure documentation substantiating these changes
- Provide regular updates on project progress as requested by the Project Steering Committee.

- Continuously and regularly monitor project impacts with respect to the outputs provided in the annual work plans and budgets, and the expected impacts in the project outcome framework.
- Prepare reports for review by the National Project Directorate, the Steering Committee and UNDP: partial, annual (narrative and financial) reports of the Project to be submitted to UNDP and GEF, including PIRs, midterm and final evaluation and audit.
- In coordination with UNDP, prepare regular implementation reports, which inform about project progress, to be submitted to GEF:
- Ensure compliance with reporting deadlines for donors, UNDP and counterparts, when required.

**Knowledge Management:**

- In coordination with the responsible parties, ensuring adequate documentation of institutional processes with a view to generating a systematized inventory of lessons learned.
- Identify and analyze the lessons learned, and distribute information about them to project partners.
- Participate in meetings, workshops, trainings and events organized by the Steering Committee members or by other collaborating organizations.
- Support Project Steering Committee functioning through advice and logistical support.
- Design and implement professional development plans for the Project Implementation Unit members.
- Identify impacts and risks and their probability of occurrence, which could affect achievement of project expected outcomes; also, define and apply the corresponding mitigation strategies. The Project Manager must ensure that the risk matrix is regularly updated and socialized
- Facilitate capacity building and involvement of the main actors in the approach of Natural Protected Areas (NPAs) and Landscape Complexes.
- Support in the development of policy documents related to NPAs and Resilient Landscapes.

***Competencies***

- Demonstrated knowledge and work experience in policy development and capacity building.
- Demonstrated knowledge and experience in result-based management and result-oriented project implementation.
- High ability to interact, communicate, develop collaborative networks and build work teams. Also, to lead and generate a teamwork spirit, stimulating the work of team members to obtain quality results in a transparent way and within the stipulated deadlines.
- Excellent oral and written communication skills, with very good analysis and synthesis skills. Ability to clearly and concisely convey project outcomes and findings for the preparation of quality reports and documents.
- Maturity and confidence to deal with high level representatives of national and international public and private sector institutions.
- Ability to negotiate effectively in sensitive situations.
- Ability to work under pressure and meet deadlines.
- Positive and constructive attitude towards work.
- Ability to actively share knowledge and experience with the project team.
- Focused on outcomes and with a positive feedback capacity.
- Demonstrate commitment to UNDP's mission, vision and values.
- Demonstrate sensitivity, adaptability and respect for culture, gender, religion, race, nationality and age.
- Good management of MS Office (Excel, Word and Power Point)

***Required Skills and Experience***

*Education*:

- Master's or equivalent studies in Environmental Sciences, economics, social sciences, or related fields.

- Knowledge on issues related to landscape management and natural resources, policies linked to forest and land management, deforestation reduction, and rural development will be assessed.

*Professional experience*:

- Work experience, not less than 8 years
- Minimum 5 year experience in relevant fields such as community natural resource management, rural development, forest and other landscape management, or other related fields.
- At least 5 years of experience in project management, preferably with international cooperation, on natural resource management, and not less than 4 years as coordinator (indispensable).
- Desirable experience in forest management and review and application of territorial management tools.
- Desirable experience with the public sector, as well as in the application of gender and indigenous peoples' rights approaches.
- Desirable experience with GEF funding

*Others:*

- Fluency in Spanish; Preferably intermediate level of English language (mainly in reading and writing).

**4) <u>Administrative Associate</u>**

Under the supervision of the National Coordinator, in coordination with UNDP's Technical Advisor on Ecosystems and Climate Change, and in coordination with the National Project Directorate (DNP) at MINAM, the Administrative Associate will have the following functions:

**Duties and Responsibilities**

- Carries out the project administrative and financial follow-up to contribute to its correct implementation and to fulfill the project objectives, in accordance with UNDP rules and procedures, in a timely and efficient manner.
- Supports the Project Partner in monitoring the execution of all project activities, according to the expenditure schedule, taking into account the correct fulfillment of the work plan.
- Supports the Project Coordinator in implementing monitoring and control mechanisms to ensure compliance with provisions set out in the Project Document on financial management, monitoring and preparation and presentation of program and financial reports both to the UNDP and to the donor.
- Assists the Project Coordinator in budgetary control, ensuring that project activities are carried out within the limits of the approved budget and UNDP rules and procedures.
- Conciliates project expenses and commitments with those registered in the UNDP systems (Maera / Atlas).
- Monitors, reviews and adjusts the project budget in coordination with the UNDP Coordinator and Program Unit.
- Supports the reconciliation of project intermediate and final financial reports to be prepared by the Project for presentation to the donor.
- Provides support to external staff mobilization (requirement processing, per diem allocation and travel settlement), in accordance with UNDP policies and procedures.
- Provides support to external requests for purchases of goods and services.
- Follows up requirements and purchase orders in coordination with the Procurement Unit.
- Supports in the selection and contracting processes for acquisition of goods and services, as well as in screening and hiring individuals and travel management according to UNDP policies, standards, procedures and good practices.
- Interacts with the ATLAS ERP system, managing: requisitions, purchase orders (PO), vendors, vouchers and others.

- Is a depository of resources that are delivered by means of an advance payment of funds; the Project Administrative Partner must administer them properly in accordance with UNDP rules and procedures, ensuring their relevance.
- Keeps an updated inventory record of project physical resources, which have been given in custody, ensuring their good use until their final disposal by the UNDP.
- Prepares required routine correspondence and reports. Ensures an adequate filing system for all project documentation.
- Coordinates logistic aspects for the organization of workshops, meetings and events.
- Ensures permanent communication and coordination in administrative and financial issues with project technical teams in Lima and the provinces, and with MINAM.
- Performs other functions assigned to him/her by the National Project Coordinator, the UNDP Technical Advisor, and / or the National Project Directorate.
- Prepares and issues semi-annual and final performance reports. He/she must submit the last report at least 15 days before the contract expiration date.
- All reports with prior agreement of the National Coordinator will be referred to the Technical Advisor for approval.
- Reviews and keeps track of overall project accounting in accordance with the project work plan and UNDP standards.
- He / She accounts for activity advances, as well as for reports presented, reviewed and approved within terms envisioned by the UNDP.
- Supports in the preparation of Annual Work and Budget Plans and of the Procurement Plan to be approved by the Project Board. They are then submitted to the UNDP Program Unit in a timely manner.
- Files organized and updated project documentation (reports, communications, payment requests, General Ledger, Inventories, etc.).

***Competencies***

- Ability to prepare and write both narrative and accounting reports.
- Ability to efficiently manage the logistics of events organized as part of the project.
- Good interpersonal relations, respect and good treatment in a very tense environment.
- Respect for diversity and gender.
- High responsibility, ethics and transparency.
- Establishment of effective relationships with project partners.
- Good willingness for teamwork and for work under pressure, including additional time if required.

**Required Skills and Experience**

- *Education:*

- Professional degree in administration, accounting or related careers.
- The degree can be replaced by a B.A. or B.S or by a degree from a non-university Technical Institute plus a work experience of not less than 7 years.

- *Professional experience*:

- Not less than five years of specific experience in administrative management of cooperation projects, preferably with knowledge of UNDP procedures.
- Experience in software management (MS Word, Excel, etc.).

- *Other*:

- Excellent verbal and written communication skills in Spanish. Preferably intermediate level of English language (mainly in reading and writing).

**5) Strategic Planning, Monitoring and Evaluation Specialist**

Under the supervision of the PPS Project Management Coordination, and in coordination with the National Project Director and the UNDP Technical Advisor on Ecosystems and Climate Change, the Strategic Planning, Monitoring and Evaluation Specialist will have the following activities:

**Duties and Responsibilities**

- Support in the preparation of the PPS Project annual operation plan and implementation plan.
- Design and develop a monitoring and evaluation system for the Project, considering its scope, UNDP requirements, counterparts and / or partners, the GEF and the beneficiaries, including monitoring of project activities and actions, targets and indicators including budget and monitoring of project impacts.
- Validate indicator baseline for project monitoring, in coordination with the National Coordinator.
- Lead the implementation of the monitoring and evaluation system, gathering information on goals and indicators, analyzing progress (or setbacks), and providing reports and alerts as needed by the Project Coordination, the National Project Directorate and the UNDP.
- Substantively support the preparation of regular (quarterly, semi-annual and annual) monitoring and evaluation reports required by MINAM, UNDP, and GEF (including PIRs).
- Support in managing and executing midterm and final evaluation, as established by UNDP, MINAM and the GEF.
- Support in identifying and systematizing project achievements, challenges, good practices, and lessons learned.
- Provide constructive feedback to the project on a constant basis, based on information analysis and results obtained.
- Monitoring and evaluation of risks and identification of mitigation strategies, including the regular updating of the SES.
- Develop M & E tools for external and internal use, and annually update the project's tracking tools.
- Completion of established activities will require full time dedication of the person in charge of the position.

**Competencies**

- Leadership and teamwork.
- Demonstrated knowledge and experience in result-based management and result-oriented project implementation.
- Effective management capacity in contexts of complexity and short deadlines.
- Excellent analytical capacity and management of qualitative and quantitative methodologies.
- Technical ability to formulate plans and reporting documents, among others, as well as for budget tracking.
- Technical ability to use monitoring tools for complex projects, for example the logical framework.
- Excellent oral and written communication skills with very good analysis and synthesis skills. Ability to clearly and concisely convey project outcomes and findings for preparing reports and quality documents.
- Good interpersonal relationships.

- Demonstrate sensitivity, adaptability and respect for culture, gender, religion, race, nationality and age.
- Accountability, responsibility, ethics and transparency.

**Required Skills and Experience**

- *Education*:

- Bachelor's degree on Biology, Environmental Engineering, Forest Engineering, economics, sociology, anthropology, or related.
- Proven knowledge in monitoring and evaluation tools and methodologies.
- A master's degree or specialization in project and / or program management and / or evaluation is desirable.
    - *Professional experience*:
- Minimum 4-year experience in planning, monitoring and evaluation of development programs, initiatives and / or environment, with increasing levels of responsibility.
- Experience in development of baselines and / or management of evaluations and use of qualitative and quantitative evidence to analyze results of programs and / or projects is desirable.
- Field work experience in the Amazon and protected areas is desirable.
- Experience in environmental projects and / or in projects financed by the GEF will be valued.
    - *Other*:
- Intermediate English is required

**6) Communication Specialist**

Under the supervision of the Project Coordination and in coordination with UNDP, and the national, regional and local counterparts, the communication specialist will carry out work aimed at developing the PPS Project Communication Strategy, and will implement and supervise planned communication activities, as follows:

**Duties and Responsibilities**

- Organize the inception workshop of the project in coordination with the project staff.
- Prepare a communication strategy that facilitates problem understanding and possible solutions by the actors, as well as participation and commitment of beneficiaries in connection to project strategies. This should be aligned with the ENCB Communications Strategy. Communication and information activities and outputs should have a strong focus on intercultural and gender equity issues. This should include:
- Diagnosis of the project's communicational needs and the key actors' needs at local, regional and national level to achieve their awareness and to achieve their participation and commitment in project implementation.
- Narrative design to inform and communicate to different target groups the project's objectives expected transformational impacts in the areas of intervention, and proposed strategies either locally (officials of regional governments, municipalities, rural communities and native communities), regionally and / or nationally.
- Identification of broader media and points of high concentration of the population in the localities to include them into the communication strategy, looking as much as possible for collaboration opportunities.

- Design of the development plan and implementation of communication activities for the PPS Project, targeting national counterparts, beneficiary communities, vulnerable populations (children, pregnant women and the elderly) and local / regional authorities in the intervention areas.
- Proposal for the development of communication materials (infographics, audiovisuals, brochures, leaflets, videos, etc.) to raise awareness among national and regional officials and local actors regarding the importance of project strategies, considering communication guidelines of MINAM, UNDP and GEF.
- Proposal for strengthening the actors' communication capacities at local, regional and national level for the implementation of project strategies, including a dissemination strategy for key institutional actors.
- Proposal of activities to communicate project logic, agenda, achievements and lessons learned among partners, beneficiaries, and regional, national and international public.
- Lead the implementation of the proposed strategy.
- Design a methodological structure and work plan to prepare the project's integral systematization. This includes:
    - Reviewing the project's conceptual approach, comparing it with the initial approach, taking note of its likely variations, enrichment or extension throughout project execution. This proposal must guarantee sharing and participatory construction throughout the systematization process, both internally and with project users and allies.
    - Making and explaining a balance of the methodological strategy implemented in the project, highlighting how this strategy has been built and enriched throughout the project.
    - Documenting the project's implementation process in its different components, stages and activities. (Including notes, chronicles and visual or audiovisual recording)
    - Recording and reviewing the set of instruments and tools produced during project execution in its various components: social management, technical management, capacity development.
    - Projecting criteria and conditions, based on project experience, for validation and institutionalization as a national and regional public policy initiative.
    - Interacting with the teams of related projects at MINAM and UNDP, as well as with teams of other partners' communicators (MINAGRI, SERFOR, GOREs, among others):
    - Aligning / harmonizing messages and image, considering the corresponding projects and partners.
    - Establishing synergies with related projects and partners, at all stages of design and implementation.
    - Supporting national institutions and regional governments in the dissemination of communication material that helps to highlight efforts to reduce deforestation.
    - Any other activity, task or function assigned by the PPS Project National Coordinator.

**Competencies**

COMMUNICATION: Ability to effectively communicate complex technical elements to all audiences, mainly indigenous peoples, settlers, and local and regional authorities in the area of work, also to develop communication products (management of networks to provide information in a timely manner for dissemination on key project actions). Technologies of Information and Communication

ORGANIZATION AND PLANNING: Ability to organize, plan and meet deadlines; Dynamic person with positive attitude.

LEADERSHIP: Ability to lead and inspire action to a diverse group of people among colleagues, partners and beneficiaries

RESPONSIBILITY AND RESPECT TO DIVERSITY: High sense of responsibility, initiative, social and intercultural and gender sensitivity and service commitment with rural, indigenous and vulnerable populations of the Peruvian Amazon.

TEAMWORK: Ability to work in a team and under pressure to meet deadlines and in culturally diverse environments.

SYSTEMATIZATION: Ability to document and systematize complex technical elements in a didactic and organized way for different audiences.

**Required Skills and Experience**

- *Education*

- Professional in communication or social sciences, preferably with specialization in communication for development or related fields.
- A master's degree in communication, Amazon anthropology, environmental sciences or others related is desirable.

- *Professional experience*:

- Minimum 5-year experience in design and implementation of activities, strategies and communication plans in subjects related to the project.
- Experience working with government agencies, local communities and / or international organizations.
- Experience in the systematization of lessons learned or development activities or environmental projects
- Experience in communicating the issues to be addressed by the project.
- Experience in establishing networks with different actors that enhance project communicational impact will be valued.
- Knowledge on issues related to indigenous peoples' livelihoods and languages of indigenous populations, management of natural resources, biodiversity conservation and / or sustainable development in Amazonian environments will be assessed.
- Demonstrated experience in the use of communication tools.
- Readiness to travel to different regions in the country.

- *Others:*

- - Intermediate English is desired.

**F. UNDP Social and Environmental and Social Screening Template (SESP)**

## Project Information

| ***Project Information*** | |
|---|---|
| 1. Project Title | Sustainable Productive Landscapes in the Peruvian Amazon |
| 2. Project Number | UNDP-GEF PIMS No. |
| 3. Location (Global/Region/Country) | Peru |

## Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability

| QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability? |
|---|
| ***Briefly describe in the space below how the Project mainstreams the human-rights based approach*** |
| The project approach will respect the human rights of all of the actors involved, including indigenous peoples, and its actions will support rights in general as well as compliance with the legal framework (including Declaration 169 of the ILO and the UN Declaration on the Rights of Indigenous Peoples). The project will support national and regional governments in the implementation of and compliance with their policies, obligations and national and international commitments related with the combat of deforestation. Its principal aim is to reduce pressures on forests with the promotion of sustainable productive landscapes, thereby not only safeguarding the rights of forest dwellers, but also protecting the livelihoods of forest dependent peoples.<br>The Project will promote the equitable distribution of benefits between all of the actors in the landscape, as well as generating specific opportunities for vulnerable groups such as indigenous people and women, related in particular to forest management, in which the approach of gender equity and environmental sustainability will be addressed. From early stages in project design, participatory and inclusive plans were implemented aimed at receiving inputs from all groups, so that their interests were reflected in the proposed activities. Additionally, by avoiding deforestation the Project will help to reduce greenhouse gas emissions and conserve forests, which will contribute to the health of actors at local, national and global levels. |
| ***Briefly describe in the space below how the Project is likely to improve gender equality and women's empowerment*** |
| The Project has a highly participatory approach and incorporates actions to promote gender equality in its implementation. Gender issues have been discussed with stakeholder during the formulation stage, scoping problems, gaps, barriers, interests and needs of stakeholders, including women among them, whose participation has been ensured.<br>With this aim, the Project has developed Gender Strategy, which will be applied in a cross-cutting manner to outcomes and outputs. In addition, activities have been proposed such as the facilitation of decision-making spaces, to allow men and women to have equitable access to the benefits generated by the Project, with differentiated positive actions for women's empowerment related to processes of participation and decision-making, as well as through actions including the engagement of women-led community-based organizations and other women's groups, to lead core project actions such as the management of non-timber forest products, establishment of nurseries to rehabilitate forest and land degradation, feasibility studies to ensure women's access to credit, among others. |

| *Briefly describe in the space below how the Project mainstreams environmental sustainability* |
|---|
| The core aim of the Project is the generation of multiple global environmental benefits through the application of an integrated approach to the management of Amazonian landscapes through the improvement of the natural values of forest, promoting the orderly use of territories within an ecosystem-based approach and biological connectivity, to boost sustainable development, avoiding and/or reducing the negative effects of productive activities.<br>The project will support stakeholders' efforts to implement environmental practices in productive landscapes, including the management and conservation of natural resources in target productive crops, and apply the lesson-learned in decision-making, ultimately guaranteeing the rights of communities to sustainably use and manage the associated resources.<br>The Project will contribute to the mitigation of climate change by reducing GHG generated by deforestation and forest degradation and improving capacities for the control of land use change. The project will promote synergies and policy harmonization to integrate environmental considerations in local, national and sectorial and development plans to maintain of flows of goods and services of ecosystems. |

## Part B. Identifying and Managing Social and Environmental Risks

| **QUESTION 2: What are the Potential Social and Environmental Risks?** | **QUESTION 3: What is the level of significance of the potential social and environmental risks?** | | | **QUESTION 6: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?** |
|---|---|---|---|---|
| ***Risk Description*** | ***Impact and Probability (1-5)*** | ***Significance (Low, Moderate, High)*** | ***Comments*** | ***Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.*** |
| **Risk 1.5:** duty-bearers do not have the capacity to meet their obligations | I = 4<br>P = 2 | Moderate | Some groups of vulnerable actors currently have limited capacities to claim their rights due to extreme poverty, low educational levels or difficult access,.<br>See Human Rights Principle 1 (item 7), and P3- Standard 6 on indigenous peoples | - The project will facilitate legal support to attend to land tenure issues that could affect the establishment of the Conservation Areas.<br>- The Project will adopt an approach of poverty reduction focused on food security, sustainable production and the conservation of natural resources.<br>- The Project will strengthen mechanisms for participation, dialogue and governance between actors.<br>- The Project will strengthen work with indigenous peoples and women, related to the implementation of Life Plans including concepts of sustainability, interests and basic needs.<br>- The project will promote and provide technical advice on land use planning and zoning through participatory and inclusive processes.<br>- The Project will support indigenous peoples in issues of territorial security related to activities of community-based control and vigilance. |

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| **Risk 1.7:** local communities or individuals have the opportunity, raised human rights concerns during the stakeholder engagement | I = 1<br>P = 1 | Low | Target groups and stakeholders will have opportunities to disseminate ideas in differente phases of the project cycle. | - During PPG, workshop and mission were held to facilitate local communities and individual participation. Concrete provisions will be made to ensure that target groups are engaged in decision making for the project. |
| **Risk 2.2** Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits? | I = 3<br>P = 1 | Low | Women have limited access to natural resources, such as land and water. There is a risk that women do not benefit adequately from the project's support to productive activities, or financial mechanisms. | - Gender Strategy has been developed during PPG phase<br>- Women perspectives will be considered in Life Plans and development plans.<br>- The Project includes positive actions for women, based on their expressed interests, such as work on non-timber forest products and agroforestry |
| **Risk 2.3** women's groups/leaders have raised gender equality concerns regarding the Project during the stakeholder engagement process and has this been included in the overall Project proposal and in the risk assessment? | I = 2<br>P = 1 | Low | The project acknowledges the interest of local women in Landscapes conservation and sustainable use. Communities already have established mechanisms for women involve in NTFP. | - The PPG have promoted women participation through specific workshops and exchanges of experiences.<br>- Gender analysis has been carried out to identify gender gaps, Gender strategy has been developed during PPG<br>- The Project Results Framework has a gender equity approach<br>- The project also takes into account youth and the opportunity to engage youth in restoration activities, as well as economic diversification.<br>- The project takes measures to ensure cross-cutting gender issues |
| **Risk 3.1.2:** Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities | I = 3<br>P = 1 | Low | The target Areas are located on buffer zones of NPA.<br>The project focuses on conservation, restoration and sustainable use of Productive Landscapes. Activities in all components are developed and implemented in conjunction with local communities to strengthen their capacity to manage these resources and ensure sustainability. | - The Project will support actions to control adverse Land use changes and reducing deforestation of productive activities, and promote compatible activities and forest conservation on buffer areas of NPA.<br>- The Project will carry out analyses and actions in support of the implementation of good practices to reduce agricultural frontier.<br>- The Project will ensure the involvement of competent authorities and of key actors in the definition of restrictions on Access to resources, in order to minimise impacts on stakeholders' interests.<br>- The Project will be associated with recognised organizations specialised in issues of protected areas. |

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| **Risk 3.1.6;** Does the Project involve harvesting of natural forests, plantation development, or reforestation? | I = 3<br>P = 2 | Moderate | Sector policies may result in increases in certain crops, and improvements in their profitability may result in advances of activities and agents of deforestation, with the strengthening of crops that are not necessarily sustainable. | - The Project will support land use planning, sectorial plans and natural resource management with ecosystem approach, in order to minimise restrictions on land and resource uses on which local livelihoods depend.<br>- The Project will emphasise environmental sustainability within sectorial policies and actions, and the inclusion of good practices in the management of products such as palm and cocao, in order to avoide promoting land use change.<br>- Pilots models to be applied will be based on productive sustainability<br>- Sectorial policies to be supported will include approaches considering socioenvironmental safeguards.<br>- The Project includes actions related to the use, management and restoration of forests, which may limit access to forest areas and reduce opportunities for informal actors to use them as means of livelihood support. |
| **Risk 6.1** Are indigenous peoples present in the Project area (including Project area of influence) which could be affected by project activities? | I = 3<br>P = 4 | Moderate | The Project is located in a complex area where several IIPP are present | - The Project will advise relevant sectors and decision makers, through analyses and studies to support decisions on technical aspects and related to compliance with socioenvironmental safeguards.<br>- The Project will organize working groups to support dialogue on the interests of key stakeholders.<br>- The project will support design and implementation of life plan of indigenous communities, gender responsive<br>- The project will apply an intercultural approach |
| **Risk 6.2** Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples? | I = 2<br>P = 4 | Moderate | The project location includes territorial lands claimed by Kakataibo IIPP | - Studies and activities will be implemented to support Kakataibo declaration, taking into account socioenvironmental safeguards.<br>- The UNDP/GEF PA Resilience project is implemented in the area and plans to provide technical assistance to secure the protection of the Kakataibo Indigenous Reserve, a process promoted by the Ministry of Culture.<br>- The project will support the design and implementation of life plans of indigenous communities, gender responsive |
| **Risk 6.3** Would the proposed Project potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous | I = 4<br>P = 2 | Moderate | With the generation of new policies and improved compliance, some actors may be economically displaced, due to possible restrictions on the productive activities on which they depend, but which may be environmentally harmful. | - The public policies will include socioenvironmental criteria and equal participation, to ensure rights of stakeholders, especially indigenous peoples and women.<br>- Studies and activities will be implemented to support Cacatiabo declaration, taking into account socioenvironmental safeguards. |

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| peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the Project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)? | | | | - The project will support design and implementation of life plan of indigenous communities, gender responsive<br>- Dialogue Platforms and working groups will be support to ensuere legal frameworks and equitue rights of indigenous peoples and ther territories<br>- Land use and forest planning will include inter-sector, participatory and inclusive models for all key stakeholders, respecting socioenvironmental safeguards of IIPP territories<br>- Where applicable and in response to specific requests, the relevance of the application of processes of Free, Prior and Informed Consent will be considered.<br>- The project will support design and implementation of life plan of indigenous communities, gender responsive |
| **Risk 6.5** Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples? | I = 3<br>P = 1 | Low | Indigenous peoples may be attracted by the profitability of commercial crops and abandon their ancestral traditions of forest use and management. | - The Project will implement, promote and include issues of social, environmental and cultural sustainability in the application of Life Plans gender responsive.<br>- The Project will guarantee the effective and significant participation of indigenous peoples, through their representative organizations. |
| **Risk 6.9** Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices? | I = 1<br>P = 2 | | Indigenous peoples may be attracted by the profitability of commercial crops and abandon their ancestral traditions of forest use and management. | - Studies and activities will be implemented to support Kakataibo declaration, taking into account socioenvironmental safeguards.<br>- The UNDP/GEF PA Resilience project is implemented in the area and plans to provide technical assistance to secure the protection of the Kakataibo Indigenous Reserve, a process promoted by the Ministry of Culture.<br>- The project will support the design and implementation of life plans of indigenous communities, gender responsive |

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| | **QUESTION 4: What is the overall Project risk categorization?** | | |
| | **Select one (see SESP for guidance)** | | **Comments** |
| | ***Low Risk*** | ☐ | |
| | ***Moderate Risk*** | **X** | The proposed Project is located within lands and territories inhabited by indigenous peoples |

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| | ***High Risk*** | ☐ | |
| | **QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are relevant?** | | |
| | Check all that apply | | **Comments** |
| | ***Principle 1: Human Rights*** | ☐ | |
| | ***Principle 2: Gender Equality and Women's Empowerment*** | ☐ | |
| | ***1. Biodiversity Conservation and Natural Resource Management*** | **X** | Generate multiple global environmental benefits through the application of an integrated approach to the management of Amazonian landscapes |
| | ***2. Climate Change Mitigation and Adaptation*** | ☐ | |
| | ***3. Community Health, Safety and Working Conditions*** | ☐ | |
| | ***4. Cultural Heritage*** | ☐ | |
| | ***5. Displacement and Resettlement*** | ☐ | |
| | ***6. Indigenous Peoples*** | **X** | The proposed Project is located within lands and territories inhabited by indigenous peoples |
| | ***7. Pollution Prevention and Resource Efficiency*** | ☐ | |

## Final Sign Off

| ***Signature*** | ***Date*** | ***Description*** |
|---|---|---|
| QA Assessor | | James Leslie<br>Senior technical Advisor Ecosystem and Climate Change UNDP Peru |
| QA Approver | | Edo Stork<br>Deputy Resident Representative (DRR) UNDP Peru |

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| PAC Chair | | Edo Stork<br>Deputy Resident Representative (DRR) UNDP Peru |

## SESP Attachment 1. Social and Environmental Risk Screening Checklist

| Checklist Potential Social and Environmental Risks | | |
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| **Principles 1: Human Rights** | | **Answer (Yes/No)** |
| 1. | Could the Project lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups? | No |
| 2. | Is there a likelihood that the Project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? | No |
| 3. | Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups? | No |
| 4. | Is there a likelihood that the Project would exclude any potentially affected stakeholders, in particular marginalized groups, from fully participating in decisions that may affect them? | No |
| 5. | Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project? | Yes |
| 6. | Is there a risk that rights-holders do not have the capacity to claim their rights? | No |
| 7. | Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process? | Yes |
| 8. | Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project-affected communities and individuals? | No |
| **Principle 2: Gender Equality and Women's Empowerment** | | |
| 1. | Is there a likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls? | No |
| 2. | Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits? | Yes |
| 3. | Have women's groups/leaders raised gender equality concerns regarding the Project during the stakeholder engagement process and has this been included in the overall Project proposal and in the risk assessment? | Yes |
| 4. | Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? | No |
| **Principle 3: Environmental Sustainability:** Screening questions regarding environmental risks are encompassed by the specific Standard-related questions below | | |
| **Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management** | | |
| 1.1 | Would the Project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services? | No |

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| 1.2 | Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities? | Yes |
| 1.3 | Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5) | No |
| 1.4 | Would Project activities pose risks to endangered species? | No |
| 1.5 | Would the Project pose a risk of introducing invasive alien species? | No |
| 1.6 | Does the Project involve harvesting of natural forests, plantation development, or reforestation? | Yes |
| 1.7 | Does the Project involve the production and/or harvesting of fish populations or other aquatic species? | No |
| 1.8 | Does the Project involve significant extraction, diversion or containment of surface or ground water? | No |
| 1.9 | Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development) | No |
| 1.10 | Would the Project generate potential adverse transboundary or global environmental concerns? | No |
| 1.11 | Would the Project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area? | No |
| **Standard 2: Climate Change Mitigation and Adaptation** | | |
| 2.1 | Will the proposed Project result in significant greenhouse gas emissions or may exacerbate climate change? | No |
| 2.2 | Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change? | No |
| 2.3 | Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)?<br>*For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding* | No |
| **Standard 3: Community Health, Safety and Working Conditions** | | |
| 3.1 | Would elements of Project construction, operation, or decommissioning pose potential safety risks to local communities? | No |
| 3.2 | Would the Project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)? | No |
| 3.3 | Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)? | No |

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| 3.4 | Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure) | No |
| 3.5 | Would the proposed Project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions? | No |
| 3.6 | Would the Project result in potential increased health risks (e.g. from water-borne or other vector-borne diseases or communicable infections such as HIV/AIDS)? | No |
| 3.7 | Does the Project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction, operation, or decommissioning? | No |
| 3.8 | Does the Project involve support for employment or livelihoods that may fail to comply with national and international labor standards (i.e. principles and standards of ILO fundamental conventions)? | No |
| 3.9 | Does the Project engage security personnel that may pose a potential risk to health and safety of communities and/or individuals (e.g. due to a lack of adequate training or accountability)? | No |
| **Standard 4: Cultural Heritage** | | |
| 4.1 | Will the proposed Project result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: Projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts) | No |
| 4.2 | Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes? | No |
| **Standard 5: Displacement and Resettlement** | | |
| 5.1 | Would the Project potentially involve temporary or permanent and full or partial physical displacement? | No |
| 5.2 | Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)? | No |
| 5.3 | Is there a risk that the Project would lead to forced evictions? | No |
| 5.4 | Would the proposed Project possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources? | No |
| **Standard 6: Indigenous Peoples** | | |
| 6.1 | Are indigenous peoples present in the Project area (including Project area of influence)? | Yes |
| 6.2 | Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples? | Yes |

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| 6.3 | Would the proposed Project potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the Project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)?<br>*If the answer to the screening question 6.3 is "yes" the potential risk impacts are considered potentially severe and/or critical and the Project would be categorized as either Moderate or High Risk.* | Yes |
| 6.4 | Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned? | No |
| 6.5 | Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples? | Yes |
| 6.6 | Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources? | No |
| 6.7 | Would the Project adversely affect the development priorities of indigenous peoples as defined by them? | No |
| 6.8 | Would the Project potentially affect the physical and cultural survival of indigenous peoples? | No |
| 6.9 | Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices? | Yes |
| **Standard 7: Pollution Prevention and Resource Efficiency** | | |
| 7.1 | Would the Project potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts? | No |
| 7.2 | Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)? | No |
| 7.3 | Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to international bans or phase-outs?<br>*For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol* | No |
| 7.4 | Will the proposed Project involve the application of pesticides that may have a negative effect on the environment or human health? | No |
| 7.5 | Does the Project include activities that require significant consumption of raw materials, energy, and/or water? | No |

## G. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP) FOR MODERATE AND HIGH RISK PROJECTS ONLY

### ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

The ESMP frames the social and environmental vision of project management to generate social and environmental benefits and avoid or minimize adverse impacts identified as moderate and high in the Social and Environmental Standards (SES). The SES objectives are aimed at:

1. Integrating the global principles of UNDP SES to improve social and environmental sustainability.
2. Determing the possible social and environmental risks and their importance; determing the project risk category (low, moderate, high); and
3. Determing the social and environmental evaluation and management level required to respond to possible risks and impacts.

### II. PROJECT DESCRIPTION

Natural lands and forests are being turned into farmland in an unplanned way and withinadequate consideration of interactions with forest dyanmics. Transforming forests to farming use, mainly for commercial crops such as cacao, coffee, and oil palm – along with fruit such as pineapple and papaya – is an increasing trend.. Thus, the aimis to have this expansion and growth occur in a sustainable fashion that generates social and environmental opportunities.

This analysis determines that current government conditions appear to not stop deforestation (both legal and illegal) – and do not take into account natural resource valuation of forests. This issue is worsened by the regional socioeconomicpressures that generate migration.

The alternative proposed by the PPS project involves integrated management of the different elements that make up the landscape, the consideration of the sustainable interaction of elements, and the inclusion of sustainable management policies in their development. This will minimize impacts to the natural and social environment while maintaining the the importance of commercial agriculture (cacao, coffee and oil palm).

Although the PPS project includes a social and environmental focus, this Environmental and Social Management Plan (ESMP) aims at avoiding, minimizing, mitigating, and managing any of the project's potential adverse risks and impacts in social and environmental terms. Additionally, it uses UNDP's Social and Environmental Standard Procedure (SESP) to integrate acknowledged global principles and identify possible social and environmental risks, their importance, and to determine the project's risk category (low, moderate, or high) depending on the analysis.

### 2.1 GEF-PPS PROJECT OBJECTIVE AND EXPECTED OUTCOMES

The PPS project general objective is to reduce pressures on Amazon forests by promoting sustainable management of productive landscapes.

The project seeks to harmonize the generation of environmental benefits with national interestsand local development targets. It seeks to apply the "win-win" perspective, identifying solutions through which producers can appropriately operate combining environmental and productive sustainability with economic and social profitability, by way of supporting sustainable production and "green" systems. The project seeks to generate important global environmental benefits in three focal areas:

1. Benefits of biodiversity by preventing deforestation of large Amazon humid forest areas (including lowland or "rupa rupa" humid forests -between 400 and 1.000 m.a.s.l.- and yunga, between 1.000 and 3.600 m.a.s.l.) and the subsequent recovery of flora and fauna, as well as improvement of the habitat in cacao, coffee and oil palm producing systems (among others) through the introduction of good farming practices management in agroforestry systems. Additionally, benefits will be generated in all the forest landscape through improved biological connectivity of surrounding natural protected areas.
2. Benefits from sustainable soil management through comprehensive landscape promotion in such a way as to keep and promote generation of ecosystem services from natural forests and non-forest lands, including: ecosystem health, protection of soil against degradation, maintenance and promotion of nutrients, and water resources.

3. Sustainable benefits of forest management in terms of preventing deforestation of large Amazon tropical forest areas and the subsequent loss of forest carbon sinks (prevented or reduced emissions), and through restoration of degraded forest lands, so that damagedecosystem services are restored.

Project components and outcomes are focused on contributing to improve domestic politics and regulations so that they are coherent and favorable todeforestation reduction with an integrated landscape approach. Additionally, they value biodiversity and ecosystem services, including them in financial policies with land use planning. Likewise, improvements are applied in the agricultural sector to be reflected in a sustainable integrated landscape with provisions for conserving natural resources and social sustainability.

## III. POTENTIAL SOCIAL AND ENVIRONMENTAL IMPACTS

### 3.1 LEGAL AND INSTITUTIONAL FRAMEWORK

The following is a brief description of the institutional framework, which is applicable to the project's environmental and social management measures in connection to general risk types and which could have an impact. The framework also follows the elements of UNDP global policies and socio-environmental standards at the project level.

Table 1. Applicable legal and institutional framework

| Main risks (in the project context) | Applicable domestic legal framework | Applicable international legal framework | Applicable UNDP Social and Environmental Standards (SES) |
|---|---|---|---|
| 1. Effects on the exercise of human rights | Political Constitution of Peru.<br>2014 - 2016 National Human Rights Plan (Approved by Supreme Decree Nº 017-2005-JUS, dated December 10, 2005). | International human rights treaties ratified by Peru, such as:<br>ILO Convention 169(approved in Peru by Legislative Resolution N° 26253 dated November 26, 1993),<br>American Convention on Human Rights (Approved by Decree Law N° 22231, dated July 11, 1978. Ratified on July 12, 1978),<br>CERD (Committee on the Elimination of Racial Discrimination, dated November 27, 1984),<br>ICCPR (International Covenant on Civil and Political Rights (ratified on April 28, 1978),<br>ICESCR (International Covenant on Economic, Social and Cultural Rights. Not ratified by Peru),<br>CEDAW (Convention of the Elimination of all Forms of Discrimination Against Women). (Approved by R.L. 23432, dated June 5, 1982. Ratified on September 13, 1982). | Principle 1: Human Rights (referred to State obligations stemming from international treaties and domestic human rights legislation).<br>It holds that:<br>"UNDP will not support activities that do not comply with national law and obligations under international law, whichever is the higher standard." |
| 2. Exclusion of marginal and/or vulnerable groups from participation processes and/or | Political Constitution of Peru.<br>Law N° 29785, Law on the right of indigenous or aboriginal peoples to prior | International Labor Organization Convention 169. | Principle 1: Human Rights and Standard 6: Indigenous Peoples |

| Main risks (in the project context) | Applicable domestic legal framework | Applicable international legal framework | Applicable UNDP Social and Environmental Standards (SES) |
|---|---|---|---|
| project benefits, including women. | consultation, acknowledged in International Labor Organization Convention 169 and its Regulation, approved by Supreme Decree N° 001-2012-MC.<br>2012 – 2017 National Gender Equality Plan, approved by Supreme Decree N° 004-2012-MIMP.<br>Strategic objective 7: to increase participation of men and women in decision-making and engagement.<br>Gender and Climate Change Action Plan, approved in 2016. | - Article 1 determines what IPs are according to objective and subjective criteria.<br>- Article 6.a stipulates the right to free and informed prior consultation every time administrative and legislative measures are foreseen to affectpeople.<br>- Article 6.b right to free participation of IPs to the same extent as other population sectors in the electoral and administrative decision making processes of those responsible for public policies.<br>- Article 7, right to decide their own development priorities… participating in formulating, applying and evaluating national or regional plans and programs that may affect them.<br>American Convention on Human Rights<br>CERD (Committee on the Elimination of Racial Discrimination)<br>ICCPR (International Covenant on Civil and Political Rights)<br>ICESCR (International Covenant on Economic, Social and Cultural Rights)<br>Convention on the elimination of all forms of discrimination against women - CEDAW.<br>• Article 14.2: Party States will adopt all the appropriate measures to eliminate discrimination against women in rural areas to ensure conditions of equality between men and women, their participation in rural development and its benefits. It particularly | - An indigenous people is recognized as one that fulfills the definitions accepted in signed conventions and treaties (Article 1 of C169).<br>-Free and informed prior consultation should be carried out when project activities can affect the rights and interests, lands, resources, territories (with or without property titles of the persons in question, as well as the traditional livelihood of involved indigenous peoples, as per the case).<br>- Direct participation of indigenous peoples and women (through their organizations should be recognized) in what concerns design, implementation and closing of project activities, since these are actions related to their local development and to their development as peoples, which can also help them to fill the gaps that separate men from women, as well as those that separate some indigenous peoples from others. |

| Main risks (in the project context) | Applicable domestic legal framework | Applicable international legal framework | Applicable UNDP Social and Environmental Standards (SES) |
|---|---|---|---|
| | | ensures rights to: participate in preparing and executing development of all levels; among them the use of ICTs, the enjoyment of economic benefits stemming from production, etc.<br>United Nations Declaration on the Rights of Indigenous Peoples = UNDRIP.<br>Article 18: right to take part in decision making on all issues that affect them. Article 23 right to establish their priorities and orientation for developing their communities. Governments will support indigenous peoples so that they manage their own organizations and services and so that they decide on their own about the subjects that affect their health, housing and other issues. | |
| 3. Project activities that can exacerbate conflicts between stakeholders | Law Nº 26505, Law on private investment in the development of economic activities in national territory lands and peasant and native community lands.<br>Law N° 24656, General Law on Peasant Communities (Published on April 14, 1987).<br>Decree Law Nº 22175, Law on Native Communities and Agricultural Development of the Low and Mountainous Jungle Areas.<br>Law N° 29785, Law on the right to prior consultation to indigenous or aboriginal peoples and its regulation, approved by Supreme Decree N° 001-2012-MC | ILO Convention 169.<br>American Convention on Human Rights<br>Committee on the Elimination of Racial Discrimination - CERD<br>Convention to Eliminate All Forms of Discrimination Against Women (CEDAW).<br>International Covenant on Civil and Political Rights – ICCPR<br>International Covenant on Economic, Social and Cultural Rights - ICESCR | Standard 6: Indigenous peoples:<br>- The project will support any necessary legal reforms to allow implementation of social and collective rights.<br>The project can become involved in carrying out relevant procedures to achieve legal acknowledgement of indigenous territories. |
| 4. Habitats are affected due to land use changes (potential changes in the use of lands and resources might adversely affect ecosystems and livelihoods) | Political Constitution of Peru.<br>Law N° 29763, Forest and Wildlife Law.<br>National Biological Diversity Strategy to 2021 and its 2014 – 2018 Action Plan. Approved by Supreme Decree N° 009-2014-MINAM, November 06, 2014.<br>National Environment Policy. Approved by Decree Law N° | Convention on Biological Diversity, ratified by Peru in 1993. Approved by R.L. N° 26181, dated May 11, 1993.<br>Ratified on May 24, 1993.<br>International Labor Organization Convention 169.<br>Commission of Experts on Application of Conventions | Principle 3: Environmental sustainability in connection with maintaining and rehabilitating natural habitats and their functions related to biodiversity and ecosystems<br>Standard 1: Conservation of Biodiversity and |

| Main risks (in the project context) | Applicable domestic legal framework | Applicable international legal framework | Applicable UNDP Social and Environmental Standards (SES) |
|---|---|---|---|
| | 012-2009-MINAM, on May 22, 2009.<br>Law Nº 26505, Law on private investment in developing economic activities in the national territory, peasant community and native community land (amended on December 2002).<br>Law Nº 29196, Law to promote organic and ecologic production.<br>Law Nº 27811, Law that establishes the protection regime for indigenous peoples' collective knowledge related to Biological Resources.<br>Plan for Risk Management and Adaptation to Climate Change in the Agricultural Sector, Period 2012-2021- PLANGRACC-A<br>2012 – 2016 Ministry of Agriculture Multiannual Ministerial Strategic Plan. | and Recommendations (CEACR) of the ILO | Sustainable Management of Natural Resources. |
| 5. Women are not involved or do not benefit from all the promoted productive activities or training processes that allow for their empowerment. | Law on Equal Opportunities for Men and Women. Law 28983. Article 6. Guidelines for the executive branch.<br><br>2012 – 2017 National Plan for Gender Equality (Supreme Decree Nº 004-2012-MIMP)<br>Strategic objective 5: Guarantee the economic rights of women in equity conditions and through equal opportunities as compared to men.<br>• Outcome 5.6: (…) productive projects promoted by the State guarantee the gender quota favoring the participation of Andean and Amazonian rural women (…).<br><br>Strategic objective 8: valuing the contribution of women in sustainable natural resource management.<br>• Outcome 8.1: Environmental management at national and regional level with gender approach.<br>• Outcome 8.3: Increase women access to and use of natural resources. | Convention to Eliminate All Forms of Discrimination Against Women - CEDAW.<br>• Article 14.2: State Parties will adopt all the appropriate measures to eliminate discrimination against women in rural areas so as to ensure equal conditions between men and women, and their participation in rural development and it its benefits. They will particularly ensure rights to participate in preparing and executing development plans at all levels, among others, such as the use of ICTs, enjoyment of economic benefits from production, etc. | Principle 2: Gender equality and women empowerment<br>- Promotion of gender equality and women empowerment are core issues in the UNDP's mandate and related subjects in their human rights–based approach or when programming development.<br>- The UNDP will seek to identify and integrate the different needs, limitations, contributions and priorities of women in their programming.<br>- UNDP programs and projects will promote gender equality and women empowerment: they will reduce gender inequalities regarding access to and control of resources and benefits from |

| Main risks (in the project context) | Applicable domestic legal framework | Applicable international legal framework | Applicable UNDP Social and Environmental Standards (SES) |
|---|---|---|---|
| | Outcome 8.5: Rural women receive information, training and technology transfer for managing natural resources such as water, soil and forests. | | development. Both women and men will participate in programs and projects and will receive comparable social and economic benefits. |

### 3.2 PROJECT POSITIVE AND NEGATIVE IMPACTS

The following is a general summary of positive and negative impacts generated by the project among vulnerable groups, according to expected outcomes.

**Table 2. Positive and negative impacts in the general and vulnerable population**

| Project Outcome | Potential social and environmental impacts |
|---|---|
| Outcome 1.1 Land use policies and plans have been strengthened and aligned through the ministries at national, regional and local level.<br><br>Outcome 1.2 Governance has been strengthened for developing public policies, for soil management and making decisions in a participatory and inclusive way.<br><br>Outcome 1.3 Actors are committed in developing public policies and are aligned for joint actions.<br><br>Outcome 1.4 The public financial flow to support effective territorial governance has increased. | Positive:<br>1. Integration of policies, convergence of ministry efforts and decrease of informality.<br>2. Increase of areas with assigned rights, which results in less threats of illegal deforestation.<br>3. Decrease of agriculture in forest areas or natural forests.<br>4. Ministry cross-section planning through a landscape model as an integrated whole.<br>5. The areas with assigned rights have a greater potential to be used for sustainable productive activities that require government permits or supervision.<br>6. Inclusion of social environmental safeguards in land planning.<br>7. Development of Life Plans formulated by indigenous peoples and taking into account indigenous women's demands and proposals.<br>8. Reduction in unilateral or illegal changes in land use.<br>9. Planning in zoning processes, forestry planning and community forest management.<br>10. Capacity strengthening – special attention to follow up to strengthening of women who participate, to organizations for decision making (for example CAR and CAM) and for better control<br>11. Support local governance models to prevent deforestation.<br>12. Development and implementation of indigenous planning and surveillance tools.<br>13. Capacity building for indigenous peoples. To the extent possible, a call for a balanced number of men and women and of community forest surveillance.<br>Negative:<br>**1.** Marginalized and/or vulnerable groups can be excluded from participation processes and/or project benefits, particularly women.<br>**2.** Economic displacement due to the use of resources that supply economic revenues to poor vulnerable or informal groups.<br>**3.** Agricultural frontier increase due to potential adequation and infrastructure (roads, bridges, etc.) due to planning policies.<br>**4.** Duplication of functions or little coordination with other initiatives. |

| Project Outcome | Potential social and environmental impacts |
|---|---|
| | **5.** Disinterest among actors in reactivating participation and consumption initiatives.<br>**6.** Training and strengthening so that governance does not keep the gap between men and women. |
| Outcome 2.1: Productive and commodity trading chains have provided incentives to producers for a sustainable production.<br><br>Outcome 2.2: Other sustainable economic activities in the territory are supported and connected to market.<br><br>Outcome 2.3: Land users access financing to support conservation and sustainable natural resources management. | Positive:<br>1. Multi-sector interaction through commodities platforms.<br>2. Improvement of knowledge on financial models for conservation.<br>3. Inclusion of economic valuing of environmental benefits in initiatives to be implemented.<br>4. Leveraging of public and private funds in sustainable productive models with special attention to those that benefit women.<br>5. Influence in the improvement of environmental behavior among private companies (application of socio-environmental standards to receive loans, etc.).<br>6. Development of loan schemes and payments for environmental services that are friendly to the environment.<br>7. Promotion of sustainable platforms for emblematic products.<br>8. Generation of multi-actor consensus in platforms and roundtables.<br>9. Inclusion of sustainable premises in commitments between actors and in voluntary certifications.<br>Negative:<br>**1.** The financial entities give more importance to some commodities and leave others behind.<br>**2.** Prevalence of some products as compared to other less profitable ones that have a greater local tradition, which might alter local habits.<br>**3.** Marginalized and/or vulnerable groups can be excluded from participation processes and/or project benefits. |
| Outcome 3.1 Sustainable production models have been demonstrated to allow scaling up at landscape level.<br><br>Outcome 3.3 Restoration of landscapes and conservation programs with public and private participation.<br><br>Outcome 3.4 Knowledge is managed to support sustainable management of productive landscapes in the Peruvian Amazon.<br><br>Outcome 3.4 Sustainable land management models are disseminated to facilitate replication and scaling up of land sustainable use in the Peruvian Amazon (knowledge and communication management). | Positive:<br>1. Sustainable technical aid implementation.<br>2. Support to sustainable models and initiatives from local organizations, emphasizing those based on indigenous knowledge, particularly developed by women.<br>3. Improvement of production techniques in emblematic products.<br>4. Improvement of the environmental profitability of commercial products and green chains.<br>5. Restoration and conservation of degraded areas.<br>6. Strengthening of community productive and conservation initiatives established in the Life Plans, with emphasis on women's initiatives.<br>7. Conservation and reduction of deforestation pressures.<br>8. Dissemination of good practices and experiences, with special chapters that capture good intercultural and gender practices in the Project and the results they have had.<br>9. Replicability of techniques.<br><br>Negative:<br>1. Adverse social reaction to sustainable technical instruments due to potential increase in production costs.<br>2. Concentration of profits in few commodities. |

| Project Outcome | Potential social and environmental impacts |
|---|---|
| | 3. Potential marginalization of women's role in productive activities.<br>4. Potential cultural displacement by non-traditional productive activities.<br>5. Social adverse reaction to the sustainability instruments for increasing some production costs.<br>6. Conflicts between public institutions due to continuity of actions or due to actions that have not been appropriately coordinated. |
| | |

## IV. MITIGATION AND MANAGEMENT

### 4.1 MITIGATION AND MANAGEMENT MEASURES ACCORDING TO SESP RISKS

We now describe the mitigation and management measures during project design and implementation which results from applying the SESP.

**Table 4. Mitigation and management measures according to potential risks resulting from the SESP[45]**

| Identified potential risk (SES) | Management response (point out the corresponding phase and, if possible, timeframe) | Information / verification source | Roles and responsibilities |
|---|---|---|---|
| **Risk 1.5:** Possibility that warrantors of rights might not have the capacity to fulfill their obligations in the project. | 1. During design, baseline analysis and local governance to help determine the implementation technical and political scenario.<br>2. During design, open dialogue with local authorities to determine interests and needs regarding environmental, social, cultural and economic rights and duties.<br>3. Support local governance, implementation of policies and compliance with local and national regulations.<br>4. Technical contribution at regional and national level on subjects related to territory management and strengthening of competent authorities' capacities.<br>5. Advisory to relevant ministries and decision makers through analyses and studies to technically support decisions which are related to compliance with social and environmental safeguards.<br>6. Organization of inter-ministerial and participatory work tables to improve management by authorities. | Existing:<br>• Analysis and characterization of local institutionality and governance.<br>• Project baseline and key-player situational analysis besides coordination of stakeholder groups.<br>Pending:<br>• Definition of specific governance topics for work in ministerial platforms.<br>• Work plan with local authorities (according to activity location).<br>• Analysis of emerging political conflicts in the intervention area and capacity building plan for preventing and managing conflicts. | Management and implementation of actions: Project management<br>Project implementation and general ministerial integration: Steering Committee.<br>UNDP: Supervises and observes effectiveness of management measures to prevent and mitigate risks.<br>Regional Governments: To be defined.<br>Local Governments: To be defined. |
| **Risk 1.7:** Possibility that right bearers do not have the capacity to defend their rights. | 1. During design a poverty alleviation approach aimed at food security, sustainable production and conservation of natural resources is applied.<br>2. The Project will strengthen participation, dialogue and | Existing:<br>• Characterization of local institutionality and governance.<br>• Analysis of the current situation | Management and implementation of actions: Project Management.<br>Project implementation and general ministerial |

[45] See SESP annex, Part B, comment column which groups positive responses from the attached checklist.

| Identified potential risk (SES) | Management response (point out the corresponding phase and, if possible, timeframe) | Information / verification source | Roles and responsibilities |
|---|---|---|---|
| | governance mechanisms among actors. It includes institutional strengthening of local representative organizations.<br>3. The project will strengthen work with indigenous peoples and women: implementation of Life Plans including sustainability, and main interests and needs.<br>4. The project will foster and technically advise sustainable land planning and zoning with participatory and inclusive processes which will include rescuing women's knowledge and proposals.<br>5. The project will support indigenous peoples regarding territorial security in connection to community control and surveillance activities. | among vulnerable groups in the project intervention area.<br>Pending:<br>• Analysis and proposals to advocate for rights that might be affected according to activity development and implementation.<br>• Analysis of emerging political conflicts in the intervention area. | integration: Steering Committee.<br>UNDP: Supervises and observes effectiveness of management measures to prevent and mitigate risks.<br>Regional Governments: To be defined.<br>Local Governments: To be defined<br>INDIGENOUS ORGANIZATIONS: To be defined. |
| **Risk 2.2:** Possibility that the project may reproduce discrimination situations against women, particularly regarding their participation and access to opportunities, or that women receive adverse impacts due to the implementation of productive activities. | Design phase:<br>1. During design, perform an analysis of the current situation among vulnerable groups including a gender characterization in the project intervention area.<br>2. Baseline of productive activities and roles and potential of women regarding leadership and capacity to partner.<br>3. During design, include the women's interests and needs in project strategies.<br>4. Facilitate participation of women in workshops that contribute to project design.<br>5. The project will develop and implement a gender strategy and an involvement plan that includes the role of women.<br>6. The project includes specific actions of work with women obtained from their expression of interests, such as work with non-lumberable forest products and on agroforestry work.<br>7. Studies will be performed to analyze greater flexibility of requirements for access to loans.<br>8. The project will promote a gender-equitable approach in its policies and actions. In special situations applicability of potential discriminatory activities will be assessed and/or corrective measures will be applied.<br>9. The project will promote the participation of women and strengthening of their capacities | Existing:<br>• Gender strategy.<br>• Maps on natural resource tenure rights have been generated (by MINAGRI, MINAM, MINEM, MINCUL, etc.)<br>Pending:<br>• Specific social and environmental measures in the locations to prevent and mitigate risks with gender approach.<br>• Field work reports on activities with social actors, with broken down gender indicators to measure effective women presence and participation.<br>• Technical studies to analyze possible overlaps between territories and rights and other pre-existing resources. | Management and implementation of actions: Project Management.<br>Project implementation and general ministerial integration: Steering Committee.<br>UNDP: Supervises and observes effectiveness of management measures to prevent and mitigate risks.<br>Regional Governments: Communication of interests and potential problems.<br>Local Governments: Communication of interests and potential problems.<br>INDIGENOUS ORGANIZATIONS: Communication of interests and potential problems. |

| Identified potential risk (SES) | Management response (point out the corresponding phase and, if possible, timeframe) | Information / verification source | Roles and responsibilities |
|---|---|---|---|
| | through activities and training aimed at forest management and facilitation of their participation in implementation processes and workshops, exchange of experiences and traineeships.<br>10. Involve a specialist on gender issues so he/she provides the project with technical support. | | |
| **Risk 2.3** Women's groups/leaders have raised gender equality concerns regarding the Project during the stakeholder engagement process. Has this been included in the overall project proposal and in the risk assessment? | - The PPG have promoted women participation through specific workshops and exchanges of experiences.<br>- Gender analysis has been carried out to identify gender gaps. Gender strategy has been developed during the PPG<br>- The Project Outcome Framework has a gender equity approach<br>- The project also takes into account youth and the opportunity to engage youth in restoration activities, as well as economic diversification.<br>- The project takes measures to ensure cross-cutting gender issues | Existing:<br>• Gender strategy.<br>• Plans for women participation in the project.<br>Pending:<br>• Specific social and environmental measures in the locations to prevent and mitigate risks with gender approach.<br>• Field work reports with local actors, with gender indicators to measure effective presence and participation of women.<br>• Technical studies to analyze possible overlaps between territories and rights and other pre-existing resources. | Management and implementation of actions: Project Management.<br>Project implementation and general ministerial integration: Steering Committee.<br>UNDP: Supervises and observes effectiveness of management measures to prevent and mitigate risks. |
| **Risk 3.1.2:** Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities | - The Project will support actions to control adverse land use changes and reduce deforestation caused by productive activities, and promote compatible activities and forest conservation on NPA buffer areas.<br>- The Project will carry out analyses and actions in support of the implementation of good practices to reduce the agricultural frontier.<br>- The Project will ensure the involvement of competent authorities and of key actors in the definition of restrictions on access to resources, in order to minimize impacts on stakeholders' interests.<br>- The Project will be associated with recognized organizations specialized in issues of protected areas. | The target areas are located on NPA buffer zones. The project focuses on conservation, restoration and sustainable use of Productive Landscapes. Activities in all components are developed and implemented in conjunction with local communities to strengthen their capacity to manage these resources and ensure sustainability. | Management and implementation of actions: Project Management.<br>Project implementation and general ministerial integration: Steering Committee.<br>UNDP: Supervises and observes effectiveness of management measures to prevent and mitigate risks. |

| Identified potential risk (SES) | Management response (point out the corresponding phase and, if possible, timeframe) | Information / verification source | Roles and responsibilities |
|---|---|---|---|
| **Risk 3.1.6;** Does the Project involve harvesting of natural forests, plantation development, or reforestation? | - The Project will support land use planning, ministerial plans and natural resource management with an eco-systemic approach, in order to minimize restrictions on land and resource uses on which local livelihoods depend.<br>- The Project will emphasize environmental sustainability within ministerial policies and actions, and the inclusion of good practices in the management of products such as oil palm and cacao, in order to avoid promoting land use change.<br>- Pilot models to be applied will be based on productive sustainability<br>- Ministerial policies to be supported will include approaches that consider socio-environmental safeguards.<br>- The Project includes actions related to the use, management and restoration of forests, which may limit access to forest areas and reduce opportunities for informal actors to use them as means of livelihood support. | - Commodity action plan and other NTF follow environmental sustainability criteria.<br>- Reforestation of forest areas will be done with native species. | Management and implementation of actions: Project Management.<br>Project implementation and general ministerial integration: Steering Committee<br>Project implementation advisory and supervision: Steering Committee.<br>Interaction: Professional organizations, producer associations, indigenous and women representatives.<br>UNDP: Supervises and observes effectiveness of management measures to prevent and mitigate risks. |
| Risk 6.1. The Project is located in a complex area where several INDIGENOUS PEOPLES are present | - The Project will advise relevant sectors and decision makers, through analyses and studies to support decisions on technical aspects and related to compliance with socio-environmental safeguards.<br>- The Project will organize working mechanisms to support dialogue on the interests of key stakeholders.<br>- The project will support the design and implementation of life plans among indigenous communities, with a gender focus.<br>- The project will ensure that civil servants, indigenous peoples and other relevant actors apply the interculturality approach. | - Actor involvement plan at subnational level and indigenous peoples' participation plan.<br>- Analysis of the current situation of vulnerable groups in the project intervention area.<br>- Specific measures to prevent and mitigate risks according to further identification of places and actors. | Management and implementation of actions: Project Management.<br>Project implementation and general ministerial integration: Steering Committee<br>Project implementation advisory and supervision: Steering Committee.<br>Interaction: Professional organizations, producer associations, indigenous and women representatives.<br>UNDP: Supervises and observes effectiveness of management measures to prevent and mitigate risks. |

| Identified potential risk (SES) | Management response (point out the corresponding phase and, if possible, timeframe) | Information / verification source | Roles and responsibilities |
|---|---|---|---|
| Risk 6.2 Are the Project or portions of the Project likely to be located on lands and territories claimed by indigenous peoples? | - Studies and activities will be implemented to support the Cacatiabo declaration, taking into account its socio-environmental safeguards.<br>- Other projects implemented by UNDP act on the area. 3 communities have applied for their deeds. The UNDP DCI project is in the diagnostic phase on two applications (Cacatiabo and Shipibo). While the MDE Saweto project would take care of the remaining community. | - Actor involvement plan at subnational level and indigenous peoples' participation plan.<br>- Analysis of the current situation of vulnerable groups in the project intervention area.<br>- Specific measures to prevent and mitigate risks according to further identification of places and actors. | Management and implementation of actions: Project Management.<br>Project implementation and general ministerial integration: Steering Committee<br>Project implementation advisory and supervision: Steering Committee.<br>Interaction: Professional organizations, producer associations, indigenous and women representatives.<br>UNDP: Supervises and observes effectiveness of management measures to prevent and mitigate risks. |
| **Risk 6.3:** Possibility that the project may adversely impact enjoyment of political, economic and cultural rights of marginalized population, indigenous peoples, subsistence farmers and/or that it might produce economic displacement. | 1. During design, include participatory consultation on needs and interests, at meetings, field visits, documentation analyses and specialized workshops.<br>2. During design, involve key national, regional and local organizations to develop project strategies and reach agreements before they are implemented.<br>3. Comply with relevant domestic and international environmental legislation.<br>4. Implement plans to ensure adequate representation of key organizations that participate in the project, considering indigenous peoples and women.<br>5. Promote spaces at national and regional level through ministerial work platforms with the main stakeholders (governmental and non-governmental) to develop capacities related to harmonization of public policies or management instruments to be generated and that might affect some actors.<br>6. Implement studies and activities to generate knowledge on | Existing:<br>• Actor involvement plan at subnational level and indigenous peoples' participation plan.<br>• Analysis of the current situation of vulnerable groups in the project intervention area.<br>• Minutes and lists of participants in workshops and meetings with key actors, indigenous groups and other relevant actors.<br>Pending:<br>• List of actors or beneficiaries with which to implement the project's proposed activities.<br>• List of key associations and/or organizations, or their representatives | Management and implementation of actions: Project Management.<br>Project implementation and general ministerial integration: Steering Committee<br>Project implementation advisory and supervision: Steering Committee.<br>Interaction: Professional organizations, producer associations, indigenous and women representatives.<br>UNDP: Supervises and observes effectiveness of management measures to prevent and mitigate risks. |

| Identified potential risk (SES) | Management response (point out the corresponding phase and, if possible, timeframe) | Information / verification source | Roles and responsibilities |
|---|---|---|---|
| | managing resources and on their relationship with key actors, including the use of socio-environmental safeguards.<br>7. Implementation of forest planning will include inter-ministerial, participatory and inclusive models applied to all key actors.<br>8. When applicable and following requests, evaluate Free and Informed Prior Consent process relevance. | with which agreements, partnerships and others will be signed.<br>• Specific measures to prevent and mitigate risks according to further identification of places and actors. | |
| **Risk 2.3** Possibility that the project may exclude potential key actors or marginalized groups, such as indigenous peoples from participating in decision making or during the process of involving actors or that they are not benefited by the activities (as might be case of indigenous peoples and women). | 1. During design, identify specific exclusion risks for marginalized and/or vulnerable groups.<br>2. Project key actors, including indigenous peoples (through their organizations) have participated in designing and generating project strategies to ensure inclusion of their needs and interests.<br>3. Involve indigenous peoples and women in revision and dialogue regarding project strategies within the framework of the project's consulting committee.<br>4. Directly involve other actors that might be affected by project activities through participatory processes to do follow up to their interests and needs.<br>5. Involve representative national indigenous organizations (AIDESEP and CONAP) to regular project follow up and relevant work platforms including -according to work level- the Ucayali and Huánuco regional indigenous organizations.<br>6. The project will support local authority governance actions and will coordinate with indigenous representatives to look after respect for their rights.<br>7. The subnational actor involvement plan, the indigenous peoples' participation plan and the gender strategy will respect the rights of different actors.<br>8. Involve a specialist on social/gender/indigenous peoples issues to provide the project with technical support. | Existing:<br>• Actor involvement plan at subnational level and indigenous peoples' participation plan.<br>• Plans to involve indigenous peoples and gender in different ministries.<br>Pending:<br>□ Specific impacts per locality and actor depending on which activity implementation will be devised.<br>□ Specific measures in the different locations to prevent and mitigate risks.<br>Minutes and lists of participants in workshops and meetings with groups of relevant actors, indigenous peoples and women. | Management and implementation of actions: Project Management.<br>Project implementation and general ministerial integration: Steering Committee<br>Project implementation advisory and supervision: Steering Committee.<br>Interaction: Professional organizations, producer associations, indigenous and women representatives.<br>UNDP: Supervises and observes effectiveness of management measures to prevent and mitigate risks. |
| **Risk 6.5:** Possibility that the project might worsen conflicts between affected communities and individuals. | 1. Baseline and local governance analysis to help determine the technical and political implementation scenario.<br>2. Project activities follow a participatory process and there | Existing:<br>□ List of relevant local authorities, local communities and native communities. | Management and implementation of actions: Project Management.<br>Project implementation and general ministerial |

| Identified potential risk (SES) | Management response (point out the corresponding phase and, if possible, timeframe) | Information / verification source | Roles and responsibilities |
|---|---|---|---|
| | will be a validation process of key actors identified for the project.<br>3. Decisions to be assumed contain technical, sustainable and participatory criteria within the established legal framework.<br>4. Actor participation plans and complaint and suggestions mechanisms are developed.<br>5. Application of coordinated planning to prevent conflicts among actors, particularly on land planning and natural resource management.<br>6. Places and pilots of activities will be determined following a previous analysis with the actors.<br>7. Generation of multi-actor spaces to discuss, fine tune and do follow up to project actions and strategies.<br>8. Carry out key technical studies on the use of resources, land tenure and territory titling in pilot local and native communities in the project intervention area to help identify and tackle with potential conflicts regarding use of natural resources.<br>9. Support dispute settlement activities in the ground (involving local authorities).<br>10. Key ministry representatives will be invited to participate in all the project implementation process to ensure work transparency.<br>11. Local government representatives will lead the processes within the framework of concerted plans.<br>12. Involve a specialist on social/gender/indigenous peoples issues to provide the project with technical support. | • Project participation plans.<br>□ Maps on natural resource tenure rights have been generated (by MINAGRI, MINAM, MINEM, MINCUL, etc.)<br>Pending:<br>□ Specific social and environmental measures in the locations to prevent and mitigate risks.<br>□ Field work reports with local actors.<br>□ Technical studies to analyze possible overlaps between territories and rights and pre-existing resources. | integration: Steering Committee<br>UNDP: Supervises and observes effectiveness of management measures to prevent and mitigate risks<br>Regional Governments: Communication of interests and potential problems.<br>Local Governments: Communication of interests and potential problems<br>Indigenous Organizations: Communication of interests and potential problems. |
| **Risk 6.5** Potential changes in land use and resources that might affect livelihoods | 1. Knowledge and analysis of land use and changes of land use in the project intervention area.<br>2. During design, identify key specialized partners for joint work in managing the territory and natural resources.<br>3. Participatory approach in project strategy design to prevent affecting livelihoods.<br>4. Application of a sustainable approach to support and facilitate actions that do not promote an adverse change to land use.<br>5. Focus on putting a break to deforestation agents and on promoting sustainable economic and productive activities that are | Existing:<br>• Baseline on land use.<br>• Deforestation maps in the project area.<br>• Maps on natural resource tenure rights have been generated (by MINAGRI, MINAM, MINEM, MINCUL, etc.).<br>• List of organizations that have been | Management and implementation of actions: Project Management.<br>Project implementation and general ministerial integration: Steering Committee<br>UNDP: Supervises and observes effectiveness of management measures to prevent and mitigate risks<br>Regional Governments: |

| Identified potential risk (SES) | Management response (point out the corresponding phase and, if possible, timeframe) | Information / verification source | Roles and responsibilities |
|---|---|---|---|
| | compatible with forest and natural resource conservation.<br>6. Analyses and actions will be carried out to implement good practices such as sustainable crop certification.<br>7. Competent authorities and key actors will be involved in determining restriction of access to resources to guarantee not affecting their interests or at least minimize such possibility.<br>8. The project will partner with acknowledged organizations specialized on protected areas.<br>9. Dialogue, work tables and participation of actors to guarantee not affecting their interests or at least minimize affecting their interests and livelihoods.<br>10. Fix a mechanism to report land use changes and deforestation before local and national authorities. | identified as key partners.<br>Pending:<br>• Updating of land and resource use changes in the project intervention and localities.<br>Reports and early alerts concerning land use changes. | Deforestation alerts and reports.<br>Local Governments: Alerts and reports on land use change.<br>Indigenous Organizations: Territorial security alerts and reports.<br>MINAM: Process follow up.<br>MINAGRI: Process follow up. |
| **Risk 6.5:** The project might result in secondary development activities (such as productive crops) that might cause adverse social and environmental effects or that might generate cumulative impacts with activities that are currently being developed in the area. | 1. Knowledge and analysis of land use and land use changes in the project intervention area.<br>2. Social and productive baseline to determine activities.<br>3. Multi-actor design of intervention strategies to detect previous effects.<br>4. Analyze collateral effects of land planning and natural resource management to minimize restrictions on land and resource use which relate to livelihoods in project locations.<br>5. The project will emphasize sustainable policies and actions and inclusion of good practices for managing products such as oil palm and cacao so as not to encourage land use changes.<br>6. Analyze the impact and cumulative effect of implementing policies or incentives related to emblematic productive crops in the area.<br>7. Emphasize sustainable policies and actions and inclusion of good practices in managing crops such as oil palm and cacao.<br>8. Productive-sustainable approach in all project pilots.<br>9. Include policies and approach that consider social environmental safeguards. | Existing:<br>• Baseline on productive crops in the area.<br>• Farming census.<br>• Needs and interests of productive and vulnerable actors.<br>Pending:<br>• Updating of land and resource use changes in the project intervention localities.<br>Analysis of policy implementation and projections. | Management and implementation of actions: Project Management.<br>Project implementation and general ministerial integration: Steering Committee<br>UNDP: Supervises and observes effectiveness of management measures to prevent and mitigate risks<br>Regional Governments: Deforestation alerts and reports.<br>Local Governments: Alerts and reports on land use change.<br>Indigenous Organizations: Territorial security alerts and reports.<br>MINAM: Process follow up.<br>MINAGRI: Process follow up. |
| **Risk 6.9.** Possibility that some economic | 1. Participatory consultation with indigenous organizations | Existing: | Management and implementation of |

| Identified potential risk (SES) | Management response (point out the corresponding phase and, if possible, timeframe) | Information / verification source | Roles and responsibilities |
|---|---|---|---|
| incentives might affect the use of natural resources in indigenous peoples' lands and that the activities may affect the traditional ways of life, culture and traditional practices of indigenous peoples (for example changes in crop types). | regarding needs and interests during meetings and specialized workshops.<br>2. Involve national, regional and local indigenous representatives for contributions to project design and implementation.<br>3. Develop work strategies and plans with indigenous peoples and women.<br>4. Promote and include social, environmental and cultural sustainability issues through implementation of indigenous peoples Life Plans.<br>5. Traditional cultural activities and practice will be promoted, as identified by the indigenous peoples themselves, tending to preserve and safeguard traditional knowledge.<br>6. Facilitate effective participation of indigenous peoples through their representative organizations.<br>7. Document traditional physical and spiritual practices to preserve ancestral knowledge.<br>8. Involve a specialist on social/gender/indigenous populations issues to supply the project with technical support.<br>9. When applicable and following request, evaluate Free and Informed Prior Consent process relevance. | • Indigenous peoples' participation plan.<br>• Analysis of the current situation of vulnerable groups in the project intervention area.<br>• Minutes of meetings with participants of workshops with indigenous groups.<br>Pending:<br>□ Analysis of impacts that might come up from implementing activities.<br>□ Minutes of workshops and work meetings.<br>Reports for dissemination of traditional knowledge in the project area. | actions: Project Management.<br>Project implementation and general ministerial integration: Steering Committee.<br>UNDP: Supervises and observes effectiveness of management measures to prevent and mitigate risks<br>Regional Governments: Deforestation alerts and reports<br>Local Governments: Land use change alerts and reports<br>Indigenous Organizations: Territorial security alerts and reports.<br>MINAM: Process follow up<br>MINAGRI: Process follow up. |

### 4.2 MONITORING AND REPORTING

The following are monitoring and reporting measures to be implemented in the project.

**Table 5. Monitoring and reporting measures**

| Monitoring Activity | Purpose | Frequency | Expected Action | Responsible entity and communication |
|---|---|---|---|---|
| Implementation follow up of the Environmental and Social Management Plan (ESMP) | Compliance with mitigation measures, including participatory processes.<br>If there are changes in the SESP, they have to be reported to the project management in the biannual reports. | Quarterly and biannually | Follow up according to project indicators.<br>Feasible application of actions.<br>Hiring of specialists for management actions. | Project management<br>MINAM<br>MINAGRI<br>UNDP<br>Indigenous organizations |
| Evaluation and feedback | Analysis of effects, collection of emerging risks and lessons learned on social and environmental risk management for feedback and/or new planning, in | Biannual and annual | Relevant lessons are recorded by the project team according to categories and affected groups and | Project technical team.<br>MINAM<br>UNDP |

| Monitoring Activity | Purpose | Frequency | Expected Action | Responsible entity and communication |
|---|---|---|---|---|
| | participatory way with counterparts and indigenous organizations. | | are used to inform management decisions. | Indigenous organizations |
| Revision, immediate corrections and continuous improvement | Internal revision of data and evidence of actions, complaint management for informing, correcting and/or adjusting decision making. | Annual | Data, evidence, records, claims or complaints collection will be reported by the technical team. | Project Management.<br>MINAM<br>UNDP |
| Comprehensive revision and project performance | The project management will carry out an annual comprehensive revision to update information and review effects caused by implementing the project. If such is the case, new recommendations will be developed and/or the proposed activities will be redirected according to social environmental safeguards. | Annual | Prevent potential emerging impacts, and integrate, if such is the case, the new social context of the implementation area. | Project management<br>Project Steering Committee<br>UNDP |
| Project Report | Written report addressed to the Project Steering Committee (and other stakeholders). Analysis and recommendations will be included for managing social and environmental risks. | Annual<br>Project end | Systematization of actions, communication and inclusion in the project final report. | Project management |
| Dissemination | Public report to key actors. | Annual | Brief presentation of the report to key actors. | Project management |

### 4.3 CAPACITY BUILDING

The project's Steering Committee will be responsible for guiding implementation and giving mitigation recommendations. The recommendations shall take into account the particular needs of key actors, including vulnerable populations (i.e., indigenous peoples and women, among others).

### 4.4 ACTOR INVOLVEMENT

The issue of actor involvement is fundamental to achieve project outcomes and develop activities to be implemented.

Due to its importance in project implementation, the issue of actor involvement will be devised in analyses and proposals highlighted within the actor involvement plan at national and subnational levels, in the participation plan for indigenous peoples and in a specific gender strategy for the project that will be applied during the implementation phase.

### 4.5 MECHANISM TO DEAL WITH COMPLAINTS AND SUGGESTIONS

A grievance mechanism will be developed to deal with complaints, claims and suggestions, which will be assumed as useful knowledge for the project. It will also be used for continuous improvement and to prevent conflicts that project actions might generate.

The mechanism to deal with complaints is included and articulated in the Ministry of Environment's claim mechanism to be implemented for project management. Therefore, complaints, claims and suggestions will be dealt with at the ministry level with more comprehensive and cross-cutting management. The project will make sure that the relevant actors and potentially affected indigenous peoples be made aware of said mechanisms and that they have proper access to them.

The specific grievance mechanism for the project is outlined under the following methodology, which will be adapted to the ministry mechanism when it starts operating.

**Methodology**
The following is the methodology to be considered when dealing with complaints, claims and suggestions.

- Complaints/claims/suggestions will be initially directed to the technical level closer to the received impact. If resolution is possible and reaction is easy, it can be solved at this technical level.
- When the complaint/claim/suggestion is difficult for the technical level to react and/or alters the activities proposed in the project, it shall be communicated and managed at Management or Steering Committee level, which will make a decision on the action.
- If the complaint/claim/suggestion refers to the project implementation concept, it will be addressed to the project Steering Committee and the national ministerial mechanisms will be used for its resolution.

Description of complaint resolution will be as follows:

1. **Project Management/Coordination receives and records complaints**
When it is difficult for the technical level to deal with the complaint, the affected party (or the party that wants to give a suggestion) should approach the project Coordination, which must record the complaint in writing,be proactive, and act to provide a solution with the aid of the technical team and do follow up to possible related social and environmental risks. The project technical team must also include the complaints within their reports. Complaint records should be accessible to the project's Steering Committee members.

2. **Project Manager registers complaint and channels to appropriate government agency**
In case the Project Coordination team cannot handle the complaint, they will communicate it to the Steering Committee. According to the latter's decision, the complaint will be channeled to the technically responsible ministry or public entity (for example, Ministry of Environment, Ministry of Agriculture, Regional Government, local governments, etc.). Likewise, the Technical Coordination will take note of adopted measures and corresponding details (when, whose, where, etc.) and communicate to the affected party both orally and in writing the action or actions to be taken.

3. **Domestic body responsible for proposing response in collaboration with pertinent entities**
The technically responsible public entity will manage the complaints received from the Coordination according to the Peruvian legal framework. The action taken will be communicated by the public entity to the project Coordination and directly to the potentially affected party. The Coordination must keep conversations open.

4. **Available options and independent mediation**
If the affected party determines that the complaint has not been appropriately dealt with, he/she will communicate this to the project Coordination. When the Coordination receives this communication, it will channel the complaint to the project Steering Committee that will make a decision on the steps to be followed.

If the project Steering Committee cannot resolve the complaint, an external arbitration or resolution will be involved, such as the Ombudsman's Office. Finally, the affected or damaged party will have the option of submitting the complaint to UNDP's Stakeholder Response Mechanism - SRM. See www.undp.org/srm. Access to UNDP's Social and Environmental Compliance Unit (SECU) is also available. See www.undp.org/secu. It can also use any other domestic or international mechanism.

The following is the flowchart for dealing with complaints and suggestions.

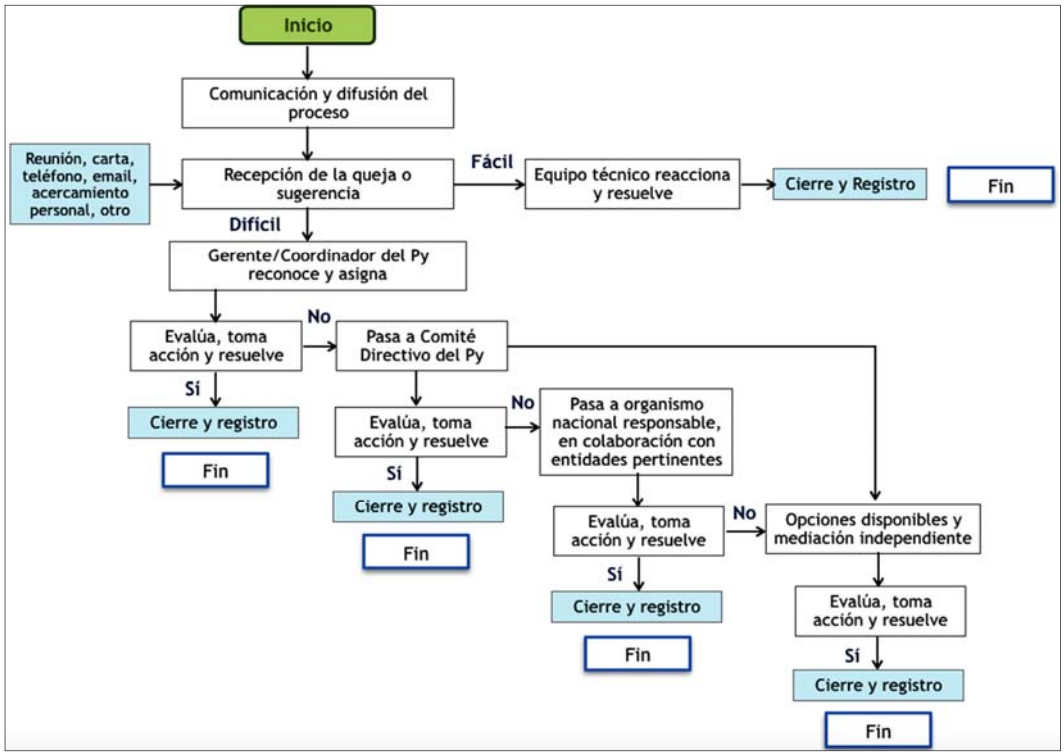



Figure 1. Complaint and suggestion mechanism for the project
Source: Prepared by the authors

**Legend:**

| | |
|---|---|
| Inicio: start | Comunicación y diffusion del proceso: process communication and dissemination |
| Reunión, carta, teléfono, email, acercamiento personal, otro: meeting, letter, phone, email, face-to-face meeting, other | Recepción de la queja o sugerencia: reception of the complaint or suggestion |
| Fácil: easy | Equipo técnico reacciona y resuelve: technical team reacts and resolves |
| Cierre y registro: closing and recording | Fin: end |
| Difícil: difficult | Gerente/coordinador del Py reconoce y asigna: project manager/coordinator acknowledges and assigns |
| Sí: yes | Evalúa, toma acción y resuelve: evaluates, takes action and resolves |
| Pasa a organism nacional responsible, en colaboración con entidades pertinentes: goes to the national body responsible for it in collaboration with pertinent entities | Opciones disponibles y mediación independiente: available options and independent mediation |

## V. FINAL CONCLUSIONS AND RECOMMENDATIONS

1. The resulting risk level following application of SESP to the project is “MODERATED”.
2. Mitigation measures were applied as from the design phase. The measures have to be updated during the implementation phase.
3. Implementation of mitigation and management measures contributes to prevent and minimize potential risks.

Some additional recommendations are:

1. Once the exact location is identified for carrying out project activities and pilots, an analysis of relevant specific impacts should be performed according to the risks described in this document.

2. There are Indigenous Peoples in Isolation and Initial Contact (IPIIC) in the project intervention area. These are included in the proposal for territorial reserves for not contacted indigenous peoples of the Cacatiabo group, which are divided in north and south. The work initiative with this non-contacted indigenous group has been assumed by the UNDP's Resilient Amazon project. It is recommended to constantly coordinate with implementers so as to propertly coordinate actions and not to overlap efforts. The north and south proposals should also be verified within the work approach.
3. Once the structure and organization has been devised for implementing the PPS Project, it is recommended to update the responsibilities and details of this Environmental and Social Management Plan.

**H. UNDP Project Quality Assurance Report (to be completed by UNDP Country Office)**

# PROJECT QA ASSESSMENT: DESIGN AND APPRAISAL

## OVERALL PROJECT

| EXEMPLARY (5) ◉◉◉◉◉ | HIGHLY SATISFACTORY (4) ◉◉◉◉○ | SATISFACTORY (3) ◉◉◉○○ | NEEDS IMPROVEMENT (2) ◉◉○○○ | INADEQUATE (1) ◉○○○○ |
|---|---|---|---|---|
| At least four criteria are rated Exemplary, and all criteria are rated High or Exemplary. | All criteria are rated Satisfactory or higher, and at least four criteria are rated High or Exemplary. | At least six criteria are rated Satisfactory or higher, and only one may be rated Needs Improvement. The SES criterion must be rated Satisfactory or above. | At least three criteria are rated Satisfactory or higher, and only four criteria may be rated Needs Improvement. | One or more criteria are rated Inadequate, or five or more criteria are rated Needs Improvement. |

## DECISION

- **APPROVE** – the project is of sufficient quality to continue as planned**.** Any management actions must be addressed in a timely manner.
- **APPROVE WITH QUALIFICATIONS** – the project has issues that must be addressed before the project document can be approved. Any management actions must be addressed in a timely manner.
- **DISAPPROVE** – the project has significant issues that should prevent the project from being approved as drafted.

## RATING CRITERIA

## STRATEGIC

| | | |
|---|---|---|
| **1. Does the project's Theory of Change specify how it will contribute to higher level change? (Select the option from 1-3 that best reflects the project):**<br>• **3:** The project has a theory of change with explicit assumptions and clear change pathway describing how the project will contribute to outcome level change as specified in the programme/CPD, backed by credible evidence of what works effectively in this context. The project document clearly describes why the project's strategy is the best approach at this point in time.<br>• **2:** The project has a theory of change. It has an explicit change pathway that explains how the project intends to contribute to outcome-level change and why the project strategy is the best approach at this point in time, but is backed by limited evidence.<br>• **1:** The project does not have a theory of change, but the project document may describe in generic terms how the project will contribute to development results, without specifying the key assumptions. It does not make an explicit link to the programme/CPD's theory of change.<br>*Note: Management Action or strong management justification must be given for a score of 1 | **3** | 2 |
| | 1 | |
| | **Evidence**<br>The project design considers a Theory of Change in its strategy. | |
| **2. Is the project aligned with the thematic focus of the UNDP Strategic Plan? (select the option from 1-3 that best reflects the project):**<br>• **3:** The project responds to one of the three areas of development work[46] as specified in the Strategic Plan; it addresses at least one of the proposed new and emerging areas[47]; an issues-based analysis has been incorporated into the project design; and the project's RRF includes all the relevant SP output indicators. *(all must be true to select this option)*<br>• **2:** The project responds to one of the three areas of development work[1] as specified in the Strategic Plan. The project's RRF includes at least one SP output indicator, if relevant. *(both must be true to select this option)*<br>• **1:** While the project may respond to one of the three areas of development work[1] as specified in the Strategic Plan, it is based on a sectoral approach without addressing the complexity of the development | **3** | 2 |
| | 1 | |
| | **Evidence**<br>The project promotes sustainable productive landscapes and sustainable use of natural resources and biodiversity attending to Sustainable | |

[46] 1. Sustainable development pathways; 2. Inclusive and effective democratic governance; 3. Resilience building

[47] sustainable production technologies, access to modern energy services and energy efficiency, natural resources management, extractive industries, urbanization, citizen security, social protection, and risk management for resilience

| | |
|---|---|
| issue. None of the relevant SP indicators are included in the RRF. This answer is also selected if the project does not respond to any of the three areas of development work in the Strategic Plan. | Development Pathways Area, the project aims strengthen national and sub-national technical and institutional capacities and policies to further low emissions, climate resilient development \ |
| **RELEVANT** | |
| **3. Does the project have strategies to effectively identify, engage and ensure the meaningful participation of targeted groups/geographic areas with a priority focus on the excluded and marginalized? (select the option from 1-3 that best reflects this project):**<br>• **3:** The target groups/geographic areas are appropriately specified, prioritising the excluded and/or marginalised. Beneficiaries will be identified through a rigorous process based on evidence (if applicable). The project has an explicit strategy to identify, engage and ensure the meaningful participation of specified target groups/geographic areas throughout the project, including through monitoring and decision-making (such as representation on the project board) *(all must be true to select this option)*<br>• **2:** The target groups/geographic areas are appropriately specified, prioritising the excluded and/or marginalised. The project document states how beneficiaries will be identified, engaged and how meaningful participation will be ensured throughout the project. *(both must be true to select this option)*<br>**1:** The target groups/geographic areas are not specified, or do not prioritize excluded and/or marginalised populations. The project does not have a written strategy to identify or engage or ensure the meaningful participation of the target groups/geographic areas throughout the project.<br>*Note: Management Action must be taken for a score of 1, or select not applicable. | **3** 2<br>1<br>*Select (all) targeted groups:*<br>*Producers,*<br>*Families*<br>*Indigenous people and its organization*<br><br>**Evidence**<br>The Results Framework includes relevant outputs and indicators which attend to the beneficiaries with gender and indigenous people focus. The project will ensure that target groups are engaged in decision making for the project |
| **4. Have knowledge, good practices, and past lessons learned of UNDP and others informed the project design? (select the option from 1-3 that best reflects this project):**<br>• **3:** Knowledge and lessons learned (gained e.g. through peer assist sessions) backed by credible evidence from evaluation, corporate policies/strategies, and monitoring have been explicitly used, with appropriate referencing, to develop the project's theory of change and justify the approach used by the project over alternatives.<br>• **2:** The project design mentions knowledge and lessons learned backed by evidence/sources, which inform the project's theory of change but have not been used/are not sufficient to justify the approach selected over alternatives.<br>• **1:** There is only scant or no mention of knowledge and lessons learned informing the project design. Any references that are made are not backed by evidence.<br>*Note: Management Action or strong management justification must be given for a score of 1 | **3** 2<br>1<br>**Evidence**<br>The project design has considered an outcome (3.4) on Knowledge management and lessons learned on sustainable productive landscapes |
| **5. Does the project use gender analysis in the project design and does the project respond to this gender analysis with concrete measures to address gender inequities and empower women? (select the option from 1-3 that best reflects this project):**<br>• **3:** A participatory gender analysis on the project has been conducted. This analysis reflects on the different needs, roles and access to/control over resources of women and men, and it is fully integrated into the project document. The project establishes concrete priorities to address gender inequalities in its strategy. The results framework includes outputs and activities that specifically respond to this | 3 **2**<br>1<br>**Evidence**<br>The project design has consider Gender analysis |

| | |
|---|---|
| gender analysis, with indicators that measure and monitor results contributing to gender equality. *(all must be true to select this option)*<br>• **2:** A gender analysis on the project has been conducted. This analysis reflects on the different needs, roles and access to/control over resources of women and men. Gender concerns are integrated in the development challenge and strategy sections of the project document. The results framework includes outputs and activities that specifically respond to this gender analysis, with indicators that measure and monitor results contributing to gender equality. *(all must be true to select this option)*<br>• **1:** The project design may or may not mention information and/or data on the differential impact of the project's development situation on gender relations, women and men, but the constraints have not been clearly identified and interventions have not been considered.<br>*Note: Management Action or strong management justification must be given for a score of 1 | and Gender strategy, the frame log considers outcomes (1.2) and outputs (1.2.3, 3.2,3.2.2, 3.4.1 ) and activities which contribute to gender equality |
| **6. Does UNDP have a clear advantage to engage in the role envisioned by the project vis-à-vis national partners, other development partners, and other actors? (select from options 1-3 that best reflects this project):**<br>• **3:** An analysis has been conducted on the role of other partners in the area where the project intends to work, and credible evidence supports the proposed engagement of UNDP and partners through the project. It is clear how results achieved by relevant partners will contribute to outcome level change complementing the project's intended results. If relevant, options for south-south and triangular cooperation have been considered, as appropriate. *(all must be true to select this option)*<br>• **2:** Some analysis has been conducted on the role of other partners where the project intends to work, and relatively limited evidence supports the proposed engagement of and division of labour between UNDP and partners through the project. Options for south-south and triangular cooperation may not have not been fully developed during project design, even if relevant opportunities have been identified.<br>• **1:** No clear analysis has been conducted on the role of other partners in the area that the project intends to work, and relatively limited evidence supports the proposed engagement of UNDP and partners through the project. There is risk that the project overlaps and/or does not coordinate with partners' interventions in this area. Options for south-south and triangular cooperation have not been considered, despite its potential relevance.<br>*Note: Management Action or strong management justification must be given for a score of 1 | **3** 2<br>1<br>**Evidence**<br>The national and subnational partners have participated in the project design and have assumed ownership of the expected results of the project. South-south cooperation through GEF Amazon Program (WB- Brasil and Colombia) |
| **SOCIAL & ENVIRONMENTAL STANDARDS** | |
| **7. Does the project seek to further the realization of human rights using a human rights based approach? (select from options 1-3 that best reflects this project):**<br>• **3:** Credible evidence that the project aims to further the realization of human rights, upholding the relevant international and national laws and standards in the area of the project. Any potential adverse impacts on enjoyment of human rights were rigorously identified and assessed as relevant, with appropriate mitigation and management measures incorporated into project design and budget. *(all must be true to select this option)*<br>• **2:** Some evidence that the project aims to further the realization of human rights. Potential adverse impacts on enjoyment of human rights were identified and assessed as relevant, and appropriate mitigation and management measures incorporated into the project design and budget.<br>• **1:** No evidence that the project aims to further the realization of human rights. Limited or no evidence that potential adverse impacts on enjoyment of human rights were considered.<br>*Note: Management action or strong management justification must be given for a score of 1 | 3 **2**<br>1<br>**Evidence**<br>Social and Environmental standards |
| **8. Did the project consider potential environmental opportunities and adverse impacts, applying a precautionary approach? (select from options 1-3 that best reflects this project):**<br>• **3:** Credible evidence that opportunities to enhance environmental sustainability and integrate poverty-environment linkages were fully considered as relevant, and integrated in project strategy and design. Credible evidence that potential adverse environmental impacts have been identified and rigorously assessed with appropriate management and mitigation measures incorporated into project design and budget. *(all must be true to select this option).*<br>• **2:** No evidence that opportunities to strengthen environmental sustainability and poverty-environment linkages were considered. Credible evidence that potential adverse environmental impacts have been identified and assessed, if relevant, and appropriate management and mitigation measures incorporated into project design and budget.<br>• **1:** No evidence that opportunities to strengthen environmental sustainability and poverty-environment linkages were considered. Limited or no evidence that potential adverse environmental impacts were adequately considered. | **3** 2<br>1<br>**Evidence**<br>The process of land titling will as a preliminary step prepare technical studies of ZEE and Micro ZEE, classifying soil types, maps, analysis of possible overlaps, socioeconomic censuses, among |

| | | |
|---|---|---|
| *Note: Management action or strong management justification must be given for a score of 1 | others. The project considers strategies and activities to reduce adverse impacts. | |
| **9. Has the Social and Environmental Screening Procedure (SESP) been conducted to identify potential social and environmental impacts and risks?** The SESP is not required for projects in which UNDP is Administrative Agent only and/or projects comprised solely of reports, coordination of events, trainings, workshops, meetings, conferences and/or communication materials and information dissemination. [if yes, upload the completed checklist. If SESP is not required, provide the reason for the exemption in the evidence section.] | **Yes** | No |
| | SESP Anexed | |
| **MANAGEMENT & MONITORING** | | |
| **10. Does the project have a strong results framework? (select from options 1-3 that best reflects this project):**<br>• **3:** The project's selection of outputs and activities are at an appropriate level and relate in a clear way to the project's theory of change. Outputs are accompanied by SMART, results-oriented indicators that measure all of the key expected changes identified in the theory of change, each with credible data sources, and populated baselines and targets, including gender sensitive, sex-disaggregated indicators where appropriate. *(all must be true to select this option)*<br>• **2:** The project's selection of outputs and activities are at an appropriate level, but may not cover all aspects of the project's theory of change. Outputs are accompanied by SMART, results-oriented indicators, but baselines, targets and data sources may not yet be fully specified. Some use of gender sensitive, sex-disaggregated indicators, as appropriate. *(all must be true to select this option)*<br>• **1:** The results framework does not meet all of the conditions specified in selection "2" above. This includes: the project's selection of outputs and activities are not at an appropriate level and do not relate in a clear way to the project's theory of change; outputs are not accompanied by SMART, results-oriented indicators that measure the expected change, and have not been populated with baselines and targets; data sources are not specified, and/or no gender sensitive, sex-disaggregation of indicators.<br>*Note: Management Action or strong management justification must be given for a score of 1 | **3** | 2 |
| | 1 | |
| | **Evidence** The project framework has been developed consider the theory of change, and national and local data, its considers a gender analysis and sex disaggregated indicators. The framework has been reviewed by partners and stakeholders | |
| **11. Is there a comprehensive and costed M&E plan in place with specified data collection sources and methods to support evidence-based management, monitoring and evaluation of the project?** | **Yes (3)** | No (1) |
| **12. Is the project's governance mechanism clearly defined in the project document, including planned composition of the project board? (select from options 1-3 that best reflects this project):**<br>• **3:** The project's governance mechanism is fully defined in the project composition. Individuals have been specified for each position in the governance mechanism (especially all members of the project board.) Project Board members have agreed on their roles and responsibilities as specified in the terms of reference. The ToR of the project board has been attached to the project document. *(all must be true to select this option)*.<br>• **2:** The project's governance mechanism is defined in the project document; specific institutions are noted as holding key governance roles, but individuals may not have been specified yet. The prodoc lists the most important responsibilities of the project board, project director/manager and quality assurance roles. *(all must be true to select this option)*<br>**1:** The project's governance mechanism is loosely defined in the project document, only mentioning key roles that will need to be filled at a later date. No information on the responsibilities of key positions in the governance mechanism is provided.<br>*Note: Management Action or strong management justification must be given for a score of 1 | 3 | **2** |
| | 1 | |
| | **Evidence** Only it is necessary to include the roles and responsibilities of the project board members ToRs, the governance mechanism is defined in the project document. | |
| **13. Have the project risks been identified with clear plans stated to manage and mitigate each risks? (select from options 1-3 that best reflects this project):**<br>• **3:** Project risks related to the achievement of results are fully described in the project risk log, based on comprehensive analysis drawing on the theory of change, Social and Environmental Standards and screening, situation analysis, capacity assessments and other analysis. Clear and complete plan in place to manage and mitigate each risk. *(both must be true to select this option)*<br>• **2:** Project risks related to the achievement of results identified in the initial project risk log with mitigation measures identified for each risk. | **3** | 2 |
| | 1 | |
| | Evidence The project design includes a detailed plan to mitigate each risk and responsible individuals to manage those. The monitoring plan | |

| | | |
|---|---|---|
| • **1:** Some risks may be identified in the initial project risk log, but no evidence of analysis and no clear risk mitigation measures identified. This option is also selected if risks are not clearly identified and no initial risk log is included with the project document.<br>*Note: Management Action must be taken for a score of 1 | includes the risk management**.** | |
| **EFFICIENT** | | |
| **14. Have specific measures for ensuring cost-efficient use of resources been explicitly mentioned as part of the project design? This can include: i) using the theory of change analysis to explore different options of achieving the maximum results with the resources available; ii) using a portfolio management approach to improve cost effectiveness through synergies with other interventions; iii) through joint operations (e.g., monitoring or procurement) with other partners.** | **Yes (3)** | No (1) |
| **15. Are explicit plans in place to ensure the project links up with other relevant on-going projects and initiatives, whether led by UNDP, national or other partners, to achieve more efficient results (including, for example, through sharing resources or coordinating delivery?)** | **Yes (3)** | No (1) |
| **16. Is the budget justified and supported with valid estimates?**<br>• **3:** The project's budget is at the activity level with funding sources, and is specified for the duration of the project period in a multi-year budget. Costs are supported with valid estimates using benchmarks from similar projects or activities. Cost implications from inflation and foreign exchange exposure have been estimated and incorporated in the budget.<br>• **2:** The project's budget is at the activity level with funding sources, when possible, and is specified for the duration of the project in a multi-year budget. Costs are supported with valid estimates based on prevailing rates.<br>• **1:** The project's budget is not specified at the activity level, and/or may not be captured in a multi-year budget. | 3<br>**2**<br>1<br>**Evidence**<br>The project budget has been designed in a multiyear budget, considering valid estimates form similar projects, but it does not consider the foreign exchange exposure | |
| **17. Is the Country Office fully recovering the costs involved with project implementation?**<br>• **3:** The budget fully covers all project costs that are attributable to the project, including programme management and development effectiveness services related to strategic country programme planning, quality assurance, pipeline development, policy advocacy services, finance, procurement, human resources, administration, issuance of contracts, security, travel, assets, general services, information and communications based on full costing in accordance with prevailing UNDP policies (i.e., UPL, LPL.)<br>• **2:** The budget covers significant project costs that are attributable to the project based on prevailing UNDP policies (i.e., UPL, LPL) as relevant.<br>• **1:** The budget does not adequately cover project costs that are attributable to the project, and UNDP is cross-subsidizing the project.<br>*Note: Management Action must be given for a score of 1. The budget must be revised to fully reflect the costs of implementation before the project commences. | **3**<br>2<br>1<br>**Evidence**<br>Yes, the project budget considers those project costs that are attributable to the project, in accordance with UNDP/GEF policies. | |
| **EFFECTIVE** | | |
| **18. Is the chosen implementation modality most appropriate? (select from options 1-3 that best reflects this project):**<br>• **3:** The required implementing partner assessments (capacity assessment, HACT micro assessment) have been conducted, and there is evidence that options for implementation modalities have been thoroughly considered. There is a strong justification for choosing the selected modality, based on the development context. *(both must be true to select this option)*<br>• **2:** The required implementing partner assessments (capacity assessment, HACT micro assessment) have been conducted and the implementation modality chosen is consistent with the results of the assessments.<br>• **1:** The required assessments have not been conducted, but there may be evidence that options for implementation modalities have been considered.<br>*Note: Management Action or strong management justification must be given for a score of 1 | **3**<br>2<br>1<br>**Evidence**<br>The implementing partner assessments have been conducted, its score is low risk**.** | |
| | **3**<br>2<br>1 | |

| | | |
|---|---|---|
| **19. Have targeted groups, prioritizing marginalized and excluded populations that will be affected by the project, been engaged in the design of the project in a way that addresses any underlying causes of exclusion and discrimination?**<br>• 3: Credible evidence that all targeted groups, prioritising marginalized and excluded populations that will be involved in or affected by the project, have been actively engaged in the design of the project. Their views, rights and any constraints have been analysed and incorporated into the root cause analysis of the theory of change which seeks to address any underlying causes of exclusion and discrimination and the selection of project interventions.<br>• 2: Some evidence that key targeted groups, prioritising marginalized and excluded populations that will be involved in the project, have been engaged in the design of the project. Some evidence that their views, rights and any constraints have been analysed and incorporated into the root cause analysis of the theory of change and the selection of project interventions.<br>• 1: No evidence of engagement with marginalized and excluded populations that will be involved in the project during project design. No evidence that the views, rights and constraints of populations have been incorporated into the project. | **Evidence**<br>This analysis has been considered in all phases of the design, including in the SESP. | |
| **20. Does the project conduct regular monitoring activities, have explicit plans for evaluation, and include other lesson learning (e.g. through After Action Reviews or Lessons Learned Workshops), timed to inform course corrections if needed during project implementation?** | **Yes (3)** | No (1) |
| **21. The gender marker for all project outputs are scored at GEN2 or GEN3, indicating that gender has been fully mainstreamed into all project outputs at a minimum.**<br>*Note: Management Action or strong management justification must be given for a score of "no" | Yes **(3)**<br>**Evidence** | No (1) |
| **22. Is there a realistic multi-year work plan and budget to ensure outputs are delivered on time and within allotted resources? (select from options 1-3 that best reflects this project):**<br>• **3:** The project has a realistic work plan & budget covering the duration of the project *at the activity* level to ensure outputs are delivered on time and within the allotted resources.<br>• **2:** The project has a work plan & budget covering the duration of the project at the output level.<br>• **1:** The project does not yet have a work plan & budget covering the duration of the project. | **3**<br>1<br>**Evidence**<br>The project design includes a multiyear work plan | 2 |
| **SUSTAINABILITY & NATIONAL OWNERSHIP** | | |
| **23. Have national partners led, or proactively engaged in, the design of the project? (select from options 1-3 that best reflects this project):**<br>• **3:** National partners have full ownership of the project and led the process of the development of the project jointly with UNDP.<br>• **2:** The project has been developed by UNDP in close consultation with national partners.<br>• **1:** The project has been developed by UNDP with limited or no engagement with national partners. | **3**<br>1<br>**Evidence**<br>The project has been designed with the participation and leadership of MINAM with UNDP technical assistance. | 2 |
| **24. Are key institutions and systems identified, and is there a strategy for strengthening specific/ comprehensive capacities based on capacity assessments conducted? (select from options 0-4 that best reflects this project):**<br>• **3:** The project has a comprehensive strategy for strengthening specific capacities of national institutions based on a systematic and detailed capacity assessment that has been completed. This strategy includes an approach to regularly monitor national capacities using clear indicators and rigorous methods of data collection, and adjust the strategy to strengthen national capacities accordingly.<br>• **2.5:** A capacity assessment has been completed. The project document has identified activities that will be undertaken to strengthen capacity of national institutions, but these activities are not part of a comprehensive strategy to monitor and strengthen national capacities.<br>• **2:** A capacity assessment is planned after the start of the project. There are plans to develop a strategy to strengthen specific capacities of national institutions based on the results of the capacity assessment.<br>• **1.5:** There is mention in the project document of capacities of national institutions to be strengthened through the project, but no capacity assessments or specific strategy development are planned.<br>• **1:** Capacity assessments have not been carried out and are not foreseen. There is no strategy for strengthening specific capacities of national institutions. | 3<br>**2**<br>1<br>**Evidence** | 2.5<br>1.5 |

| | | |
|---|---|---|
| **25. Is there is a clear strategy embedded in the project specifying how the project will use national systems (i.e., procurement, monitoring, evaluations, etc.,) to the extent possible?** | Yes **(3)** | No (1) |
| **26. Is there a clear transition arrangement/ phase-out plan developed with key stakeholders in order to sustain or scale up results (including resource mobilisation strategy)?** | Yes (3) | No **(1)** |

## I. UNDP Risk Log (to be completed by UNDP Country Office)

| Project risks | | | | | |
|---|---|---|---|---|---|
| **Description** | **Type** | **Impact & Probability** | **Mitigation Measures** | **Owner** | **Status** |
| Resistance among producers and policy makers to the introduction of environmental considerations into target sectors | Social, productive and political | P = 3 (there is growing awareness among producers, corporations and policy makers of the importance of addressing environmental sustainability and responsibility issues)<br>I = 3 (the combat of environmental threats will depend on a range of stakeholders in addition to producers and policy makers) | Awareness raising regarding the market benefits of environmental production in terms of access to global commodity markets<br>Consolidation of mechanisms and capacities to ensure that producers have sustained long-term access to the support services they require to be able to meet the environmental requirements of global commodity markets<br>Support to the functioning of national commodity platforms in order to ensure that producers' interests are effectively represented<br>Evidence-based awareness raising regarding the benefits of incorporating environmental considerations in terms of productive sustainability (particularly important in the case of oil palm, which is principally aimed at national markets rather than global commodity markets). | MINAM/ PMU | Reducing |
| Climate change places additional stressors on the target ecosystems and undermines the viability of productive alternatives supported by the project | Environ-mental and productive | P = 5 (climate change is certain to occur and pressure the target ecosystems)<br>I = 2 (may have positive or negative impacts on threats affecting environmental values, and productive alternatives will be complemented by governance and planning) | Focus on improved structural and compositional diversity in production systems, to increase their resilience to climatic change and variability; this resilience benefit may incidentally help to motivate the introduction of such modifications with resulting benefits for BD, SLM and SFM.<br>Application of an adaptive approach to technology generation and transfer to enable farmers to adapt their practices to changing conditions | MINAM/ PMU | Increasing |
| Poor land tenure and governance conditions in already disturbed | Social and political | P = 3 (tenure and titling are being addressed through IDB PTRT3 project, and regional | Support to complementary measures to replace expansion into primary forest with expansion in already-deforested | MINAM/ PMU | Reducing |

| Project risks | | | | | |
|---|---|---|---|---|---|
| **Description** | **Type** | **Impact & Probability** | **Mitigation Measures** | **Owner** | **Status** |
| or deforested areas leads producers to colonize primary forest | | governments are committed to local governance)<br>I = 3 (land tenure and governance issues will be complemented by market-based approaches and financial instrument for zero-deforestation production | areas (governance, community-based forest management in "local forests", technical assistance, financial incentives, market-based incentives) | | |
| Climate related disasters affect livelihoods | Environmental | P=2<br>I=2 | The project will promote measures to decrease vulnerability of negative impact of climate related events through the improved ecosystem services associated with disaster risk reduction. For example, the reforestation and restoration of degraded areas will prevent "huaycos" (landslides) and/or decrease their impact. | PMU | Increasing |

## J. Supplemental Provisions to the Project Document: The Legal Context

General responsibilities of the Government, UNDP and the executing agency

1. All phases and aspects of UNDP assistance to this project shall be governed by and carried out in accordance with the relevant and applicable resolutions and decisions of the competent United Nations organs and in accordance with UNDP's policies and procedures for such projects, and subject to the requirements of the UNDP Monitoring, Evaluation and Reporting System.
2. The Government shall remain responsible for this UNDP-assisted development project and the realization of its objectives as described in this Project Document.
3. Assistance under this Project Document being provided for the benefit of the Government and the people of (the particular country or territory), the Government shall bear all risks of operations in respect of this project.
4. The Government shall provide to the project the national counterpart personnel, training facilities, land, buildings, equipment and other required services and facilities. It shall designate the Government Co-operating Agency named in the cover page of this document (hereinafter referred to as the "Co-operating Agency"), which shall be directly responsible for the implementation of the Government contribution to the project.
5. The UNDP undertakes to complement and supplement the Government participation and will provide through the Executing Agency the required expert services, training, equipment and other services within the funds available to the project.
6. Upon commencement of the project the Executing Agency shall assume primary responsibility for project execution and shall have the status of an independent contractor for this purpose. However, that primary responsibility shall be exercised in consultation with UNDP and in agreement with the Co-operating Agency. Arrangements to this effect shall be stipulated in the Project Document as well as for the transfer of this responsibility to the Government or to an entity designated by the Government during the execution of the project.
7. Part of the Government's participation may take the form of a cash contribution to UNDP. In such cases, the Executing Agency will provide the related services and facilities and will account annually to the UNDP and to the Government for the expenditure incurred.
    a. Participation of the Government
        1. The Government shall provide to the project the services, equipment and facilities in the quantities and at the time specified in the Project Document. Budgetary provision, either in kind or in cash, for the Government's participation so specified shall be set forth in the Project Budgets.

2. The Co-operating Agency shall, as appropriate and in consultation with the Executing Agency, assign a director for the project on a full-time basis. He shall carry out such responsibilities in the project as are assigned to him by the Co-operating Agency.
3. The estimated cost of items included in the Government contribution, as detailed in the Project Budget, shall be based on the best information available at the time of drafting the project proposal. It is understood that price fluctuations during the period of execution of the project may necessitate an adjustment of said contribution in monetary terms; the latter shall at all times be determined by the value of the services, equipment and facilities required for the proper execution of the project.
4. Within the given number of man-months of personnel services described in the Project Document, minor adjustments of individual assignments of project personnel provided by the Government may be made by the Government in consultation with the Executing Agency, if this is found to be in the best interest of the project. UNDP shall be so informed in all instances where such minor adjustments involve financial implications.
5. The Government shall continue to pay the local salaries and appropriate allowances of national counterpart personnel during the period of their absence from the project while on UNDP fellowships.
6. The Government shall defray any customs duties and other charges related to the clearance of project equipment, its transportation, handling, storage and related expenses within the country. It shall be responsible for its installation and maintenance, insurance, and replacement, if necessary, after delivery to the project site.
7. The Government shall make available to the project - subject to existing security provisions - any published and unpublished reports, maps, records and other data which are considered necessary to the implementation of the project.
8. Patent rights, copyright rights and other similar rights to any discoveries or work resulting from UNDP assistance in respect of this project shall belong to the UNDP. Unless otherwise agreed by the Parties in each case, however, the Government shall have the right to use any such discoveries or work within the country free of royalty and any charge of similar nature.
9. The Government shall assist all project personnel in finding suitable housing accommodation at reasonable rents.
10. The services and facilities specified in the Project Document which are to be provided to the project by the Government by means of a contribution in cash shall be set forth in the Project Budget. Payment of this amount shall be made to the UNDP in accordance with the Schedule of Payments by the Government.
11. Payment of the above-mentioned contribution to the UNDP on or before the dates specified in the Schedule of Payments by the Government is a prerequisite to commencement or continuation of project operations.

b. Participation of the UNDP and the executing agency
   1. The UNDP shall provide to the project through the Executing Agency the services, equipment and facilities described in the Project Document. Budgetary provision for the UNDP contribution as specified shall be set forth in the Project Budget.
   2. The Executing Agency shall consult with the Government and UNDP on the candidature of the Project Manager a/ who, under the direction of the Executing Agency, will be responsible in the country for the Executing Agency's participation in the project. The Project Manager shall supervise the experts and other agency personnel assigned to the project, and the on-the-job training of national counterpart personnel. He shall be responsible for the management and efficient utilization of all UNDP-financed inputs, including equipment provided to the project.
   3. The Executing Agency, in consultation with the Government and UNDP, shall assign international staff and other personnel to the project as specified in the Project Document, select candidates for fellowships and determine standards for the training of national counterpart personnel.
   4. Fellowships shall be administered in accordance with the fellowships regulations of the Executing Agency.
      a. May also be designated Project Co-ordinator or Chief Technical Adviser, as appropriate.
   5. The Executing Agency may, in agreement with the Government and UNDP, execute part or all of the project by subcontract. The selection of subcontractors shall be made, after consultation with the Government and UNDP, in accordance with the Executing Agency's procedures.

6. All material, equipment and supplies which are purchased from UNDP resources will be used exclusively for the execution of the project, and will remain the property of the UNDP in whose name it will be held by the Executing Agency. Equipment supplied by the UNDP shall be marked with the insignia of the UNDP and of the Executing Agency.
7. Arrangements may be made, if necessary, for a temporary transfer of custody of equipment to local authorities during the life of the project, without prejudice to the final transfer.
8. Prior to completion of UNDP assistance to the project, the Government, the UNDP and the Executing Agency shall consult as to the disposition of all project equipment provided by the UNDP. Title to such equipment shall normally be transferred to the Government, or to an entity nominated by the Government, when it is required for continued operation of the project or for activities following directly therefrom. The UNDP may, however, at its discretion, retain title to part or all of such equipment.
9. At an agreed time after the completion of UNDP assistance to the project, the Government and the UNDP, and if necessary the Executing Agency, shall review the activities continuing from or consequent upon the project with a view to evaluating its results.
10. UNDP may release information relating to any investment oriented project to potential investors, unless and until the Government has requested the UNDP in writing to restrict the release of information relating to such project.

Rights, Facilities, Privileges and Immunities

1. In accordance with the Agreement concluded by the United Nations (UNDP) and the Government concerning the provision of assistance by UNDP, the personnel of UNDP and other United Nations organizations associated with the project shall be accorded rights, facilities, privileges and immunities specified in said Agreement.
2. The Government shall grant UN volunteers, if such services are requested by the Government, the same rights, facilities, privileges and immunities as are granted to the personnel of UNDP.
3. The Executing Agency's contractors and their personnel (except nationals of the host country employed locally) shall:
    a. Be immune from legal process in respect of all acts performed by them in their official capacity in the execution of the project;
    b. Be immune from national service obligations;
    c. Be immune together with their spouses and relatives dependent on them from immigration restrictions;
    d. Be accorded the privileges of bringing into the country reasonable amounts of foreign currency for the purposes of the project or for personal use of such personnel, and of withdrawing any such amounts brought into the country, or in accordance with the relevant foreign exchange regulations, such amounts as may be earned therein by such personnel in the execution of the project;
    e. Be accorded together with their spouses and relatives dependent on them the same repatriation facilities in the event of international crisis as diplomatic envoys.
4. All personnel of the Executing Agency's contractors shall enjoy inviolability for all papers and documents relating to the project.
5. The Government shall either exempt from or bear the cost of any taxes, duties, fees or levies which it may impose on any firm or organization which may be retained by the Executing Agency and on the personnel of any such firm or organization, except for nationals of the host country employed locally, in respect of:
    a. The salaries or wages earned by such personnel in the execution of the project;
    b. Any equipment, materials and supplies brought into the country for the purposes of the project or which, after having been brought into the country, may be subsequently withdrawn therefrom;
    c. Any substantial quantities of equipment, materials and supplies obtained locally for the execution of the project, such as, for example, petrol and spare parts for the operation and maintenance of equipment mentioned under (b), above, with the provision that the types and approximate quantities to be exempted and relevant procedures to be followed shall be agreed upon with the Government and, as appropriate, recorded in the Project Document; and
    d. As in the case of concessions currently granted to UNDP and Executing Agency's personnel, any property brought, including one privately owned automobile per employee, by the firm or organization or its personnel for their personal use or consumption or which after having been brought into the country, may subsequently be withdrawn therefrom upon departure of such personnel.
6. The Government shall ensure:
    a. prompt clearance of experts and other persons performing services in respect of this project; and
    b. the prompt release from customs of:

i. equipment, materials and supplies required in connection with this project; and
ii. property belonging to and intended for the personal use or consumption of the personnel of the UNDP, its Executing Agencies, or other persons performing services on their behalf in respect of this project, except for locally recruited personnel.

7. The privileges and immunities referred to in the paragraphs above, to which such firm or organization and its personnel may be entitled, may be waived by the Executing Agency where, in its opinion or in the opinion of the UNDP, the immunity would impede the course of justice and can be waived without prejudice to the successful completion of the project or to the interest of the UNDP or the Executing Agency.
8. The Executing Agency shall provide the Government through the resident representative with the list of personnel to whom the privileges and immunities enumerated above shall apply.
9. Nothing in this Project Document or Annex shall be construed to limit the rights, facilities, privileges or immunities conferred in any other instrument upon any person, natural or juridical, referred to hereunder.

Suspension or termination of assistance

1. The UNDP may by written notice to the Government and to the Executing Agency concerned suspend its assistance to any project if in the judgement of the UNDP any circumstance arises which interferes with or threatens to interfere with the successful completion of the project or the accomplishment of its purposes. The UNDP may, in the same or a subsequent written notice, indicate the conditions under which it is prepared to resume its assistance to the project. Any such suspension shall continue until such time as such conditions are accepted by the Government and as the UNDP shall give written notice to the Government and the Executing Agency that it is prepared to resume its assistance.
2. If any situation referred to in paragraph 1, above, shall continue for a period of fourteen days after notice thereof and of suspension shall have been given by the UNDP to the Government and the Executing Agency, then at any time thereafter during the continuance thereof, the UNDP may by written notice to the Government and the Executing Agency terminate the project.
3. The provisions of this paragraph shall be without prejudice to any other rights or remedies the UNDP may have in the circumstances, whether under general principles of law or otherwise.

**K. Gender rating**

Based on UNDP´s Tracking Gender-Related Investments and Expenditures in ATLAS

| Output | Gender rate |
|---|---|
| 1.1.1 National Sector development policies and plans defined in accordance with land-use policy and plans, including concept of landscape sustainability, and based on root cause analyses | 2 |
| 1.1.2 Regional and local development plans aligned with NAMAs, Forest and Climate Change Strategy, and land use plans | 2 |
| 1.1.3 Microzoning that clearly defines areas for forest conservation, restoration and sustainable use plans) | 1 |
| 1.1.4 Community life plans elaborated, sensitive to gender and including approach of landscape sustainability | 2 |
| 1.2.1 National commodity platforms established | 2 |
| 1.2.2 Territorial governance platforms strengthened | 1 |
| 1.2.3 Strengthened, gender sensitive community level governance | 3 |
| 1.2.4 Technical and institutional capacities developed in national, regional and local governments for the implementation of plans, including the elaboration of public budgets | 1 |
| 1.3.1 Effective and transparent land-use change approval mechanism | 2 |
| 1.3.2 Real-time, transparent monitoring and analysis system to detect illegal deforestation and land-use change, integrated with control mechanisms | 0 |
| 1.3.3 Inspection and enforcement capacities to address violations in land-use regulation | 0 |
| 1.3.4 Community-based monitoring | 2 |
| 1.4.1 Financing gaps identified for the implementation of policies | 1 |
| 1.4.2 Public finance incentives for regional and local governments in support of sustainable landscape management | 1 |
| 2.1.1 Strategies for promoting market certifications, jurisdictional certification, companies' sustainable procurement policies | 1 |
| 2.1.2 Alliances with private sector and supply-chain actors to support adoption of sustainable practices in landscapes | 1 |
| 2.2.1 Strategies to promote the development of sustainable deforestation-free economic activities, linked to markets | 1 |
| 2.2.2 Linkages of activities with market, financial and public incentive | 1 |
| 2.3.1 Credit and insurance schemes promoted to benefit sustainable land practices aligned with National Forest and CC Strategy (farmers, communities etc). | 1 |
| 2.3.2Cost-Benefit Analyses of sustainable practices developed | 0 |
| 2.3.3PES and incentive systems promoted to compensate land users for the implementation of sustainable economic practices and sustainable ecosystem management | 1 |
| 3.1.1 Pilot experiences of sustainable agriculture promoted to facilitate scaling-up (including market access) | 2 |
| 3.1.2 Pilots of community-based sustainable livelihood support options in indigenous area | 2 |
| 3.2.1 TA systems, tools, methodologies and capacities for delivery of technical support integrating principles of gender equity | 2 |
| 3.2.2 Technical assistance programs rolled out in alliance with supply-chain actors and local/regional governments, to deliver support to green commodity producers, integrating principles of gender equity | 2 |
| 3.3.1 Local restoration initiatives in priority localities | 1 |
| 3.3.2 Local conservation initiatives in priority localities | 2 |
| 3.4.1 Systematization of best practices, lessons learned and case studies, including evidence of the special contribution of women and indigenous peoples to the sustainability of Amazonian landscapes | 3 |

| | |
|---|---|
| 3.4.2 Communications products developed and disseminated | |
| 3.4.3 System for adaptive management and learning to inform landscape management approaches by decision makers | 2 |

Rating.

3. Outputs that have gender equality as a principal objective.
2. Outputs that have gender equality as a significant objective
1. Outputs that will contribute in some way to gender equality, but not significantly
0. Outputs that are not expected to contribute noticeably to gender equality

**L. Assessment: Results of capacity assessments of MINAM (including HACT Micro Assessment)**

As a result of Micro evaluation of MINAM developed in 2015, this implementing partner has Low Risk. See separate attached document for assessment.

## M. Letter of Agreement between UNDP and MINAM

### LETTER OF AGREEMENT

### BETWEEN UNITED NATIONS DEVELOPMENT PROGRAMME (UNDP) AND THE GOVERNMENT FOR THE PROVISION OF SUPPORT SERVICES

Dear Fernando León Morales
*Viceminister of Natural Resource Strategic Development*
Project 00087272

Reference is made to consultations between officials of the Government of Peru (hereinafter referred to as "the Government") and officials of UNDP with respect to the provision of support services by the UNDP country office for nationally managed programmes and projects. UNDP and the Government hereby agree that the UNDP country office may provide such support services at the request of the Government, through its Ministry of Environment (hereinafter referred to as "MINAM"), as described in the Project Document "**Sustainable Productive Landscapes in the Peruvian Amazon**."

1. The UNDP country office may provide support services for assistance with reporting requirements and direct payment. In providing such support services, the UNDP country office shall ensure that the capacity of MINAM is strengthened to enable it to carry out such activities directly. The costs incurred by the UNDP country office in providing such support services shall be recovered from the administrative budget of the office.

2. The UNDP country office may provide, at the request of the designated institution, the following support services for the activities of the project:

    a. Technical Assistance, including support of UNDP's technical team and operations team.
    b. Identification and/or recruitment of consultants, enterprises, United Nations Volunteers and project personnel
    c. Procurement of goods and services.
    d. Consultants and Project personnel travel management
    e. Assessment from the Project Management team.
    f. Quality assurance of Project's activities.

3. The procurement of goods and services and the recruitment of project and programme personnel by the UNDP country office shall be in accordance with the UNDP regulations, rules, policies and procedures. Support services described in the paragraph above are further detailed in Annex 1. If the requirements for support services by the country office should change during the life of a programme or project, the annex to the project document shall be revised with the mutual agreement of the UNDP resident representative and the designated institution.

4. The relevant provisions of the Country Programme Document 2017 – 2021 (hereinafter referred to as the "CPD"), shall apply to the provision of such support services. MINAM shall retain overall responsibility for the nationally managed project. The responsibility of the UNDP country office for the provision of the support services described herein shall be limited to the provision of such support services detailed in the Annex 1.

5. Any claim or dispute arising under or in connection with the provision of support services by the UNDP country office in accordance with this letter shall be handled pursuant to the relevant provisions of the CPD.

6. The manner and method of cost-recovery by the UNDP country office in providing the support services described in paragraph 2 above are specified in the CPD and detailed in Annex 1.

7. The UNDP country office shall submit progress reports on the support services provided and shall report on the costs reimbursed in providing such services, as may be required

8. Any modification of the present arrangements shall be effected by mutual written agreement of the parties hereto.

9. If you are in agreement with the provisions set forth above, please sign and return to this office two signed copies of this letter. Upon your signature, this letter shall constitute an agreement between MINAM and UNDP on the terms and conditions for the provision of support services by the UNDP country office for the nationally managed project

Yours sincerely,

_____

Signed on behalf of UNDP
*María Del Carmen Sacasa*
*United Nations Resident Coordinator*
*UNDP Resident Representative*

_____

From the Government
Fernando León Morales
*Viceminister of Natural Resource Strategic Development*
*Ministry of Environment*

# Annex 1

## DESCRIPTION OF UNDP COUNTRY OFFICE SUPPORT SERVICES

1. Reference is made to consultations between the Ministry of Environment (MINAM) Peruvian Government Institution, and officials of UNDP with respect to the provision of support services by the UNDP country office for the nationally managed project:

"**Sustainable Productive Landscapes in the Peruvian Amazon"**

2. In accordance with the provisions of the Project Document and the present Letter of Agreement, the UNDP country office shall provide support services for the Project as described below

3. Support services to be provided:

   a. Technical Assistance, including support of UNDP's technical team and operations team.
   b. Identification and/or recruitment of consultants, enterprises, United Nations Volunteers and project personnel
   c. Procurement of goods and services.
   d. Consultants and Project personnel travel management
   e. Assessment from the Project Management team.
   f. Quality assurance of Project's activities.

4. Total cost of the services from (September) 2017 through (September) 2023:

| | | |
|---|---|---|
| • International Consultants Recruitment | USD | 486,000.00 |
| • National Consultants Recruitment | USD | 2, 296,000.00 |
| • Individual Services Recruitment | USD | 8, 734,687.00 |
| • Procurement of enterprises and goods | USD | 645,467.00 |
| • Operational expenses (travel, equipment, licenses) | USD | 1,850,640.00 |
| • Technical assistance, assessment and quality assurance | USD | 300,000.00 |
| **TOTAL:** | **USD** | **14,312,794.00** |

**Important Note**: The assistance of one or more experts and publication in newspapers or other media will be charged directly to the Project, once the technical specifications and/or the Terms of References of the goods or services needed and estimated costs are identified.

5. Description of functions and responsibilities of the parties involved:

The funds for the Project's execution shall be from Green Environmental Fund (GEF)

UNDP, per MINAM's request, makes available its management capacity in terms of technical assistance, contracting and procurement of goods and services.

In this context, the roles and responsibilities of the parties involved in this Letter of Agreement are as follows:

MINAM:

- Designate a National Director of the Project for the activities indicated under the responsibility of MINAM in the Work Plan and it's alternate.
- Request UNDP the actions for the team's constitution, corresponding to the implementation of the results anticipated in the Work Plan.

UNDP:

- Develop processes of technical assistance, identification, acquisition and / or contracting of consultants, companies, UN Volunteers and project management team, acquisition of goods and services for the implementation of the activities of this Project. Contracts under the Letter of Agreement and PRODOC will be subject to UNDP rules, policies and procedures.
- Provide support for the follow up and monitoring of the Project as a whole, to ensure the achievement of the results contemplated in the Work Plan.

# XIII. ADDITIONAL ANNEXES

## A. MAP ANNEX

**Figure 4. Location of the project area**

**Figure 5. Territorial categories in the project area**

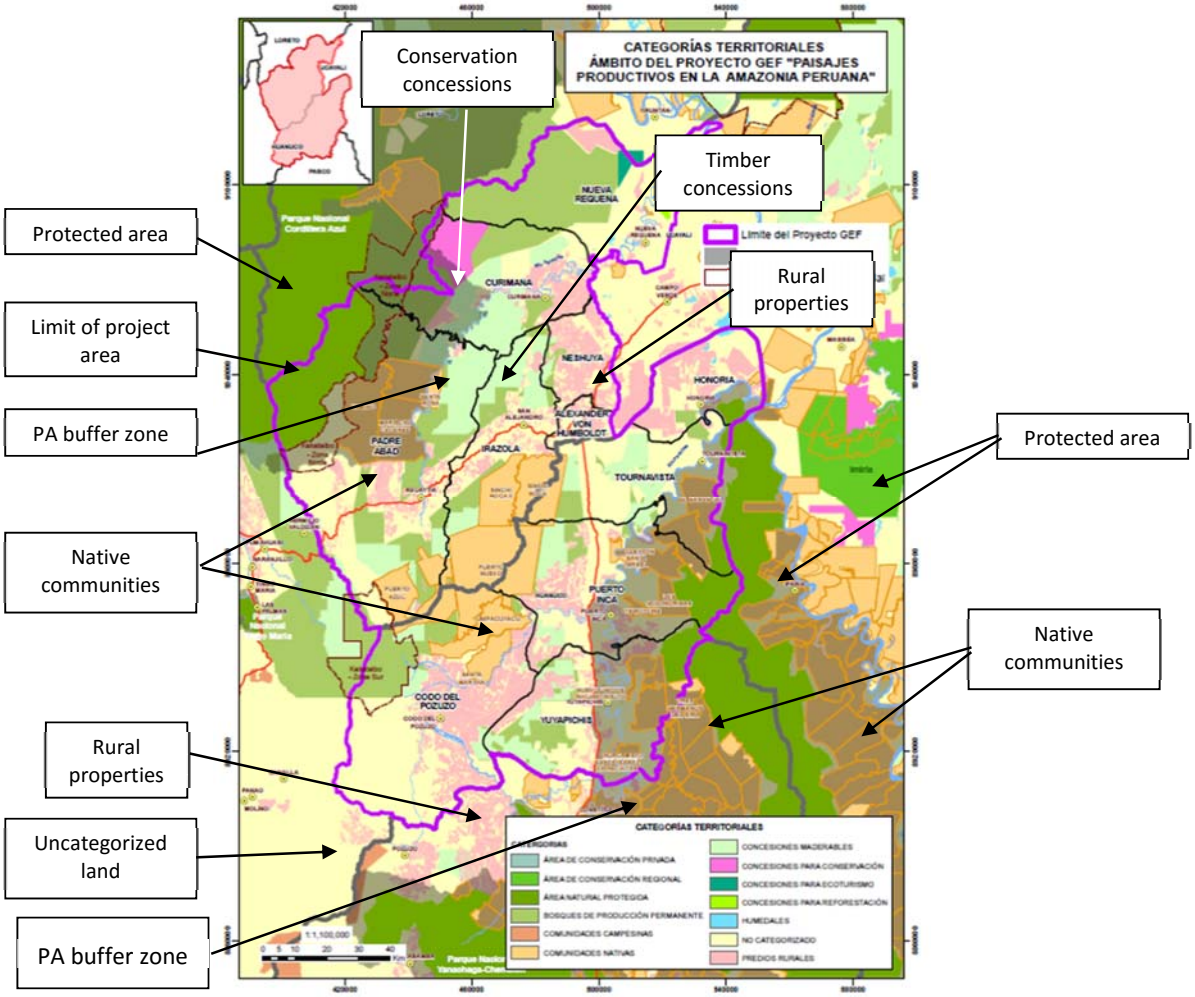



**Figure 6. Areas identified by indigenous communities for hunting, fishing and NTFP collection**

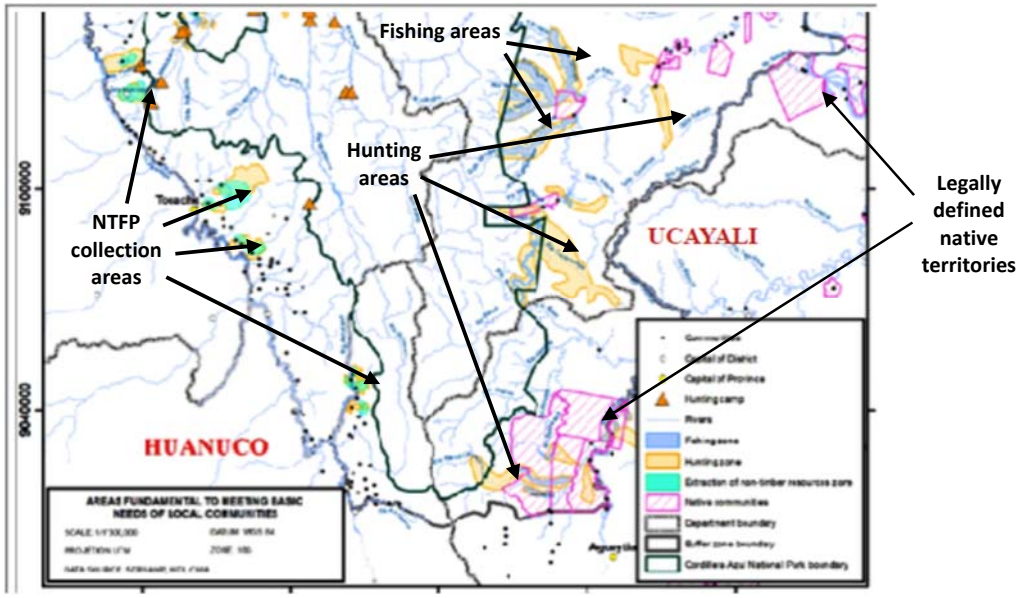



**Figure 7. Location of Kakataibo peoples in the project area**

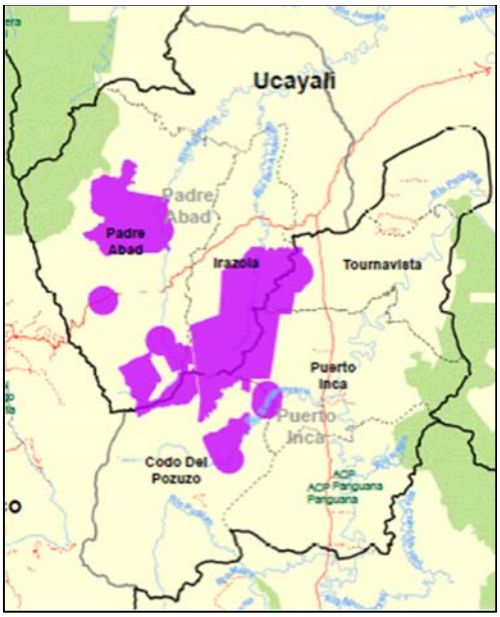

Ucayali
Padre Abad
Padre Abad
Irazola
Tournavista
Puerto Inca
Puerto Inca
Codo Del Pozuzo
ACP Paiguana
ACP Paiguana

**Figure 8. Spatial distribution of deforestation in Peru, 2000-2014** [15]

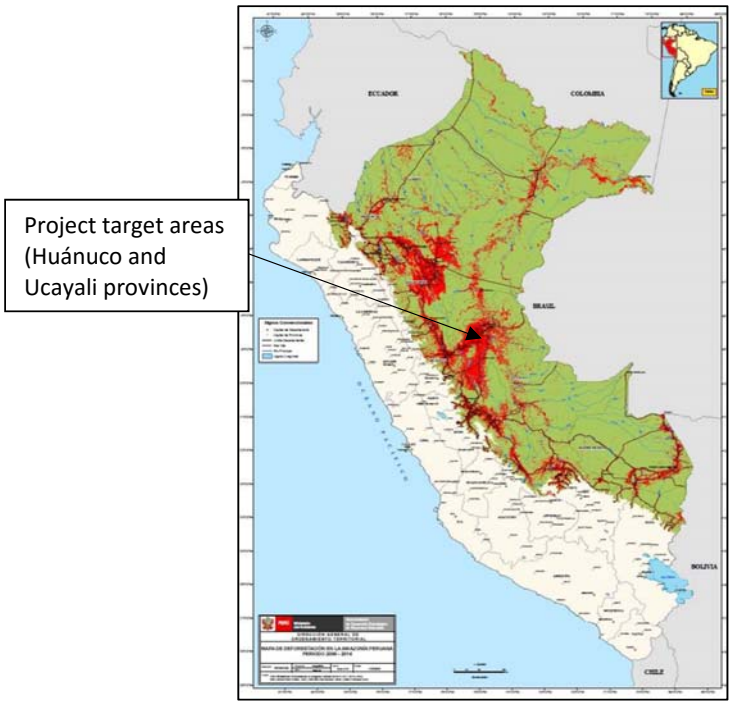
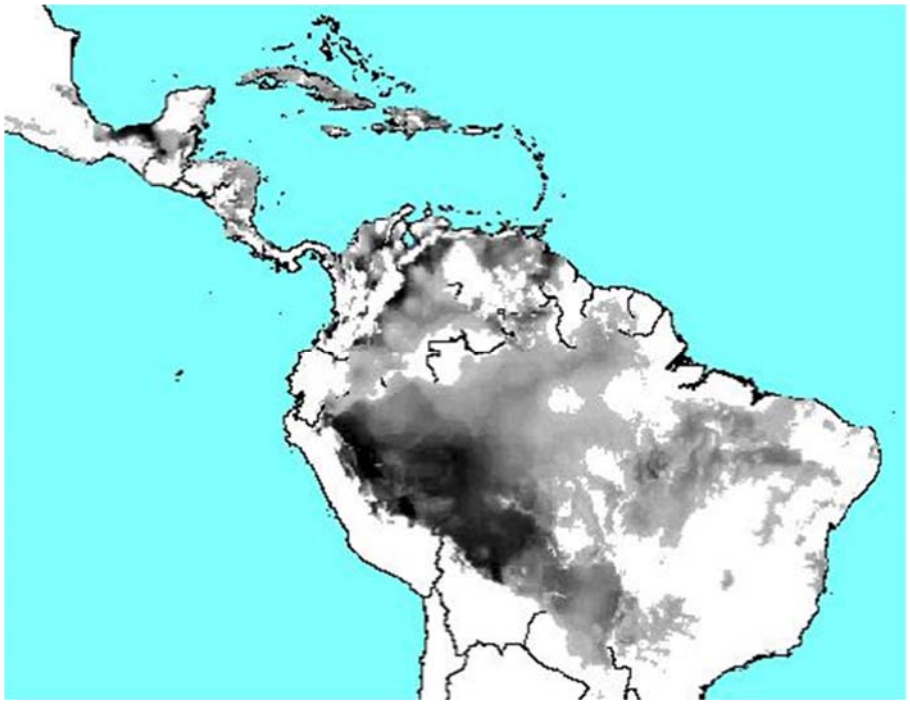



**Figure 9. Climate similarity map: regions with similar rainfall and temperature conditions to the Ucayali region. Source: Jones et al. (2002) [8]**



## B. SUPPORTING DATA

**Table 7. Natural forest, and land cover in deforested land and reforestation in Peru, 2000-2010 [9]**

| Department | Area of natural or tropical forest in 2000 (ha)[a] | Types of land cover of deforested land, 2000 (ha)[b] | | | | | | Cumulative reforestation, 2010 (ha)[c] |
|---|---|---|---|---|---|---|---|---|
| | | Agriculture | Grasslands | Secondary forest | Secondary forest and agriculture | No vegetation | Total, 2000 | |
| San Martín | 3,206,763 | 136,927 | 73,695 | 390,384 | 718,522 | 8,141 | 1,327,669 | 18,177.65 |
| Amazonas | 2,721,999 | 172,471 | 364,750 | 192,009 | 246,142 | 26,095 | 1,001,467 | 17,277.10 |
| Loreto | 34,896,163 | 130,634 | 25,298 | 355,898 | 420,223 | 13,538 | 945,591 | 23,479.87 |
| Junin | 1,718,361 | 24,589 | 59,688 | 116,825 | 531,658 | 1,514 | 734,273 | 71,255.42 |
| Ucayali | 9,160,726 | 25,356 | 117,811 | 213,223 | 265,194 | 5,480 | 627,064 | 31,889.99 |
| Huánuco | 1,564,407 | 69,458 | 78,095 | 184,029 | 267,860 | 1,178 | 600,620 | 45,860.82 |
| Cusco | 3,170,025 | 13,938 | 161,713 | 246,736 | 114,620 | 594 | 537,601 | 122,831.72 |
| Cajamarca | 409,491 | 69,353 | 103,697 | 84,291 | 262,042 | 647 | 520,030 | 110,526.43 |
| Pasco | 1,418,506 | 2,824 | 38,874 | 81,422 | 178,408 | 480 | 302,008 | 19,621.86 |
| Madre de Dios | 8,102,917 | 21,861 | 60,101 | 71,432 | 42,885 | 7,600 | 203,879 | 8,467.01 |
| Puno | 1,406,400 | 2,166 | 45,091 | 55,467 | 43,206 | 103 | 146,033 | 44,218.38 |
| Ayacucho | 251,350 | 5,942 | 18,727 | 44,387 | 66,127 | 183 | 135,366 | 68,807.95 |
| Huancavelica | 18,738 | 7,511 | 24,850 | 17,164 | 2,461 | 0 | 51,987 | 50,079.46 |
| Piura | 74,262 | 7,374 | 5,222 | 10,804 | 8,322 | 13 | 31,735 | 46,387.61 |
| La Libertad | 96,335 | 112 | 2,369 | 3,693 | 1,057 | 0 | 7,231 | 58,383.13 |
| Ancash | - | - | - | - | - | - | - | 87,867.21 |
| Apurimac | - | - | - | - | - | - | - | 78,117.29 |
| Other | 60,671 | - | - | - | - | - | - | 66,667.77 |
| Total | **68,277,114** | **690,516** | **1,179,981** | **2,067,764** | **3,168,727** | **65,566** | **7,172,554** | **969,916.72** |

Sources: [a]INEI 2010, [b]MINAM 2009

**Table 8. Producer types by altitude zone in the Peruvian Amazon as a whole [9]**

| Altitude zone | Family producers | | Large producers | | Total | |
|---|---|---|---|---|---|---|
| | Number | % | Number | % | Number | % |
| Fluvial yunga | 192,823 | 98.3 | 3,305 | 1.7 | **196,128** | 100.0 |
| Foothill forest | 125,640 | 98.0 | 2,558 | 2.0 | **128,198** | 100.0 |
| Lowland forest | 128,476 | 98.3 | 2,272 | 1.7 | **130,748** | 100.0 |
| **Totals** | **446,939** | **98.2** | **8,135** | **1.8** | **455,074** | 100.0 |

**Table 9. Territorial categories in the target districts**

| Category | | ha | % |
|---|---|---|---|
| **Natural protected areas** | Natural protected areas | 124,385 | 5.99 |
| | Private conservation areas | 128 | 0.01 |
| **Titled Native Communities** | | 364,874 | 18 |
| **Permanent production forests** | Forestry concessions | | |
| | Timber concessions | 232,644 | 11.20 |
| | Reforestation concessions | 2,753 | 0.13 |
| | Non-timber concessions | | |
| | Conservation concessions | 24,982 | 1.20 |
| | Ecotourism concessions | 3484 | 0.17 |
| **Reserved permanent production forests (future concessions or local forests)** | | 344,559 | 16.59 |
| **Rural properties** | | 277,090 | 13.34 |
| **Special zone** | | 821 | 0.04 |
| **Non-categorized** | | 700,957 | 33.75 |
| | **Total** | **2,076,676** | **100.00** |

**Table 10. Summary of main socio-productive stakeholder in the target areas**

| Socio-productive stakeholder | Description | Type of landscape occupied | Activities |
|---|---|---|---|
| Informal settlers | Coca growers, loggers, miners etc. | Primary forest, permanent production forests and uncategorized areas | Coca growing, illegal logging, alluvial mining |
| Subsistence farmers | Immigrants from Andean areas (ex-coca growers), with weak economic insertion, basic agriculture combined with NTFP collection | | Production of cassava, cocona and citrus; harvest of Amazonian fruits (aguaje, ungurahui, caimito, cocona, pijuayo etc.) |
| Members of native communities | Ancestral inhabitants, hunters and fishers, carrying out community-based forest management and basic agriculture | Areas dominated by primary forests | Subsistence agriculture in small agroforestry plots |
| Recently settled farmers | Immigrants from Andean areas or neighbouring areas who acquire or rent lands, formally or informally | Primary forest in permanent forest concessions, uncategorized areas and secondary forests | Cacao and papaya growing, pasture for livestock |
| Established colonist farmers and ranchers | Andean immigrants, ex-coca growers, who establish permanent crops and livestock and extend pasture areas | Primary forest in private lands, secondary forest of different ages, degraded pastures | Plantain, papaya, citrus, cacao, coffee and oil palm production, and pastures for livestock |
| Intermediate level agrarian producer | Established immigrants who acquire legalized lands, including palm, cacao and plantain producers, and forest plantation managers; have access to credit | Secondary forests (and parts of primary forest) of different ages, degraded pastures, close to access routes | Cacao, oil palm, coffee, heart of palm, rice, maize, forest plantations and pasture for livestock. |
| Commercial scale agrarian producer | Established immigrants, associated, cooperatives, with access to finance, exporter. | | |

**Table 11. Crops in the target districts**

| Crops | | ha | % of production area | % of total area |
|---|---|---|---|---|
| Cultivated pastures | | 133,088 | 66.6 | 6.41 |
| Industrial crops | Cacao | 10,832 | 5.4 | 0.52 |
| | Oil palm | 10,440 | 5.2 | 0.5 |
| | Coffee | 836 | 0.4 | 0.04 |
| | Annatto | 603 | 0.3 | 0.03 |
| | Coconut palm | 111 | 0.1 | 0.01 |
| | *Sub-total industrial crops* | *22,822* | 11.4 | *1.10* |
| Cereals (yellow maize and rice) | | 18,479 | 9.2 | 0.89 |
| Fruit trees and plantains | | 13,181 | 6.6 | 0.63 |
| Forestry plantations (bolaina and mahogany) | | 6,547 | 3.3 | 0.32 |
| Rootcrops and beans | | 5,288 | 2.6 | 0.25 |
| Fruit | | 336 | 0.2 | 0.02 |
| Agroindustrial | | 150 | 0.1 | 0.01 |
| Total | | 199,891 | | 9.63 |

**Figure 10. Perennial and annual crops in the Peruvian Amazon (National Agricultural Census, INEI 2012)**

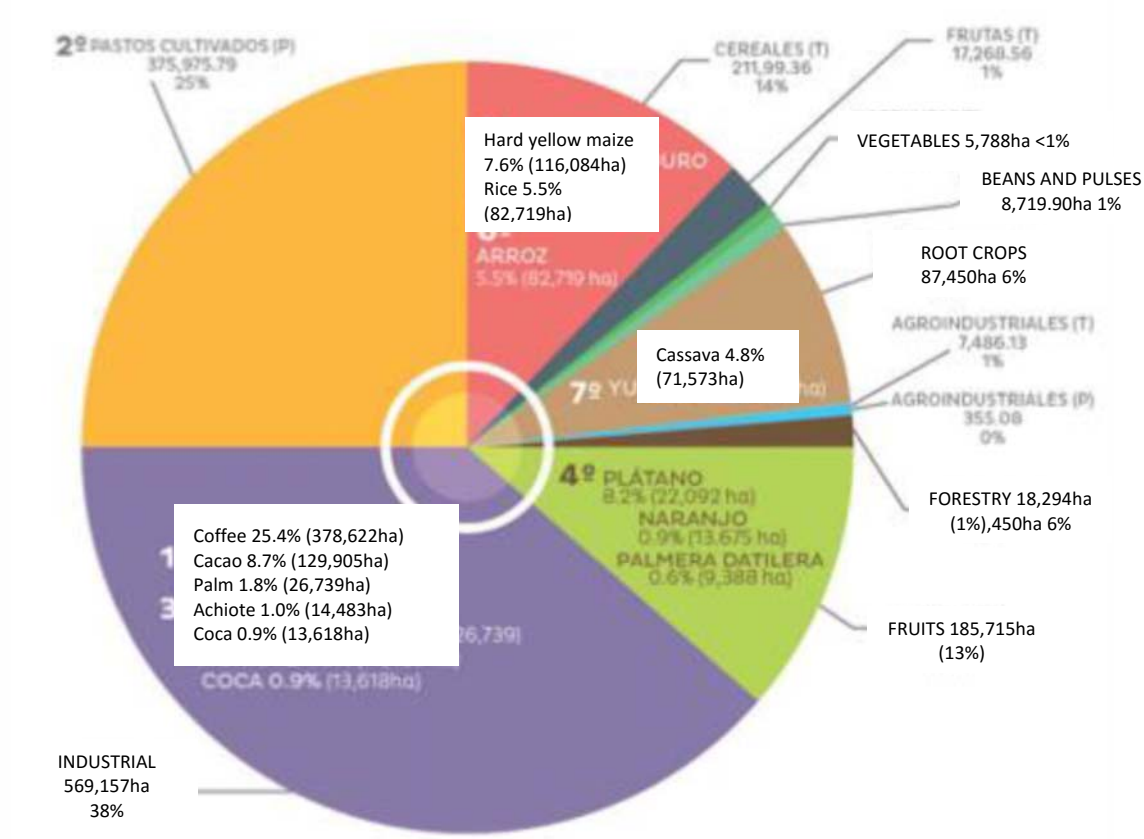



**Figure 11. Relative importance of crops in the target districts (CENAGRO, 2012)**

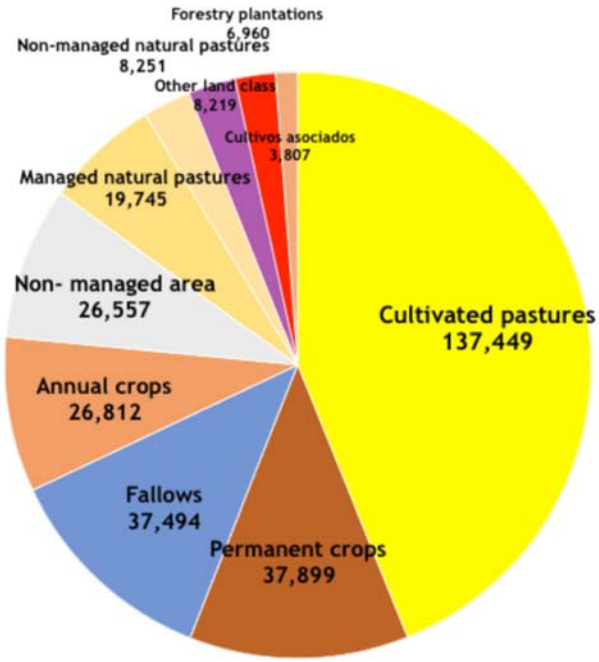


**Table 12. Area of oil palm in Peru, by location (FENAPALMA, 2015) (*indicates areas covered by the project)**

| Region | Entity | Production Zone | Area in growth (ha) | Area in production (ha) | Total (ha) |
|---|---|---|---|---|---|
| **San Martin** | | | | | **28,575** |
| **Loreto** | | | | | **13,309** |
| **Ucayali** | COCEPU/OLAMSA | Coronel Portillo | 0 | 6,154 | 6,154 |
| | Plantaciones de Ucayali SAC | | 3,875 | 0 | 3,875 |
| | Plantaciones Pucallpa SAC | | 5,877 | 0 | 5,877 |
| | INDOLMASA | | 61 | 1,221 | 1,282 |
| | Other individuals | | 3,036 | 0 | 3,036 |
| | ASPASH/OLPASA | Padre Abad* | 1,553 | 2,782 | 4,335 |
| | OLPASA | | 20 | 0 | 20 |
| | Other individuals | | 144 | 0 | 144 |
| | | | | Total | **24,722** |
| **Huánuco** | Asociación Agropecuaria Nuevo Amanecer | Puerto Inca* | 136 | 1,550 | 1,686 |
| | Asociación Central de Palmicultores de Nuevo Paraíso | Marañon | 678 | 956 | 1,634 |
| | | | | Total | **3,319** |
| | | **Totals** | **24,790** | **45,135** | **69,925** |

**Table 13. Indigenous communities in the target districts [7]**

| Region | Province | District | Native Communities | Population | Ethnic Group |
|---|---|---|---|---|---|
| Huánuco | Puerto Inca | Tournavista | Naranjal | 350 | Ashaninka |
| | | Puerto Inca | Cleyton, Santa Teresa, Las Golondrinas, Tsirotzine | 594 | Asháninka, Yanesha, Kakataibo |
| | | Yuyapichos | Tahuantinsuyo (Nuevos Unidos), Guacamayo, Santa Isabel de Pachitea | 657 | Ashaninka, Yanesha |
| | | Codo del Pozuzo | Santa Marta, Alianza de Santa Marta-Unipacuyacu (?), Campo Verde | 540 | Kakataibo, Yanesha |
| Ucayali | Coronel Portillo | Nueva Requena | Shambo Porvenir, Santa Clara de Uchunya | 489 | Shipibo,Conibo |
| | Padre Abad | Padre Abad (Aguaytía) | Puerto Azul, Mariscal Cáceres Yamino, Santa Rosa, Santa Rosita de Apua | 675 | Kakataibo |
| | | Irazola* (San Alejandro) | Puerto Nuevo, Sinchi Roca I, Sinchi Roca II | 705 | Kakataibo |
| | | Curimaná | Cocama | | Cocamas |

**Figure 12. Relation between the percentage of poor people per district and forest cover in 2011, for three altitude zones in the Peruvian Amazon [9].**

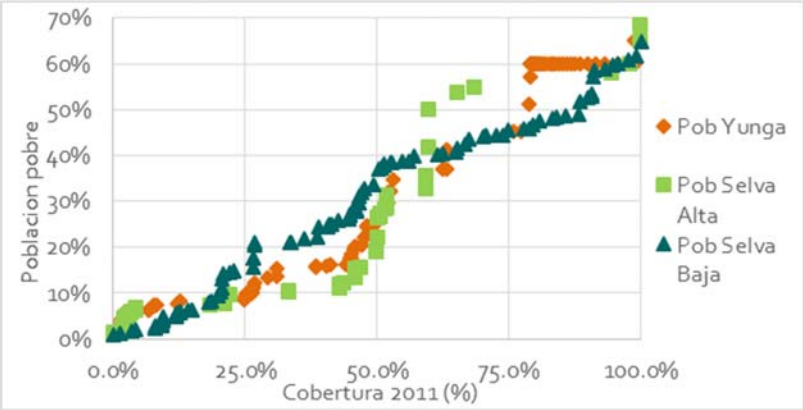



**Table 14. Current crop yields in selected localities of the project area**

| Yields | Sources |
|---|---|
| **Cacao** | |
| Coronel Portillo and Padre Abad provinces:<br>- 650kg/ha/year (average age of plantations 2 years 8 months) | Diagnostico situacional de la cadena productiva de cacao en las provincias de Coronel Portillo y Padre Abad, Región Ucayali* |
| Padre Abad district:<br>- Traditional technology: 200kg/ha/year<br>- Medium technology level: 500kg/ha/year | Mejoramiento y desarrollo de capacidades de la cadena productiva del cultivo de cacao orgánico en el distrito de Padre Abad, provincia de Padre Abad, Región Ucayali * |
| Puerto Inca, Yuyapichis, Codo Del Pozuzo, Honoria y Tournavista:<br>- 350kg/ha/year | Mejoramiento de capacidades técnico productiva y calidad del cacao, en las localidades de Puerto Inca, Yuyapichis, Codo Del Pozuzo, Honoria y Tournavista en la provincia de Puerto Inca, departamento de Huánuco* |
| Puerto Inca:<br>- 500-600kg/ha/year | Tito Bartra Rodriguez<br>Gerente Desarrollo Económico<br>Municipalidad provincial de Puerto Inca |
| - 700-900kg/ha/year | Fernando Voter Salcedo<br>TechnoServe Inc |
| **Oil palm** | |
| Neshuya (Ucayali):<br>- 13t/ha/year in plantations >10 years old | Plan Nacional de Desarrollo Sostenible de la Palma Aceitera en el Perú 2016 – 2025* |
| - 4t/ha/year @ 3 years<br>- 6t/ha/year @ 4 years<br>- 8t/ha/year @ 5 years<br>- 15t/ha/year @ 8-25 years | Norberto Angulo Garcia<br>Industrias Oleaginosas Monte Alegre S.A. (Indolmasa) |
| **Coffee** | |
| Padre Abad y Raymondi:<br>- 15 qq/ha/year. | Mejoramiento de capacidades técnico productivo para elevar la productividad y competitividad de la cadena productiva de café, en los distritos de Padre Abad y Raymondi, provincias de Padre Abad y Atalaya, Región Ucayali* |
| - 12-15 qq/ha/year after 8 years. | Carlos Ramirez Brancacho, Dirección de Promoción y Competitividad Agraria – Dirección Regional Agricultura |
| Padre Abad:<br>- 15 qq/ha/year. | Actualización del diagnóstico de la cadena productiva de café en Padre Abad* |

**Figure 13. Land use changes 2011-2013 (source: MINAM)**

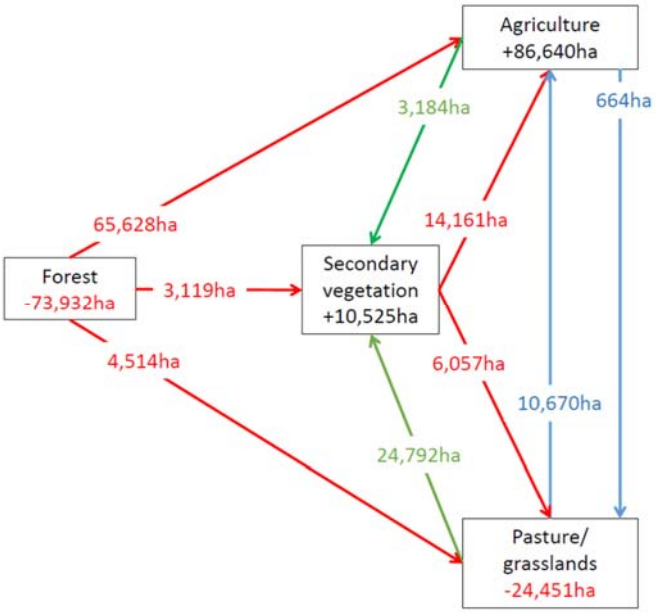
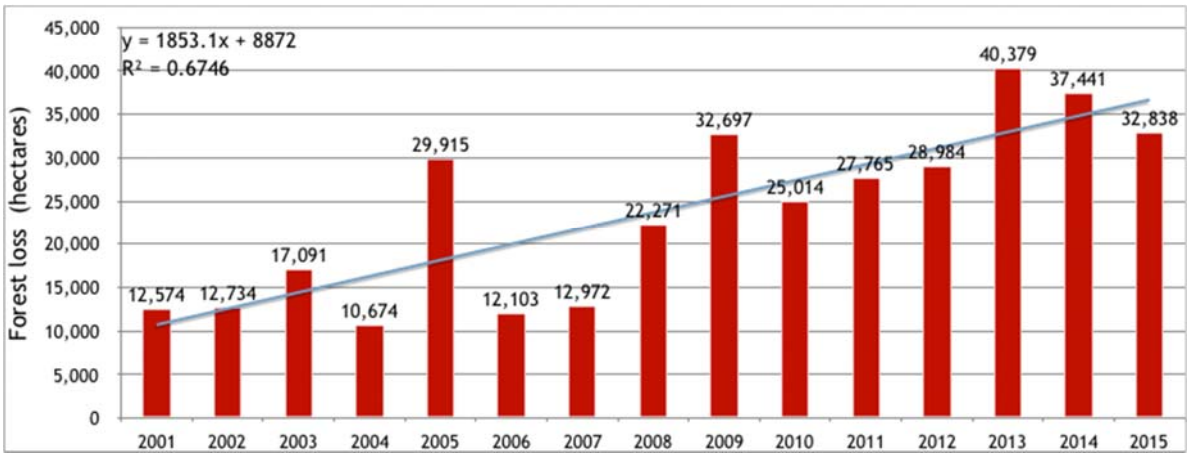


**Figure 14. Area deforested by year in the target areas, 2001-2015 (source: MINAM)**




## C. LAND USE SYSTEMS IN THE PROJECT AREA

*Fallows and secondary forests [8]*

The amount of remaining on-farm forest is related to farm type and decreases with the length of settlement. In the more recently inhabited areas, 59% of the farm remained forested in 2005, whereas in more mature settlements, forest coverage decreased to 40%. Oil palm farmers had over 50% of their land still forested, while cattle ranches, the oldest settlements, had an average of 19% of their land under forest.

Farmers benefit from fallows and secondary forests. Useful species in secondary forests include medicinal plants, edible fruits, firewood, and wood for rural construction or handcrafts. The amount of on-farm secondary forest changes according to the age of settlement. In younger settlement areas, many smallholders preserve tree cover on a small part of their farm in order to benefit from a wide range of forest products. In older settlement areas, secondary forests are the only significant forest resource available to the rural poor. These long-term residents maintain more forest on their farms than do recent colonists.

Most farm families underutilize timber trees growing in their secondary forests. A minority of them actively harvest trees for cash timber sales: most harvest trees for on-farm uses, but do not sell timber due to low on-farm prices for unprocessed timber. In cases where farm families do exploit timber for cash sales, management practices generate low cash returns. On-farm prices are often only one third of the net price at saw mills in urban centers, due to the lack of bargaining power, irregular stem size, high transportation costs.

*Oil palm [*8]

Following its declaration being of national interest in the year 2000, a number of production opportunities opened up for both small and large-scale producers with the provision of incentives including investment facilities, tax benefits, commercial benefits and access to lands. Between 2001 and 2014, according to official statistics, the area under oil palm grew at an average annual rate of 13%, from 14,667ha to 77,537ha (see Additional Annex A, Table 12). Between 2012 and 2014 the area increased by around 12,173ha, from 57,752ha to 69,925ha [29]. In 2014, FENAPALMA estimated that there were 7,209 small and medium-scale producers, as well as large private companies (Grupo Palmas and Palmas del Perú); MINAGRI considers that there is a potential area of 1,405,000ha for the establishment of this crop [22].

Two of the provinces covered by the project (Padre Abad and Puerto Inca) contain oil palm, covering 6,185ha or 8.8%: the bulk of the more than 24,000ha of oil palm in Ucayali Region is located further to the west, in the lowlands of Coronel Portillo province.

**Box 5.** ***Technical assistance provided*** **to** ***oil palm growers in the target areas:***

- **Ucayali Region: Provincia de Coronel Portillo –Neshuya-Campo Verde and Provincia de Padre Abad – Aguaytía (Corredor Pucallpa –Neshuya).** There are around 700 palm producers in this corridor, associated in the Central de Palmicultores de Ucayali-COCEPU, and the company OLAMSA, which through the company SERNASA, provides technical assistance to partners and fruit suppliers. The technical staff carry out phytosanitary evaluations and soil sampling, and approve credits for fertilising the plantations. The Company INDOLMASA, belonging to 22 small producers (ex-members of COCEPU) directly finances technical assistance to its members and 41 fruit suppliers. In this corridor there are 19 field technicians working, and 9 professionals, covering around 17,586ha.
- **Aguaytía:** in this area there are around 320 palm growers, organized in the Palm Producers Association of Shambillo (ASPASH). OLPASA, the oil extraction Company belonging to the members of ASPASH, has a technical team consisting of 4 professionals, who cover around 4,300ha, with visits to producers around once every three months. Individual producers are not covered.

*Cacao*

Peru contains a range of different varieties of cacao, which have been introduced from the Caribbean, Central America and Ecuador, in addition to crosses with native varieties. Consequently, it is estimated that Peru contains around 60% of the varieties of cacao in the world.

The principal production zones are the valleys of La Convención (Cusco), of the River Apurímac-Ene (VRAE, Ayacucho, Cusco and Junín), Huallaga (Huánuco and San Martín), Tambo (Junín) and Marañón (Cajamarca y Amazonas). The Forestera and Trinitaria varieties were introduced in parallel with coffee during the colonization of the Peruvian Amazon in the 1930s. In the 1970s, the area of cacao expanded, to supply international demand. From the 1980s, cacao production was replaced by illegal coca production, which was much more profitable. The sector was also affected by the limited management of plantations, poor post-harvest treatment, low quality genetic material, poor resistance to pests and disease, the lack or weakening of cacao producer organizations and low levels of public and private investment.

The 1990s saw the introduction of a policy of social pacification, with campaigns for the eradication of illegal crops of coca, together with alternative development programmes supported by international cooperation agencies. From the year 2000 on, production of CCN51 cacao was promoted with technical and financial support from entities such as the UN Office on Drugs and Crime (UNODC) , the National Commission for Development and Life without Drugs (DEVIDA), the Ministry of Agriculture and Irrigation (MINAGRI) and USAID, resulting in improvements in cocoa quality and yield. In 2012, there were 4,201ha of cacao in Huánuco Department (45% Criollo and Nativo varieties, 50% CCN51 and 5% Trinitario and Forastero) and 28,984ha in San Martín (8% Criollo and Nativo, 90% CCN51 and 2% Trinitario and Forastero) [26].

The Ucayali region has approximately 1,500 ha of cacao in the western portion of the Ucayali benchmark site - close to the Andean foothills. Yields have been low due to diseases such as witch's broom (Crinipellis perniciosa) and moniliasis. Recent extension efforts by CARE, Winrock International and ICRAF have helped farmers increase yields.

*Citrus*

Many established smallholder farmers also produce a variety of citrus products as part of their diversification strategy. In the 1980s, the regional government promoted citrus production. In 2001, approximately 9,000ha were under production of limes (44%), oranges (42%) and tangerines (14%), with a total production in the Ucayali region of 15,300 t/yr. In 2012, the Agricultural Census reported a total of 19,500ha of citrus plantations in the Amazon as a whole.

*Long fallow slash-and-burn agriculture*

Farmers convert high forest or older fallows (secondary forests) ranging from 6 to 20 years of age for agricultural production. The biomass enhances soil nutrients while the burning reduces pests and weeds. Traditional long crop-fallow rotations typically start with upland rice in the first year, followed by two years of maize, plantain or cassava. Two representative systems are: 1) agricultural production with the first year in rice and the next two years with cassava, and 2) agriculture production with rice in the first year, then two years of plantain. In both systems, land is fallowed for eight years. Land preparation in the first year requires 21 workdays/ha, given that

a secondary forest is assumed to be converted to agricultural use; high forest conversion typically requires more labour (42 workdays/ha). In addition to traditional crop production, illicit crops such as coca are also cultivated.

*Short fallow slash-and-burn agriculture*
Shorter crop-fallow rotations are also used to cultivate traditional annual food crops, usually grown for three years, followed by three to five years of natural bush fallow. As with longer fallow systems, fire is typically used to prepare the land. Weed invasions and lower soil fertility can lead to smaller harvests as compared to longer fallows. The representative systems are the same as the long fallow system described above but have a 4-year fallow period. In some areas farmers use Kudzu (*Pueraria phaseoloides*) to fix nitrogen and shorten the fallow period, thereby intensifying production.

*Native pastures*
Cattle are an important livelihood option in the Peruvian Amazon. Herd sizes are typically small (<100 head); most small ranches consist of mixed systems that include annual crop production; and many farmers with pastures do not have cattle but almost all of them aspire to get some. Capital constraints typically limit farmers' cattle purchases; the majority of farmers with cattle financed their initial purchases with off-farm income.

After growing annual crops for various rotations, farmers often leave fields fallow and, if available, graze cattle. Native grasses quickly take over, such as *Paspalum conjugatum*, *Axonopus compresus* and *Homolepsis atruensis*. Native pastures, however, degrade rapidly thereby producing less biomass per ha. The stocking rate on degraded traditional pastures is only about 0.6 animal units (AU)/ha and milk yield is typically around 3 litres/day.

The land area dedicated to pastures generally increases according to the age of the settlement. Pastures covered 60% of the larger cattle ranches. For smallholders, the recent settlers had about 10% in pasture, whereas those longer-established had 19% (Fujisaka and White, 1998). Approximately 20% of farmers who have pastures, actually own cattle (Fujisaka, 1997).

*Riverine*
Areas along the Ucayali and Aguaytía rivers provide a diverse range of agro-ecological conditions in which to cultivate crops (WWF "Iquitos varzea" ecoregion). A significant proportion of agricultural production comes from riverine areas: 60% of plantain, over half of rice and nearly a third of maize, cassava and bean production. These areas are commonly divided into four types: upper and lower floodplains, beaches and mudflats. Annual flooding provides nutrients, making the soils relatively fertile and enabling greater crop yields. While only the upper floodplains require fallowing, to control weeds principally, the lower areas come with a greater risk of unexpected flooding and catastrophic crop loss. Of the estimated 150,000 ha of available riverine land, only one third is used for agricultural production, primarily because of flood risks and expensive transportation costs. The two main production areas are mudflats, where temporary farmers produce rice, and floodplains where permanent dwellers cultivate a variety of crops, including rice, maize, cassava, beans, soybeans and plantains.

*Forest use*
Most small and medium-sized farmers are to some degree linked to markets and as a consequence are not exclusively "forest dependent". Few family producers manage natural forests or forest plantations, and forests typically make a limited contribution to their economic security; farmers tend to view forests as a reserve of land available for conversion to agriculture, rather than a valuable resource on their own account [9].

Forest use in the Amazon has traditionally comprised subsistence activities involving hunting, gathering, fishing and farming. However, over time, indigenous peoples and other traditional forest users (ribereños and colonists) have added commercial activities, such as harvesting of timber and NTFPs. In the past, rural populations in this region had little incentive to pursue land-use strategies with higher immediate returns than those for swidden agriculture because land was relatively abundant, they rarely had secure tenure over land and resources, and markets for NTFPs were unreliable [13].

In remote regions of the Amazon, most colonists, ribereños and indigenous peoples engage predominantly in shifting cultivation, with relatively little development of cattle ranching. The intensity of smallholder agriculture varies significantly within groups: households nearer to markets tend to include cash crops and commercial NTFPs in their livelihood strategies; by contrast, more remote households engage primarily in subsistence agriculture and subsistence use of NTFPs [13].

## D. PROCEDURES FOR LAND USE CLASSIFICATION, PLANNING, ZONING AND TITLING

***Classification of Lands according to Principal Use Category (CUM)***

Prior to titling or assignment, land is classified according to its potential, in terms of its 'Principal Land Use Capacity' (*Capacidad de Uso Mayor* or CUM), in accordance with the regulation for Land Use Classification (Supreme Decree Nº 017-2009-AG) and the Regulation for Soil Surveys (Supreme Decree Nº 013-2010-AG). This classification is an input for Ecological and Economic Zoning (ZEE), Territorial Planning (*Ordenamiento Territorial*), land titling and forest zoning, and allows soils with similar physical, chemical and biological characteristics to be grouped. The classifications used under this process are annual or short cycle crops (*cultivo en limpio*) (A), permanent crops (C), pasture (P), forest production (F) and protection lands (X).

MINAGRI, through its General Directorate of Agrarian Environmental Affairs (DGAAA) is responsible for the execution, supervision, promotion and diffusion of land classification, in coordination with MINAM. In the process of land classification, DGAAA and Regional Governments do not require approval by institutions in other sectors such as forestry or environment. The soil surveys that form the basis for the classification may be carried out by the Natural Resource Evaluation Directorate (DERN), or land users, who may contract specialists registered with DGAAA.

***Ecological and Economic Zoning (ZEE), Territorial Planning (Ordenamiento Territorial)***

*Ordenamiento Territorial* (OT) is a State policy through which analysis, studies and information permit the adequate and rational organization and administration of the occupation and use of lands, with the aim of planning development and preventing or mitigating impacts generated by economic and social activities. It is therefore intended to contribute to the wellbeing of the population and the conservation of natural capital, through the definition of intervention actions. Economic and ecological zoning (ZEE) was incorporated into the Peruvian legal framework in 1997[48] to prevent problems such as title overlapping and inappropriate use. ZEE is the basis for the development of OT plans, and defines the potential and limitations of the land on the basis of participatory process and field information.

MINAM has overall responsibility for oversight of ZEE, while regional and local governments are in charge of enforcement in the political administrative areas under their remit [3]. In the Peruvian Amazon, much of the work to develop ZEEs has been led by the Instituto de Investigaciones de la Amazonia Peruana (IIAP), a public research institute, attached to MINAM and located in Iquitos. The scientists at IIAP have been developing the concept of the ZEE as a methodological framework and its implementation in the Peruvian Amazon for more than 20 years, but regional Governments have now come to play an increasingly important role in the process. The effort to elaborate ZEE's is occurring at three scales – micro (at the level of a forestry concession or community [10,000-50,000 hectares]); meso (at the level of a district or province [100,000 to 1 million+ hectares]); and macro (for a whole region, around 10 million hectares).

In December 2014, ZEE processes were underway in all 24 departments of the country; ZEE studies had been completed in nine regions (San Martín, Callao, Amazonas, Madre de Dios, Cusco, Cajamarca, Piura, Ayacucho, Tacna, Lambayeque y Huancavelica), and the next regions where they were due to be completed were Junín, Huánuco and Moquegua[49]; they have now been completed at meso level in Ucayali and Huánuco, and are under review by MINAM. The macro-scale study is available for San Martin (ZEE-San Martin, 2009) and Madre de Dios (ZEE-Madre de Dios, 2009), while at least 11 meso-scales studies were being evaluated in Loreto in 2013 (Info Region, 2013). Many of these studies are still being developed or are in different stages of consultation, but once completed the documents and associated maps should be legally binding – at least in Loreto (see Ordenanza Regional N° 004-2013-GRL-CR; Info Region, 2013). In addition to the ZEE processes, since 2013 analyses of land use dynamics have been included in Specialised Studies of Changes in Land Coverage and Use[50].

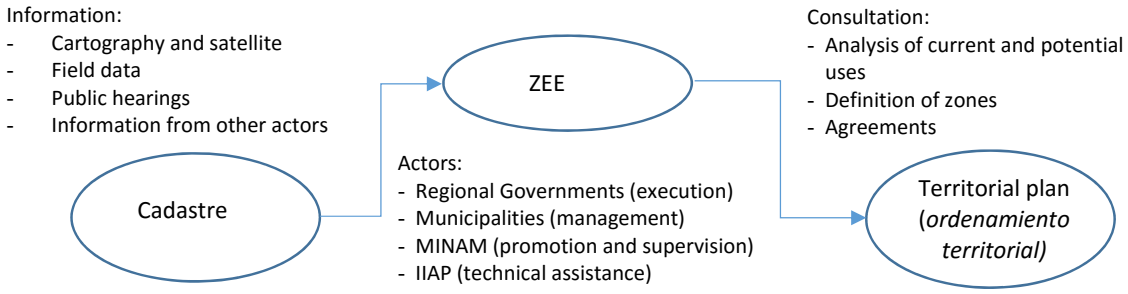
[48] Regulated in 2004 by Supreme Decree No. 087-2004-PCM

[49] http://www.minam.gob.pe/ordenamientoterritorial/mapa-zona-ecologica-economica-zee/regiones-zee-2/

[50] RM N° 135-2013-MINAM

The process for ZEE[51] is shown below:

**Figure 15. Simplified process for ZEE and OT**




**Box 6. Categories used in *zonificación forestal* and *ordenamiento forestal***

*Zonificación forestal* categorizes forests as:

- Productive forest zones
- Protection and ecological conservation zones
- Recuperation zones
- Special treatment zones.

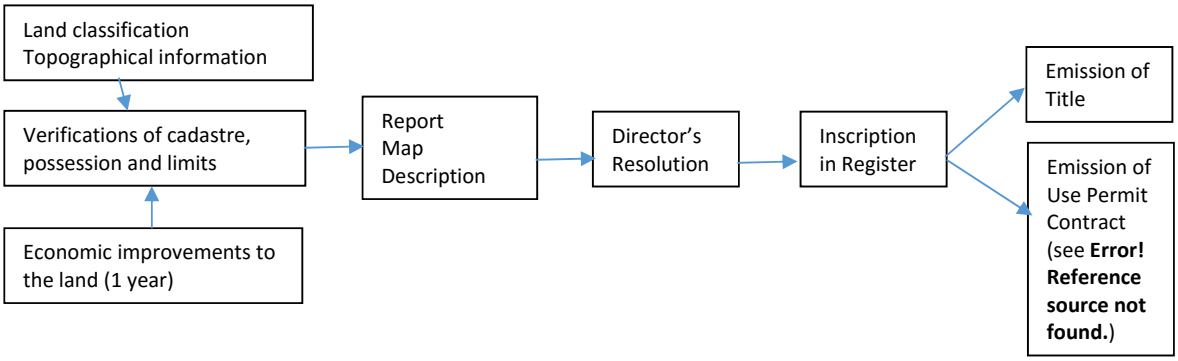
*Ordenamiento forestal* then categorizes them as:

- Local forests
- Protection forests
- Forests in the lands of peasant or native communities
- Forests in private properties
- Permanent production forests
- Reserve forests

***Land titling***

The process for the emission of land titles is summarized below:

**Figure 16. Summary of the process leading to land titling**




**Box 7. Use permits (*cesiones en uso*)**

Article 63 of the Forestry and Wildlife Law (Law 29763), provides for the issuing of use permits in the case of agroforestry systems in zones of agroforestry or silvopastoral production, or recuperation. In these cases, the Regional Forestry and Wildlife Authority may enter into contract for use permits (*cesiones en uso*) on public lands, on areas not exceeding 100ha, with the conditions and safeguards established by SERFOR and in the framework of Law 29763 and its regulation, and respecting acquired rights. This may be applicable in the case of oil palm plantations that are already established on Forestry or Protection lands, and which do not have land titles. This aspect may be included in Complementary and Temporary Dispositions, potentially covering plantations established prior to the approval of the regulation of the Forestry Law, with the safeguard that the permit is for a prudential period of 25 years (after the palm production decreases). This requires the DRA together with SERFOR to carry out cadastral surveys of plantations and forest lands.

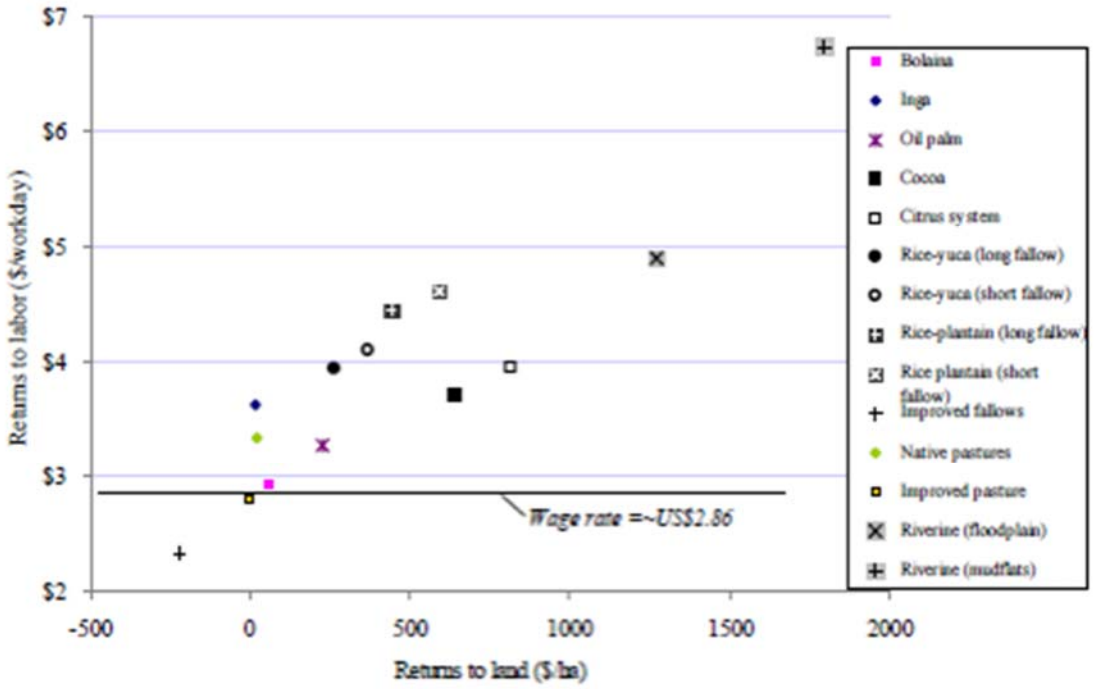
[51] Decreto del Consejo Directivo Nº 010-2006-CONAM-CD, del 28 de abril de 2006

## E. PRINCIPAL DETERMINANTS OF PRODUCTION SYSTEMS

***Determinants of production systems***

Research in Ucayali has shown that the financial performance of land use systems there is varied both in terms of returns to land and returns to labor. Despite the range of returns, systems typically have similar performance with respect to both factors of land and labor. For the LUS studied, the land and labor returns are positively correlated (0.90, R2 = 0.82), as can be seen in Figure 17.

**Figure 17. Returns to labour and land of land use systems in Ucayali [8]**




Agricultural production in riverine systems generates the highest returns to land and labour: nearly double those of upland systems. Mudflats and floodplains have the highest returns to land over the 20-year horizon (NPV US$1796 ha-1 and NPV US$1270, respectively). They permit farmers to earn almost US$5 to US$7 workday-1, respectively. [8]

Citrus (NPV US$810 ha-1) and cacao systems (NPV US$643 ha-1) have the highest of returns to land in the uplands. Returns of the citrus system come from both the sale of agricultural crops and fruits. The short and long fallow systems and the oil palm perform similarly. Traditional and improved pastures, as well as the multistrata Inga agroforestry system, have very low NPV returns to land (NPV US$21 ha-1, US$-4 ha-1 and US$19 ha-1, respectively). Improved fallows has the lowest returns to land (NPV US$-221 ha-1). [8]

Systems at or below the average daily wage for unskilled labor, approximately US$2.86 (10 Peruvian soles), are unlikely to be attractive options for farmers. Almost all systems produce labor returns greater than this market wage, with most in the US$3 to US$7 day-1 range. [8]

Pasture systems produce some of the lowest returns to labor (and returns to land). High investment costs, in terms of cattle and fencing, reduce the financial performance. Cattle have a strong cultural significance in Peru as in many Latin American countries, however in the target areas the expansion of the sector reported in the 1990s (Labarta, 1998) appears to have slowed in recent years. Other systems that require initial investments, such as cacao, oil palm and agroforestry systems, generate returns to labor higher than the market wage with higher returns to land than pastures. Nevertheless, short and long fallow slash-and-burn systems produce higher returns to labor than these perennial systems. Citrus systems, however, demonstrate good returns to both land and labor, although the price elasticity of demand for citrus may foreclose profitable production at a large scale

unless markets expand, either through exports (which may not be competitive internationally) or increases in domestic demand driven by rising incomes. More research is needed to examine the viability of expanding citrus production. [8]

Farmers may not be able to afford the establishment costs of the perennial systems either in terms of labor and material investments or waiting until the system produces its first year of positive cash flow. Oil palm requires almost five years until earnings from the system are positive. Even short and long fallow systems have negative cash flow (when imputed labour costs are included) earnings in the first year since land preparation can be approximately US$53 ha-1. [8]

**Table 15. Profitability of land use systems in Ucayali [8]**

| Land Use System | Scale | Returns to Land | Return to Labour | Establishment Costs | |
|---|---|---|---|---|---|
| Farm size: 30ha | LUS (ha) | NPV* private prices (US$/ha) | Wage to set NPV=0 Private prices (US$/workday) | Labour and materials (US$/ha) | Year of first positive cash flow |
| Multistrata system | 1 | 18-60 | 2.9-3.62 | 148-176 | 3-4 |
| Oil palm | 5-10 | 226 | 3.2 | 1,272 | 4 |
| Cacao | 1 | 644 | 3.34 | | 4 |
| Citrus | 0.5 | 810 | 3.96 | | 3 |
| Long fallow | 2 | 262-440 | 4.12-4.62 | 280-465 | 2 |
| Short fallow | 2 | 367-591 | 4.10-4.61 | 280-465 | 2 |
| Improved fallows | 1** | (221) | 4.5 | 112 | 3 |
| Native pastures | 1-60 | 22 | 3.33 | | 2 |
| Improved pasture | 1-60 | (4) | 2.79 | 200 | 2 |
| Riverine | 1.7-4.5 | 1,271-1,796 | 4.89-6.74 | 53-148 | 1 |

*NPV: annual discount rate = 15%; time horizon: 20 years; ** size of experimental plot.
Sources: Alegre *et al* (2005; Faminow (2001); Holmann (1999a,b); Labarta *et al* (2005), White *et al.* (2001) ; Yanggen (2003)

The labour inputs to establish perennial LUS are higher than traditional fallow systems. During the establishment phase, annual crop production typically provides earnings that reduce establishment costs. Operating labor requirements for oil palm are much higher than other systems. In contrast, pasture systems are markedly lower. Pasture systems, however, do not address food security concerns during the establishment phase. Most systems are subject to both production yield and market price risks. [8]

**Table 16. Labour requirements and food entitlements of land use systems matrix (Ucayali) [8]**

| Land Use System | | Labour | | Source of Food Security* | | Risk# |
|---|---|---|---|---|---|---|
| | Scale (ha) | Establishment (days/ha) | Operating (days/ha/yr) | Establishment | During operation | |
| Multistrata system | 0.5 | 104-413 | 30-143 | F | B | B |
| Oil palm | 5 | 118 | 684 | F | B | B |
| Cacao | 1 | 60 | 136 | F | B | B |
| Citrus system | ~1 | 72 | 125 | F | B | B |
| Long fallow | 2 | 21 | 53-67 | B | B | B |
| Short fallow | 2 | 21 | 53-67 | B | B | B |
| Improved fallows | 0.1 | 92 | 33-143 | F | B | B |
| Native pastures | 50 | 4 | 8 | 0 | $ | P |
| Improved pasture | 20 | 18 | 6 | 0 | $ | P |
| Riverine | 1-5 | 16 | 74-100 | B | B | B |

**Additional food production (F); supplies additional income ($); neither (0); both (B)*
*#Market price risk (M); production risk (P); or both (P)*

# F. ADDITIONAL ANALYSES OF THE CAUSES AND DRIVERS OF DEFORESTATION

**Illegal logging** is a major cause of forest degradation in the target localities. Logging is typically selective, focusing on the extraction of high value species: more than 120 species are harvested but 6 species account for around 50% of the volume and 20-25 species account for around 90% (INRENA, 2001, 2002, 2003). Illegal logging has major economic impacts: in 2006, the World Bank estimated that nationally the illegal logging sector generated between $44.5 and $72 million annually, compared to recorded legal profits from timber sales which reached only $31.7 million. Losses to the economy overall were estimated to be around $70 million as of 2002 due to tax evasion, non-payment of required fees, and devaluation of standing timber. By 2011, the government and industry of Loreto region estimated that illegal logging was causing the country annual losses greater than $250 million dollars – 1.5 times the value of total timber exports [10]. It also has major impacts at local level: while illegal loggers do not necessarily aim to change land use, they reduce the value of the forest through selective logging, which affects its species composition and structure, together with its ecological functioning, biodiversity and carbon content, and its capacity to provide ecosystem goods and services, as well as reducing its value and increasing its susceptibility to incursion and clearance by settlers. Illegal logging also has severe local effects on local populations, especially indigenous peoples, undermining governance structures through corruption.

The deforestation processes associated with logging in this area are not necessarily the same as those typically described in other tropical areas, starting with the arrival of loggers, followed by small (mostly subsistence) farmers and then by capitalized medium-size farmers: here, there is a more distinct compartmentalization between loggers and others, and the relation between them is not necessarily sequential or direct [10]. Timber producers specialize in this activity and in the timber value chain. They are interested in the forest resource, and not necessarily in access to land. Generally, they are continually seeking new areas of forest containing commercially valuable species, regardless of whether the area coincides with a concession, protected area, indigenous territory or other category. The timber extracted is then typically legalised (or "laundered") using documents from authorized areas.

Timber extraction and processing is conducted by both formal and informal operations. Formal companies tend to be larger and backed by financing from Lima or international sources. Less formal small-scale harvesting operations are widely scattered throughout the Amazon region, particularly along the rivers, and often in remote areas. Ill-trained, informal loggers with chainsaws perform most extraction. Vertical integration of the industry including extraction, transformation, transport, and commercialization is not strong. Consequently, the logging industry is very inefficient [5].

The trees that are sold are mostly extracted from forests in the interior of the territories of communities, which have been invaded by farmers and loggers. The trees are sold either standing or sawn; the types of exploitation and their profitability depend on the timber volumes and species. For ranchers, timber constitutes a complementary source of income: it serves to cover expenses such as schooling, health care and clothes, and in some cases is used for investment in the expansion of cropping areas.

Some native communities have Government permits for commercial timber harvesting: these are typically implemented in association with timber companies, which handle timber extraction, processing and marketing. These permits are in some cases used to "launder" timber harvested in other, non-authorized, areas [10]. In Codo del Pozuzo, there are three separate "laundering" chains for illegally felled timber that arrives in Lima in the round: a) the sale of illegally-felled timber through concessionaires; b) conversion in flitches by local sawmills (Puerto Súngaro), and (c) laundering between loggers and sawmills in Puerto Súngaro [10].

According to the National Strategy for Forests and Climate Change (ENBCC), the proportional contribution of different productive activities to deforestation is as follows:

- Agriculture: 51.9%
- Livestock: 39.9%
- Illegal mining: 5.8%
- Coca cultivation: 2.3%
- Infrastructure and extractive industries: 0.3%

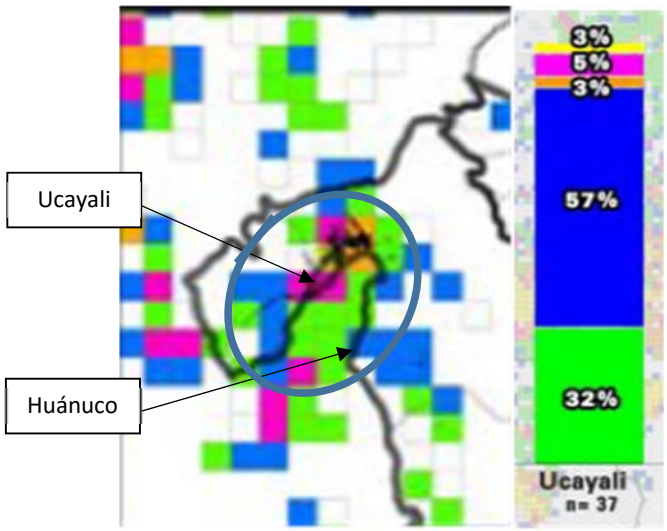
The dominant process of deforestation in the target localities is the **conversion of forest to agriculture** (see Figure 13 in Additional Annex B), including the production of staple grains by smallholders, perennial cash crops such as cacao and oil palm, and medium term cash crops such as papaya. The objective of the farmers carrying

out this deforestation is not normally to use the timber, but rather to carry out agricultural production: the income received from the sale of timber as a result of forest clearance is considered complementary and is largely unrecognised.

The forest that is affected in this way is comprised in part of primary forest and in part of well-developed secondary forest that has regrown following earlier clearance[52]. Although some of the current forest clearance is occurring within the context of cyclical swidden systems, there is a significant imbalance between the area being cleared and the area regenerating to secondary forest, and a net increase in the areas cleared annually (), indicating that the situation is far from stable.

Most of the forest clearance in the target localities is either diffuse (especially in Huánuco), suggesting **disorganized clearance by multiple smallholders**; or linear (especially in Ucayali), suggest **opportunistic clearance following the opening of roads** (Figure 18). There are smaller areas of more geometric clearings, suggesting clearance for **larger scale, more organized commercial agriculture or ranching**, and wishbone pattern clearance, suggesting **colonization along small feeder roads**.

**Figure 18.** Spatial patterns of deforestation in the project target area [16]

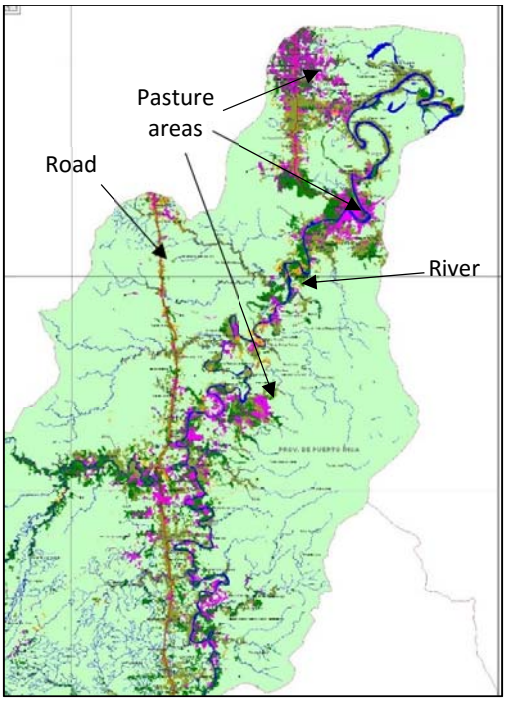



Green = diffuse, blue = linear, orange = geometric, pink = fishbone, yellow = consolidated

Deforestation patterns in the Ucayali region have initially followed rivers but as roads improved access to resources, faster rates of deforestation occurred along the roads (Figure 19).

[52] The map of deforestation in Aguaytía catchment 1955-1995 (in [8]) shows that significant areas classified by MINAM as "forest loss 2000-2015" had already been deforested prior to 1981.

**Figure 19.** Land use in the north-eastern part of Ucayali Province




Illegal forest clearance for agriculture tends to occur mostly in geographically isolated areas, where the producers (principally immigrants) do not know and/or do not respect the limits of the authorised use categories, and official controls are deficient or "tolerant". This is typically accompanied by **land trafficking and low levels of governance and legality [**10**]**.

Between 2001 and 2014, 65% of forest clearance in the target localities occurred in units of less than 5ha. This is not however necessarily an accurate reflection of the magnitude of the impact of small farmers on primary forest, given that a significant proportion of this clearance appears to have occurred instead in areas of well-develop forest fallow (see above). Most forest loss occurs in areas where small scale permanent crops are associated with ranching, and larger scale crops. This is related to the conditions and the levels of investment that correspond to the profiles of medium scale producers or highly specialised small producers [9].

The highest rates of forest clearance in the target areas have occurred in rural properties (38.5%), followed by non-categorised land (23.0%) (Figure 20). Natural Protected Areas and Private Conservation Areas have been relatively effective as barriers to forest clearance, as shown by their low deforestation rates (0.3% and 0.5% respectively over the period). Indigenous areas have also had relatively low rates of forest clearance (Figure 21), suggesting that indigenous communities are relatively effective in managing their forests sustainably and preventing incursion, although the deforestation rates in indigenous areas in the project localities, at 7.1%, is still significant and is several times the rate in indigenous areas across the Amazon as a whole (2.3%).

**Figure 20. Forest clearance rates by territorial category, 2001-2014**

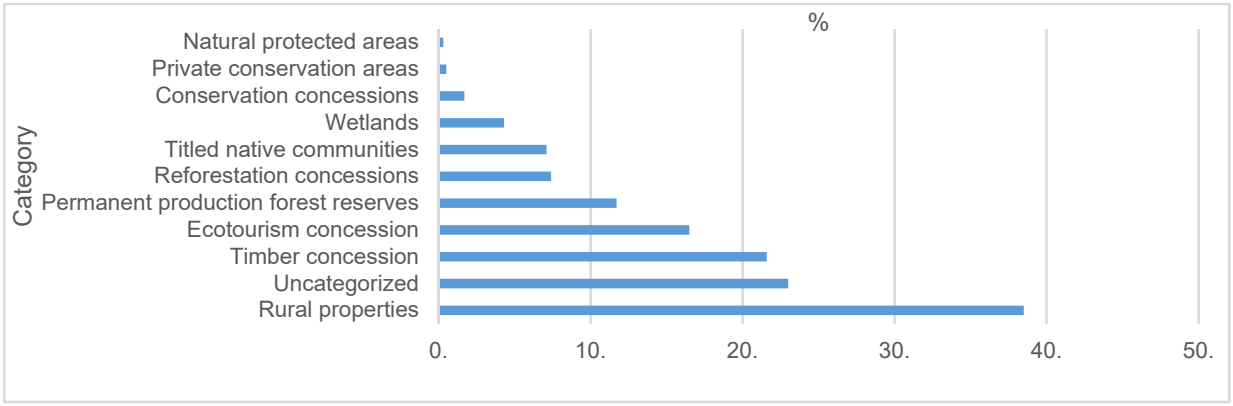
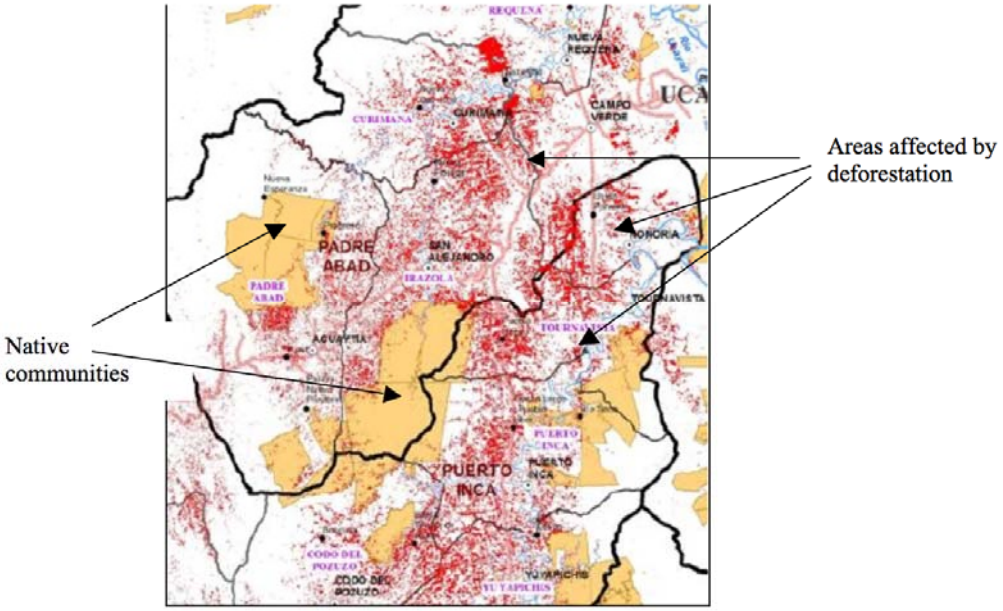


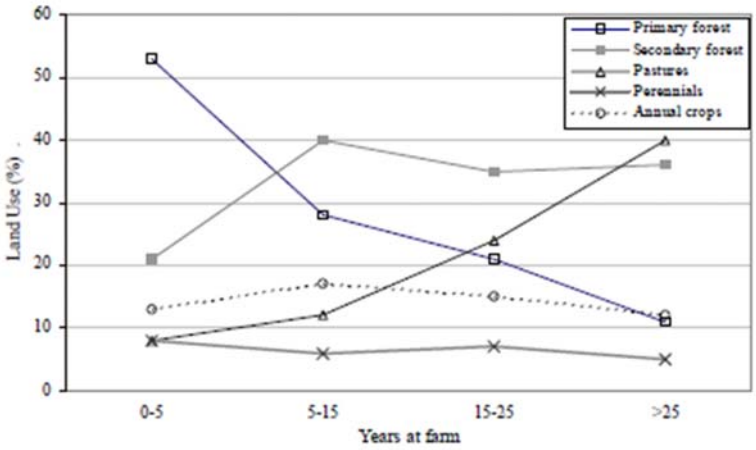

**Figure 21.** Locations of native communities and hotspots of forest clearance in the target localities

I




Following initial establishment, farms typically pass through a process of transition: the area of forest in the farm unit declines, mirrored by a progressive increase in the area of pasture; cropping areas tend to occupy a relatively limited and constant area of the farm, due in large part to limitations on farmers' access to the labour and capital which these systems demand; and, following initial expansion, the area under secondary forest tends to stabilize in line with the stabilization of cropping areas, with which secondary forest typically alternatives in a cyclical manner in "swidden" systems (Figure 22). Annual crops may be an intermediate phase prior to the installation of permanent crops, or cultivated in a crop/fallow rotation. Historically, the end point of deforestation processes has been the establishment of pastures, which currently account for around two-thirds of the deforested area; however, the area under pasture declined significantly between 2011 and 2013 (Figure 14) due in part to replacement by perennial crops (principally oil palm), but more significantly through the reversion of pasture to secondary vegetation, indicating a decline in the sector.

**Figure 22.** Land use changes in **Ucayali** benchmark site studied by ICRAF (2000) Source: Yanggen (2003) **[9]**




Farmers use slash and burn agricultural techniques because of their low capital input requirements. The majority of settler-farmers have few financial resources with which to purchase cattle; farmers increase holding in pastures due in part to decreasing fertility of soils after repeated slash and burn agricultural cycles. Rather than move to new holdings, farmers sometimes change their land use systems to pastures and perennial crops [8].

The production systems that are established are also dependent on biophysical characteristics, and especially the physiography and the configuration of the transport and access networks. Palm is typically located in flat, accessible areas, while coffee and cacao may be found in steeper, more inaccessible localities. Colonists sow their crops in plots located near to roads; native people do so along the margins of rivers, which are used as transport routes to the communities and for the sale of part of the production, especially plantains. Small dispersed patches of deforestation correspond to Coca plantations, typically established in small, dispersed deforested patches, are normally located in areas with difficult access, with a range of different legal use categories including native communities and uncategorised areas.

Once established, farmers can apply for certificates of possession (*constancias de posesión*), which then help them to obtain land title. This represents a perverse incentive that promotes the conversion of forests to agriculture. The existence of *constancias de posesión* and land titles are important elements facilitating access to programmes such as the Peruvian Cocoa Alliance (ACP), AGROIDEAS and PROCOMPITE: for this reason, DEVIDA promotes land titling through PIRDAIS.

Occupations of native communities frequently give rise to conflicts. Colonist farmers have in some cases settled in the lands of native communities, in some cases forcibly and in others through rental arrangements. They establish annual or biannual crops, and in some cases may have *constancias de posesión* on native lands, which generates conflicts due to overlapping rights. There also exist intermediate forms of occupancy of native lands, which in some cases may be through social relations (marriage), and which may be tolerated or authorised.

It is also common to find permanent crops in protected areas. This arises from producers' needs to find cropping areas in unknown locations and through informal networks, the lack of knowledge of laws and regulations, and limited clarity regarding the legal framework for access to land, together with ambiguous interpretation and application of the law by the authorities.

332. As the agricultural frontier advances and *constancias de posesión* and titles are acquired, the sale of lands between small and medium producers becomes more frequent (in some cases including the land titles), a phenomenon which may motivate the movement of migrants to new forest areas or to urban areas. There are also land sales between large/medium size producers and small producers. In Codo del Pozuzo, large producers of Austrian/German origin purchase lands from small and medium producers, at the same time providing opportunities for paid labour, and supplying technical assistance as well as livestock and credit so that they can expand their pasture areas.

The processes of pasture establishment by ranchers involves the initial occupation of *de facto* open access areas, clearance of forests and direct sowing of pastures. Initial investment costs can be high, including the purchase of planting material, fencing and the purchase of cattle (which may cost US$300 per head), and, as a result, ranchers typically maintain minimal stocking densities, their principal motivation for pasture establishment

being land grabbing and speculation [9]. Medium-scale producers who have the resources needed to continue investing in ranching, and are also interested in diversifying their activities with other crops, tend to purchase land from small livestock producers and sell them to large ranchers, while generating labour opportunities for small local producers and new migrants. However, large farmers do not only gain access to land through small and medium scale farmers, but also through the direct granting of larger areas of land for the establishment of permanent crops such as oil palm.

Another form of relation between group of producers is the provision of labour. Small farmers provide labour for large and medium-scale farmers, and it is common for there to be competition for labour between one crop and another. Labour demand can function as a draw for temporary migrants.

333. Deforestation is accompanied with a process of transition between the prevailing producer types. Small scale subsistence farmers are more numerous in areas with more forest cover; while medium scale producers are more prevalent in areas with more active deforestation than those with stable vegetation cover, given the association of this type of producer with the processes of pasture expansion [9]. Although forest clearance for smallholder agriculture has significant negative impacts on global environmental values (see below), it is also associated with the process of emergence from poverty, given the strong correlation shown between forest cover and poverty levels, which holds true in all of the three main altitude classes (see Additional Annex A, Figure 12).

Migration to the agricultural frontier has occurred in different waves and from different places of origin, and different groups of immigrants have brought with them different production strategies and capacities. Migrants descended from pioneers of European origin have established large areas of cattle pastures in Codo del Pozuzo; colonists from Andean and Amazonian areas initially planted annual or biannual crops, together with coca, followed by pasture, and many now grow permanent crops; in Pucallpa, meanwhile, migration has led to the expansion of urban areas. Recent migrants in Codo del Pozuzo tend to be medium and large-scale ranchers from neighbouring districts and from Chaglla, who have the capital needed to occupy and buy land from medium and small-scale farmers.

Agricultural clearance resulting from the settlement of migrant farmers can be clearly distinguished from cyclical (sometimes called “migratory”) shifting cultivation which is the traditional production modality of many long established producers in the Amazon, including indigenous peoples. Rather than necessarily leading to land conversion, shifting cultivation typically involves patterns of growth, fallow, and regrowth, rather than felling of primary forests; these cycles produce temporal and spatial mosaics of crop fields and forests than can be relatively stable and sustainable. Family-based producers in the native communities of Sinchi Roca and Puerto Nuevo in Irazola district, for example, harvest trees for their own use, such as house construction, collect non-timber forest products and plant crops such as cassava and plantain [9].

***Expansion of commodity-based agriculture***

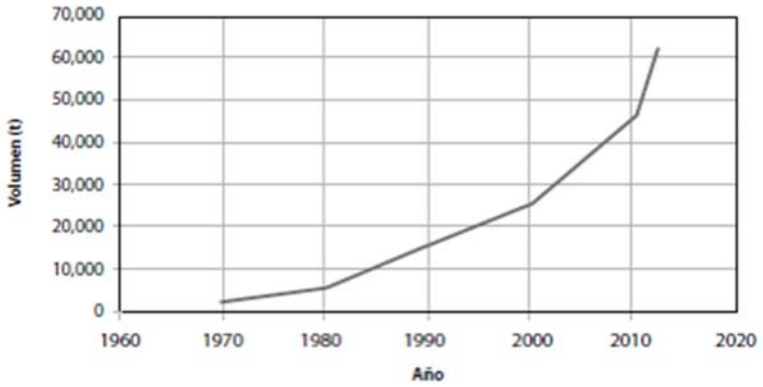
In recent years, the area of perennial crops (coffee, cacao and oil palm) has increased in the three main altitudinal zones, especially in the fluvial *yungas* and *selva alta* (foothill forest). In the lowland forest area, these kinds of crops are progressively increasing in importance and farmers’ productive systems are becoming increasingly specialised, with support from incentives and projects. Much of this expansion has occurred in areas categorised as appropriate only for forestry or protection, or where the conversion and elimination of forest is not permitted and which are therefore ineligible for titling [9].

Cacao contributes to an estimated 30% of national GHG emissions from forest conversion, which at 41% is the main source of GHG emissions in the country. Cocoa production in Peru is experiencing a major boom (see Figure 23). It has tripled in the last 15 years, making the country the fourth largest exporter in Latin America and the second in organic production. Cocoa is the flagship product of Irazola.

Cocoa producers may be either occupiers or owners, and have established themselves in the hillier areas of Irazola; this topography has limited the expansion of other productive sectors such as livestock and oil palm. The sector has benefited from support given its status as an alternative crop to coca.

This growth responds to global demand (see below): also, as with oil palm, it is related in part to the development of alternatives to coca. Cacao expansion supported by the Programme for the Development of Alternatives (PDA) started in Irazola in 2000, in areas of forest, pastures and fallows. In Codo del Pozuzo, its expansion is much more recent (2011), especially in pastures inside small farms [9].

**Figure 23. Growth in the production of cacao in Peru (tons), 1970-2012. Source: MINAGRI [**26**]**




The current boom is the outcome of:

- Major investments by government agencies and international development agencies to support cacao as an alternative to illicit crops in the Amazon region;
- Relatively stable high prices over the last years;
- Steadily increasing international demand for processed cocoa products and high quality beans;
- International cocoa buyers looking to secure their supply base.

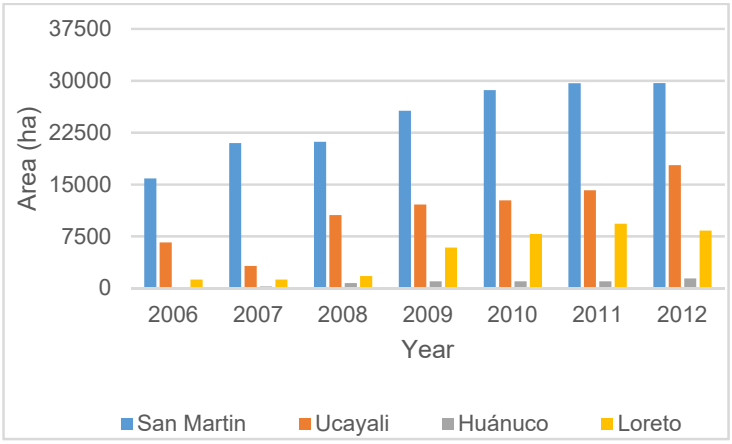
Coffee: the establishment of new coffee plantations in primary forests has been a major contributor to deforestation and GHG emissions, especially in the highly sensitive *yungas* forest ecosystem on the eastern slopes of the Andes. Coffee has in recent years become the main agricultural export of Peru. It is planted on an area covering more than 425,000ha, extending throughout the oriental band of the Andes. The Andean Amazon ecosystem is home to 95% of coffee producers with the entire coffee sector comprising more than 223,000 producers, of which 85% are small-scale farmers with an average holding size of around 3ha. The rapid expansion has been the result of a boom of settlers migrating from the highlands (*sierra*) to the rainforest (*selva*) in search of better economic opportunities, and a series of social government programmes intended to favour the establishment of alternative crops as replacements for coca.

Oil palm: it is estimated that oil palm production is responsible for up to 21% of Peruvian GHG emissions from land conversion. Production of oil palm has increased by 212% between 2000 and 2013, following the statutory declaration of the establishment of domestic capacity in palm oil production to be of national interest.

Oil palm cultivation has been enthusiastically embraced by both agroindustry and smallholder producers; the latter (with plots of 5-20ha) account for around 50% of the total area under production. Given producer interest and a continuing 70% dependence on imports, the area under cultivation is expected to further expand to approximately 100,000ha in the coming years. In 2000, MINAGRI developed the 2000–2010 National Plan for Oil Palm Promotion, with a market-based approach. The plan intended to promote production nuclei or clusters in the departments of San Martín and Loreto, consolidating 50,000ha.

In 2014, the total area under oil palm in the country was around 77,537ha, up from 57,195ha in 2012. The target districts of the project do not correspond to the main areas of oil palm expansion in the country, despite being among the districts most affected by deforestation nationally (the main criterion for their selection).

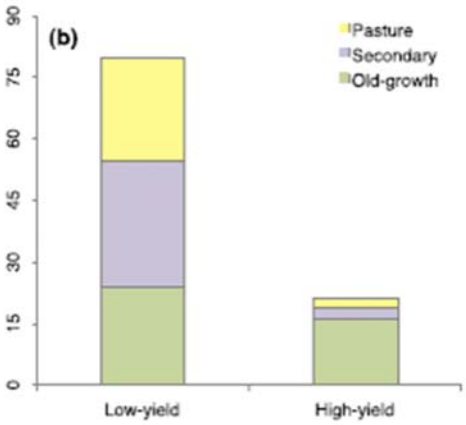
**Figure 24. Growth in the area of oil palm in Peru, by region, 2006-2012**




Two models of oil palm expansion occur in the Peruvian Amazon. The first, defined here as high-yield expansion, is typically operated by private companies. These companies have access to sufficient capital and technology to invest in infrastructure and agricultural inputs and to apply farming techniques aimed towards optimizing yields in relatively large extensions. Low-yield plantations are usually owned by smallholders who operate either individually or as cooperative associations. Owners have restricted access to capital and land that limits expansion and the full application of technology to maximize yields. These constraints translate into smaller plantations with relatively low productivity [25].

Between 2000 and 2008, 72% of new industrial-scale high-yield oil palm plantations in the Peruvian Amazon expanded into forested areas. A study in the Ucayali region found that smallholder low-yield plantations have accounted for most expansion overall (80%), but only 30% of their expansion involved forest conversion, contrasting with 75% for high-yield expansion (Figure 25). High-yield expansion minimized the total area required to achieve production, but counter-intuitively at higher expense to forests than low-yield plantations [25]. In the project district of Irazola, oil palm is the most important crop by area, having been introduced as an alternative to coca production; it was initially planted mainly on pasture and fallow land with shallow slopes but is increasingly being established in areas of residual forest farther from the road [9].

**Figure 25. Area expanded into pastures, secondary, and old-growth forests by low- and high-yield plantation in the target districts in Ucayali, 2000-2008 [25]**




To date, the main beneficiaries of smallholder palm plantations in Peru have been Andean migrants who settled relatively recently in the Amazon. Indigenous peoples and established settlers, known locally as 'riberenos', have not participated in any significant way in palm oil schemes [21]. In the north and east of Irazola, palm producers are of both small and medium scale: the latter tend to purchase and accumulate titled lands, while the former tend to "invade" areas of forest and fallow, then organize and apply for land titles [9].

Experience with smallholder schemes in Indonesia and Malaysia shows that migrants and transmigrants usually benefit much more from palm oil development than indigenous peoples, and that in the cases where indigenous

people did participate significantly, the wealthier members of the community benefited most [21]. If this pattern—individual gain at the expense of previously communally held resources and increasing deforestation and fragmentation of indigenous-held land—repeats in Peru, it will be virtually impossible to ensure deforestation-free palm oil plantations, and significant social conflict may accompany increasing deforestation rates. Palm oil may additionally serve as justification for economic discourses (de Soto, 2011) that are seen to weaken customary land ownership and indigenous peoples' rights and that are strongly at odds with the Peruvian indigenous and forest conservation movement (Chirif, 2011) [21].

In the case of corporate plantations, the social and gender benefits of palm oil are already more contested. Grupo Palmas (2011) maintains that their operations generate substantial stable employment (approximately 4000 permanent jobs), that they provide additional benefits including free lodging and food, and that they are investing in increasing the participation of women (currently about 10 percent of the labor force). Gamero (2011) argues that the current agrarian labor regime and current contract law do not favor palm oil workers. For example, of the approximately 1,800 plantation laborers at Palmas del Espino, only 80 have permanent contracts that entitle them to pension and health benefits, even though many have been employed for more than 10 years. Of the more than 200 women employed, none have permanent contracts, most of the work assigned to them is of a menial nature, and they are paid below the minimum wage. Plantation labor costs represent only 4 percent of the cost of capital in this enterprise, allowing the Grupo Palmas to be a highly profitable operation (Gamero, 2011) [21].

**Coca production**

Coca production has encouraged deforestation. The National Commission for Development and Life without Drugs (DEVIDA 2001) estimated that coca growing was responsible for 24% of the country's deforestation in 2000 [10], both directly, and through the reinvestment of coca earnings by farmers in extra farm labour or cattle (White et al., 2003) [8]. There has been a decline in coca production in recent years, however, from 62,500ha nationally in 2011 to 42,900ha in 2014 and 40,300ha in 2015, a trend which coincides with the implementation of the National Drug Control Strategy by the Government [30]. Coca production typically results in small patches of deforestation in areas with limited access: in Codo del Pozuzo, cultivation in the north of the district has also occurred in native communities as well as in uncategorized areas; cultivation in uncategorized areas is also evident in Irazola [10].

**Incentives**

Agricultural credit has had unintended effects on markets, the economy and the environment, and has been found to increase the extensive production practices that cause deforestation. For example, the provision of credit in the Peruvian Amazon during the 1980s enabled farmers to purchase labour so that more forest could be cleared for agricultural production (Coomes, 1996; Yanggen, 1999; Spoor, 2002), with few investing in purchasing agricultural inputs for intensification. When subsidized credit and guaranteed prices were eliminated in the context of structural adjustment, production levels rapidly declined in the Aguaytía watershed (Yanggen, 1999), and satellite images confirmed a related decrease in deforestation rates (IIAP, 1999). Credit was so enticing that urban dwellers sometimes acquired land in order to be able to receive the government benefit. In the northern regions of the Peruvian Amazon, demand for land and titles caused conflicts between actual inhabitants of supposedly vacant land and the urban dwellers that were able persuade government officials to provide legal documents (Coomes, 1996) [8].

The effects and effectiveness of incentive policies in changing productive and resource practices may vary between stakeholder types. Those who most commonly benefit tend to be those who can provide some form of counterpart contribution, for example in the form of productive infrastructure, established crops, labour and financial capital. These conditions tend to favour medium producers, or small producers who already have financial capital and/or are beneficiaries of support from projects [9].

DEVIDA, for example, has provided complex packages of direct and indirect incentives including social, legal and technical aspects as well as technological packages, which in some cases motivate forest clearance. The challenge faced by the programmes and projects of DEVIDA is how to consolidate the eradication of coca crops and compensate producers through options of profitable productive alternatives. The Peru Cocoa Alliance (ACP), financed by USAID and DEVIDA, provides financial support for the establishment of cacao of between USD4,000 and 6,000/ha, depending on factors such as the location and accessibility of the beneficiaries' lands; in addition, it also provides other forms of support including seed, fertilizers, materials, training and traceability.

On their own, incentives do not necessarily promote changes in land use: rather, this results from synergies between different incentives and associated factors. This is evident in the case of the lack of articulation and

coherence between the promotion of crops as alternatives to coca, and the normative framework that regulates the ownership of lands with agricultural vocation, the conservation of forest and protection lands, and the management and use of forest resources and wildlife. This situation generates perverse incentives that promote deforestation, and the conversion of forest and protection lands to agriculture and pasture. In many cases, when producers do not have land titles and therefore do not comply with the requirements to benefit from projects, the projects themselves promote land titling: in these conditions, it is not clear whether obtaining land title is one of the objectives of forest conversion, or conversely whether it is the benefits resulting from obtaining title that make titling attractive to producers. This is context-dependent. The existence of title does not necessarily limit producers in establishing or expanding their production systems: titles are of interest to producers when public programmes require them, or as a requisite to access credit, or when there is competition for land due to strong demographic pressures.

A fundamental aspect of the relation between the conversion of forests for crops and the provision of title, independent of the capacity of the producer to maintain and manage the crop in the long term, is the need to establish economic improvement of the land in order to obtain a possession certificate (*constancia de posesión*). There is no standard definition for economic improvement in this context, but it is generally interpreted by the authorities as some form of temporary or permanent crop reflecting an investment by the farmer.

Any given incentive, or practice promoted through the incentive, may have a different impact depending on the context. For example, if agroforestry systems are promoted in forest areas, and are not accompanied by adequate mechanisms to control the legal processes of land use change, this may result in processes of degradation with the loss of important ecological functions, carbon emissions and loss of biodiversity.

## G. IMPLICATIONS OF DEFORESTATION

*Land degradation*

The productivity of Amazonian natural resources is often short lived. Both timber extraction and agricultural activities are limited by slow regenerative capabilities. After forests are converted to agricultural use, soil nutrient leaching, due to heavy rainfall, along with invasive weeds restrict annual crop cultivation to a few seasons. Slash-and-burn practices (also termed shifting cultivation) are used to regenerate land productivity and are sustainable in terms of soil fertility as long as fallow periods are of sufficient duration. In many instances, 15-30 years are required for a land parcel to adequately recuperate. But, as population density increases and farm size decreases, smallholder farmers are compelled to shorten fallow cycles and thereby reduce the ability of the land to recover [7].

Aside from pastures, no big differences have been found in agronomic sustainability among land use systems studied in the Peruvian Amazon: the land use systems are sustainable but at different levels of productivity [13]. Most systems do not use inorganic treatments (e.g., fertilizers or pesticides): only with oil palm systems is chemical fertilizer typically used. The indicators in Table 17 reflect the resulting soil quality and associated productivity of the land uses. Although forested areas have lower soil bulk density (1.2 g cm-3), a measure of soil compaction, the other measures of P, Ca and Mg, are not distinct from other land uses, except for native pastures, where available P (5ppm) is the lowest observed. Soils of agricultural lands have higher bulk densities (1.25-1.3 g cm-3). Pastures, both improved and native, have the highest bulk densities (1.4 g cm-3 and 1.45 g cm-3). Soil biological, chemical, and physical properties along with nutrient balances are useful indicators of agronomic sustainability. Soil physical properties were similar in all systems except for high-input cropping. Amendments of lime and fertilizers improved soil fertility in the high input system, but tillage worsened physical properties.

**Table 17. Variations in soil physical indicators of agronomic sustainability between land use types in Yurimaguas [13]**

| Land use | Bulk density ($g/cm^3$) | Pentrometer resistance (K Pascal) | Porosity (%) | Infiltration (cm/hr) | Water stable aggregrates | Aggregate mean diameter (mm) |
|---|---|---|---|---|---|---|
| Forest | 1.25 | 10 | 52 | 45 | 19 | 0.49 |
| Fallow | 1.42 | 30 | 48 | 22 | 15 | 0.45 |
| Multistrata | 1.33 | 75 | 47 | 16 | 17 | 0.41 |
| Plantation | 1.35 | 65 | 46 | 15 | 15 | 0.46 |
| Crop – low input | 1.41 | 65 | 46 | 15 | 13 | 0.36 |
| Crop – high input | 1.51 | 280 | 39 | 2 | 5 | 0.14 |

Source: Alegre et al (1999) and Alegre et al (2001)

Soil biological properties in high-input cropping were lower than in all other systems as reflected by lower soil organic matter, lower soil microbial biomass, lower mineralization and lower macrofaunal diversity (Figure 26) (Alegre et al., 1999; Alegre et al., 2001). Nutrient balances were positive for the forest and fallow systems because there was little or no nutrient export from crop harvest. Harvest in the other systems resulted in negative nutrient balances but was offset to some degree by fertilization in the high-input cropping system, and nutrient pumping and N-fixation in the agroforestry systems.

**Figure 26. Soil carbon, microbial carbon and nitrogen mineralization of different land use systems in Yurimaguas Source: Alegre et al. (1999) and Alegre et al. (2001) [13]**

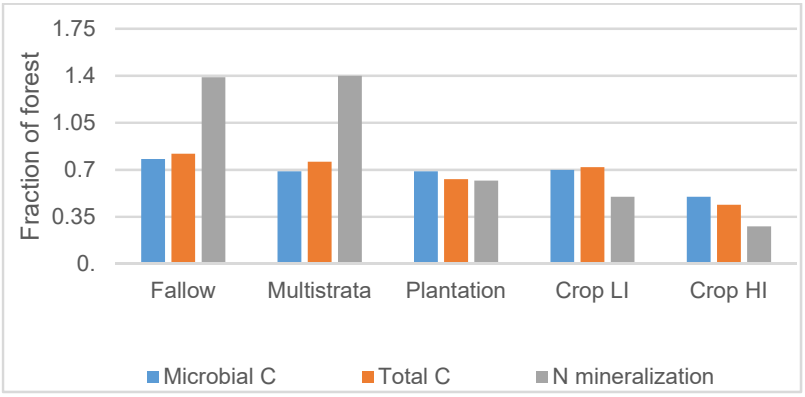
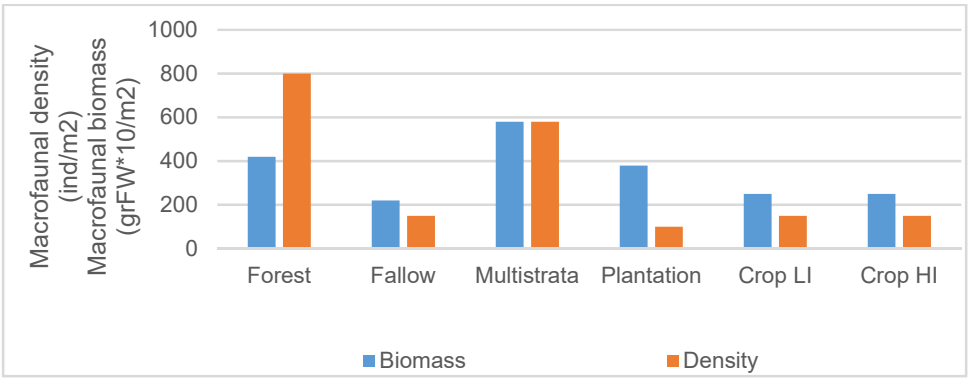



**Figure 27. Soil macrofauna of different land use systems in Yurimaguas Source: Alegre et al. (1999) and Alegre et al. (2001) [13]**




All land use systems demonstrated an increase in soil carbon stocks with the exception of the high input system, which showed a 7% reduction after 10 years of continuous cultivation (Table 18). Multistrata and peach palm agroforestry systems recorded higher soil C stocks because the soil was disturbed very little, therefore greater amounts of litter and roots were accumulated and incorporated into the soil (Alegre and Arévalo 1999; Alegre and Bandy, 2000).

**Table 18. Soil nutrients and organic carbon stored for six land use systems in Yurimaguas (initial measurement and change after 10 years)**

| Land Use System | C | M | P | K | Ca | Mg |
|---|---|---|---|---|---|---|
| Shifting agriculture | 14.7 (+6.8) | 1075 (+850) | 18 (-4) | +85 (-9) | 388 (+5) | 41 (+11) |
| High input | 18.9 (-1.3) | 1190 (+404) | 18 (+51) | +70 (+49) | 280 (+748) | 30 (+179) |
| Low input | 16.5 (+5.6) | 1331 (+501) | 17 (+10) | +69 (-20) | 323 (-67) | 38 (+5) |
| Multistrata | 13.5 (+8.6) | 1132 (+729) | 19 (-8) | +73 (-16) | 353 (-72) | 39 (-6) |
| Peach palm | 14.7 (+8.1) | 956 (+961) | 20 (-10) | +76 (-19) | 349 (+30) | 34 (-1) |
| Secondary forest | 15.4 (+6.8) | 1244 (+604) | 20 (-5) | +68 (-5) | 369 (-186) | 37 (-10) |

Source: Alegre et al (1999)

*Climate change and GHG emissions*

According to the most recent National Greenhouse Gas Inventory (2012), the principal source of GHG emissions at national level is the Land Use and Land Use Change sector, which accounts for 86,742Gg$CO_{2eq}$, or 51% of the total. The principal category within this sector is the conversion of forest to pasture, which accounts for 79,772Gg$CO_{2eq}$. This sector also accounts for the only sinks of atmospheric GHG: changes in forest biomass and other woody stocks capture 3,923Gg$CO_{2eq}$ (including biomass increase and perennial crops) and the

abandonment of cultivated lands, which captures 12,301Gg$CO_{2eq}$ resulting from the biomass increase due to the natural formation of secondary forests.

Forests and agroforestry systems typically have more carbon and above- and belowground biodiversity than agricultural systems. Nevertheless, generalizations are not always possible. Although agricultural systems have lower stored carbon (4.8-9 t ha-1), especially pastures (~5 t ha-1), longer fallow systems can have more stored carbon (up to 24 t ha-1) than other agricultural systems. While aboveground biodiversity follows a decreasing trend, from forest to agricultural land uses, belowground biodiversity does not demonstrate a simple trend [8].

When forest is converted to agricultural uses, aboveground (time-averaged) carbon stocks are considerably reduced (less dense and lower vegetation replaces woody species). As expected, managed forest and older natural fallows have the highest carbon contents. As fallows mature into secondary forests, they increase their carbon content (Table 19). Among tree-based systems, the carbon content of perennial systems is relatively high, ranging from 41 t ha-1 for oil palm plantations to 74 t ha-1 for rubber plantations (Ucayali). Carbon of multistrata agroforestry systems (Yurimaguas) lies at 59 t ha-1. Rubber plantations and multistrata systems have a permanent understorey of Kudzu, which increase the carbon stocks by 2-5 t ha-1 (Alegre et al., 2000a) [8].

Carbon stocks of annual cropping systems and other land use systems reveal stark differences. The amount of carbon stored in annual cropping systems is very low (3-17 t ha-1). Although a system with upland rice showed similar carbon stocks to the biennial plantain system, the rice was grown immediately after forest clearing and thus included carbon measures of the remaining unburned logs. Subtracting the logs (which will decompose) reduces the estimate by at least 50%. Pastures contained the lowest quantities of carbon (2 t ha-1) [8].

**Table 19. Aboveground carbon stocks of different land use systems in the Peruvian Amazon [8]**

| Ucayali Land Use | | Aboveground Carbon (t/ha) |
|---|---|---|
| Forest | Primary | 162[a] |
| | Residual (logged) | 123[a] |
| Perennial crops | Rubber (30 year) w/Kudzu | 74 |
| | Oil palm with grasses | 41 |
| Fallows | 15 year | 126 |
| | 3 year | 21 |
| Agricultural crops | Maize | 8 |
| | Cassava | 3 |
| | Plantain | 16 |
| Pasture | Degraded | 5 |

a includes standing, dead and fallen logs.
N.B. None of the results above are time averaged.
Source: Alegre et al. (2000a)

Average $N_2O$ fluxes from cropping systems in the Peruvian Amazon have been found to be two to three times higher than secondary forest (9.1 µg N m-2 hr-1), while those of the tree-based systems are similar to secondary forest. Fluxes from all the tree-based systems, including 23-year-old secondary forest were within the range of secondary forests reported for the Amazon. $N_2O$ fluxes from younger systems (based on soil N availability indices, litterfall N rates, and litter C-N ratios) are less than from more mature forests due to the increased demand for and more efficient use of nutrients (Table 20). Increased fluxes in the cropping systems, sometimes reaching 209 µg m-2 h-1, can be attributed to N fertilization while fluxes from the tree-based systems are related to litterfall N [13].

**Table 20. Nitrous oxide fluxes of different land management treatments**

| Land management | Period 1 | Period 2 | Period 3 | Annual total[a] |
|---|---|---|---|---|
| | µgN/m2/h | | | kgN/ha/yr |
| High input cropping (hi) | 12.5 | 209.0 | 8.2 | 2.33 |
| Low input cropping (low) | 10.6 | 62.3 | 10.0 | 1.27 |
| Shifting cultivation fallow (sc) | 9.5 | 11.8 | 8.0 | 0.80 |
| Multistrata agroforestry (ms) | 7.8 | 7.7 | 4.3 | 0.56 |
| Peach palm plantation (pp) | 10.3 | 16.2 | 8.7 | 0.89 |

| Land management | Period 1 | Period 2 | Period 3 | Annual total[a] |
|---|---|---|---|---|
| | µgN/m2/h | | | kgN/ha/yr |
| Forest fallow control (f) | 8.6 | 18.8 | 8.1 | 0.80 |
| SED | 3.8 | 39.5 | 2.2 | 0.43 |
| **Single df contrasts[b]** | **Probability** | | | |
| f vs all | 0.62 | 0.190 | 0.870 | |
| Crops vs. trees | 0.37 | 0.001 | 0.120 | |
| Hi vs. low cropping | 0.62 | 0.004 | 0.440 | |
| Sc vs f | 0.82 | 0.860 | 0.950 | |
| Ms vs pp | 0.53 | 0.830 | 0.070 | |
| Block (soil texture) | 0.40 | 0.630 | 0.400 | |
| Subplot (time of day) | 0.04 | 0.190 | 0.001 | |

[a]Based on weighted average from the three sampling periods
[b]refers to treatment abbreviations in the top half of the table

Methane fluxes also differ according to land use (Table 21**Error! Reference source not found.**). In tree-based and low-input cropping systems, average $CH_4$ consumption has been found to be approximately one to two thirds that of the secondary forest (–30.1 µg C m-2 h-1). High-input cropping systems produce positive net $CH_4$ fluxes.

**Table 21. Methane fluxes of different land management treatments**

| Land management | Period 1 | Period 2 | Period 3 | Annual total[a] |
|---|---|---|---|---|
| | µgC/m2/h | | | kgC/ha/yr |
| High input cropping (hi) | 5.2 | 33.0 | 25.9 | 1.33 |
| Low input cropping (low) | -20.3 | -10.2 | -17.1 | -1.59 |
| Shifting cultivation fallow (sc) | -27.7 | -16.5 | -24.5 | -2.22 |
| Multistrata agroforestry (ms) | -25.5 | -27.2 | -21.4 | -2.12 |
| Peach palm plantation (pp) | -21.0 | -13.8 | -12.7 | -1.16 |
| Forest fallow control (f) | -30.1 | -32.1 | -29.0 | -2.62 |
| SED | 10.8 | 10.7 | 5.6 | 1.12 |
| **Single df contrasts[b]** | **Probability** | | | |
| f vs all | 0.17 | 0.010 | 0.001 | |
| Crops vs. trees | 0.07 | 0.002 | <0.001 | |
| Hi vs. low cropping | 0.04 | 0.002 | <0.001 | |
| Sc vs f | 0.83 | 0.176 | 0.414 | |
| Ms vs pp | 0.69 | 0.240 | 0.156 | |
| Block (soil texture) | 0.66 | 0.790 | 0.200 | |
| Subplot (time of day) | 0.89 | 0.180 | 0.001 | |

[a]based on weighted average from the three sampling periods
[b]refers to treatment abbreviations in the top half of the table

The $N_2O$ and $CH_4$ fluxes of land use systems tend to be related. A low-input annual cropping system had $N_2O$ emissions one and one-half times higher than the secondary forest but half the $CH_4$ consumption rates. On the other hand, a fertilized, high-input annual cropping system had $N_2O$ emissions almost four times that of the secondary forest in addition to a switch from $CH_4$ consumption to $CH_4$ production on these soils. These results demonstrate the increased global warming potential of annual systems compared to the forest and tree-based systems.

These results demonstrate two important results with respect to greenhouse gas emissions and land use change:

1) the forest and agroforestry systems are greenhouse gas sinks; and
2) as land use intensification increases, more gases are released.

Efforts to establish tree-based systems on degraded lands could partially counteract the past effects of deforestation on increased atmospheric trace gas concentrations. In contrast, annual cropping systems exacerbate these effects because they sequester little C, have higher $N_2O$ emissions and substantially reduced $CH_4$ consumption or even net CH4 emissions (Alegre and Arévalo, 2000).

*Biodiversity*

Little site-specific information is available on the biodiversity values of the project's target areas or on the implications of forest conversion for biodiversity. Studies from similar areas in Asia, however, have shown that on converting primary forest to oil palm plantations, there is a 77% reduction in the number of forest-dependent bird species and an 83% reduction in the number of forest-dependent butterfly species; when oil palm plantations are established in previously logged areas, the reductions are 73% and 79% respectively [19].

334. Studies of aboveground biodiversity in the Peruvian and Brazilian Amazon [13] have shown that the highest species and functional type richness occurred in forests logged 40 years previously, 20-year abandoned gardens and 2-year successional fallows dominated by Asteraceous 'daisy' fallows. Multistrata agroforests showed moderate richness while improved pastures were least rich, with only four plant species and functional types (Table 22). In terms of management under agroforestry systems, richness of species implies more biomass for C sequestration and recycling of nutrients through organic matter decomposition (Gillison and Alegre, 2000).

**Table 22. Aboveground biodiversity index measures [13]**

| Meta land use | Site | | Species richness | Plant functional type | Ratio |
|---|---|---|---|---|---|
| Natural forests (N) | Ucayali | | 63 | 31 | 2.03 |
| | Iquitos | Resting | 71 | 39 | 1.82 |
| Managed forests (M) | Ucayali | 33 years since logged | 66 | 31 | 2.13 |
| Extensive agroforests (A) | Brazil | Reca Copoazu/peach palm/coffee | 47 | 33 | 1.42 |
| | Yurimaguas | Bactris palm | 11 | 9 | 1.22 |
| Intensive agroforests (A*) | Brazil | Coffee/rubber/no shade | 24 | 21 | 1.14 |
| Crop/long fallow systems (L) | Yurimaguas | 10-year fallow | 36 | 26 | 1.38 |
| Crop/short fallow systems (S) | Brazil | Newly opened/mixed crops | 26 | 20 | 1.30 |
| Continuous annual cropping (C) | Brazil | 3-year cassava/ex Capoeira | 33 | 29 | 1.14 |
| Pasture/grasslands (P) | Yurimaguas | Grazed and burned savanna | 23 | 18 | 1.31 |
| Intensive pasture (P*) | Brazil | 20 year brachiaria | 12 | 10 | 1.20 |

Values are average for this land use type
*Von Humboldt Forest Reserve

The typical land use sequence of slash-and-burn agriculture (starting with forest, followed by cropping, a fallow period, cropping after fallow and often resulting in pasture or a fallow again) has been found in Ucayali to result in the loss of 143 out of 235 plant species initially present in the forest. Post-forest land uses were found to contain only 7-25% of the original forest species, plus 13 to 66 new plant species, typically pioneer species adapted to that land use. Although fallowed areas regained some of the original forest properties, valuable shade-tolerant, slow-growing hardwood forest trees did not reappear in fallow (Fujisaka et al. 2000) [13].

While aboveground biodiversity follows a decreasing trend, from forest to agricultural land uses, belowground biodiversity does not demonstrate a simple trend. Tree-based systems such as cacao and citrus have less soil macrofauna (total weight: ~8 g m-2) than either long or short agricultural fallow systems (20 and 15 g m-2, respectively) or improved pastures (38.4 g m-2).

Soil macrofauna have an important role as they help to regulate the physical-chemical processes that affect soil productivity. Termites, ants and earthworms are three important groups. The stage of land use within a slash-and-burn system affects invertebrate communities. With intensive land uses such as continuous cropping, macrofauna numbers are significantly reduced. Some diversity levels can increase, however, after agricultural use. For example, when comparing the total population (density m-2) of a 17-year-old secondary forest, the 7-year-old multistrata agroforestry system presented a 31% biomass recovery. In Table 23, total biomass of macrofauna was highest in the multistrata system followed by the secondary forest and then peach palm plantation with a leguminous cover crop. From the total biomass, 95% corresponded to the predominance of the exotic species, Pontoscolex corethrurus, followed by termites (Alegre and Pashanasi, 2000).

**Table 23. Taxonomic richness, mean abundance and biomass of macroinvertebrates in different land use systems in Yurimaguas [13]**

| Land Use System | Degraded Pasture | Improved Pasture (Brachiaria) | Shifting Agriculture | High Input | Low Input | Multi-strata | Peach Palm | Secondary Forest |
|---|---|---|---|---|---|---|---|---|
| **Mean population density ($m^{-2}$)** | | | | | | | | |
| # of taxonomic units* | 22 | 23 | 22 | 16 | 16 | 31 | 22 | 30 |
| Total* | 654 | 914 | 151 | 171 | 175 | 557 | 115 | 806 |
| **Biomass (grams of fresh weight $m^{-2}$)** | | | | | | | | |
| Total | 57 | 166 | 21.8 | 22.4 | 23.3 | 55.9 | 35.5 | 42.9 |

*Includes earthworms, termites, ants, Coleoptera, Arachnida, Myriapodes and others

Tree-based systems such as cacao and citrus have less soil macrofauna (total weight: ~8 g m -2) than either long or short agricultural fallow systems (20 and 15 g m-2, respectively) or improved pastures (38.4 g m-2).

## H. BASELINE INVESTMENTS

**Table 24. List of restoration and conservation initiatives in the project intervention area**

| Name of project | Budget | | Area (ha) | Status |
|---|---|---|---|---|
| | Peruvian soles | USD (approx) | | |
| Recovery of ecosystem services for water regulation in the sub-catchment of the Neshuya River, with the aim of protecting wáter in the districts of Irazola, Curimaná and Campo Verde, provinces of Coronel Portillo and Padre Abad - Región Ucayali (SNIP Code: 2310818). | 3,673,168 | 1,102,710 | 204 | Under evaluation |
| Recovery of degraded área in the micro-catchments of Pintuyacu and Maquisapayoc in the district of Puerto Inca, Puerto Inca provice – Huánuco (SNIP code: 294500) | 3,156,203 | 947,516 | 27,438 | Under evaluation |
| Proposal for the establishment of Codo de Pozuzo Regional Conservation Area | No data | | 9,423 | Proposed |
| Forest management to reduce deforestation and degradation in Shipibo Conibo and Kakataibo indigenous communities of Ucayali Region | 7,000,000 | 2,101,450 | 18,260 | Under execution by AIDER |
| Sustainable management of communal shiringa as an alternative to deforestation and forest degradation in the Peruvian Amazon | No data | | 48,046 | Under execution by the National Forestry Chamber |

**Table 25. Details of baseline investments by Government of Peru and cooperation agencies**

| Project/Programme | Objective | Geographic scope | Responsible | Funding source | Amount US$ | Duration |
|---|---|---|---|---|---|---|
| "DCI": Joint Declaration of Intent between Peru, Norway and Germany for the promotion of sustainable development in Peru | Contribution to significant reductions in greenhouse gas emissions from deforestation and forest degradation. Contribution to achieving the target of zero net emissions from land use change by 2021 and the national target of reducing deforestation by 50% by 2017 and further reductions from then on; contribution to sustainable development of the agricultural and forestry sectors and to environmentally appropriate mining in Peru. | National (Amazonia), especially Ucayali, Amazonas, San Martin, Madre de Dios. | MINAM-UNDP | Governments of Norway and Germany | Up to 300 million, with an approach of payment for results. | 2014-2021 Three phases: 2016-18 ($6.1M) 2017-21 (the remainder) |
| Programme for the promotion and sustainable management of forest production in Peru | Increased productivity and competitiveness in forest production in Peru | Ucayali, Huánuco, Loreto, San Martin, Pasco, Junín, Cusco, Apurimac, Ancash | SERFOR | KfW | 123 million | 2017-2021 |
| JICA: Project for Development of Capacities for Forest Conservation and REDD+ Mechanisms; | Capacity generation and strengthening of target groups for forest conservation, and mechanisms for the reduction of emissions from deforestation and degradation (REDD+) Forest conservation in native and campesino lands | Amazonas, Lambayeque, Loreto, Piura, San Martín, Tumbes and Ucayali | MINAM-PNCB | JICA | 5,900,000 | 2014-2017 |
| JICA: Programme for Forest Conservation in Amazonas, Lambayeque, Loreto, Piura, San Martín, Tumbes and Ucayali | | | | | 57,000,000 | 2017-2021 |
| FIP: Forest Investment Plan for Perú | General Objective: to reduce deforestation and forest degradation to contribute to the reduction of greenhouse gas emissions, as well as improving carbón stocks in sustainable forest landscapes. Specific objective: to contribute to the strengthening of governance and forest planning; to promote sustainable forest management; to promote the recovery of degraded áreas and forest conservation; and to contribute to the control of deforestation of Amazonian forests in Peru. | 1: Yurimaguas-Tarapoto Corridor; 2: Atalaya (Ucayali) Corridor; 3: Iñapari-Pto. Maldonado-RC Amarakaeri Corridor. | MINAM - IDD | CIF | 50,000,000 | 2016-2021 |
| Cadastre, Titling and Registry of Rural Lands in Peru – Phase 3 (PTRT-3) | General Objective: strengthening of rural properties in the Selva and selected areas of the Sierra Specific Objective: Cadastral Studies, Titling and Registry of | Amazonas, Apurímac, Cajamarca, Cusco, Huánuco, Junín, | MINAGRI | IDB | 40,000,000 | 2015-2019 |

| Project/Programme | Objective | Geographic scope | Responsible | Funding source | Amount US$ | Duration |
|---|---|---|---|---|---|---|
| | Rural Lands; Development of Technological Platform for improving the agility of Cadastre, Titling and Land Registry services; strengthening of institutional capacities for the titling of rural lands, and of the policy framework | Loreto, Puno, San Martin and Ucayali | | | | |
| Peru Cocoa Alliance | Improvement of the quality of life of small farmers in the regions of San Martín, Ucayali and Huánuco through the cultivation and sustainable production of fine aroma cocoa of high quality, and facilitation of access to new markets | Ucayali, Huánuco, San Martin | Carana Corporation, ECOM and ROMEX - USAID | USAID | 36,000,000 | 2016-2020 |
| Programme for Sustainable, Inclusive and Competitive Forest Development in the Peruvian Amazon | Recovery and conservation of Amazonian forests, through the strengthening of the institutionality of the forest administration, management for conservation of forest resources and Amazonian ecosystems, and the improvement of the competitiveness of the forest sector. | 8 regions of the Amazon basin | MINAGRI | CAF | 20,000,000 | 2016-2020 |
| Peru UN-REDD Programme | To complement Government efforts to prepare for the implementation of REDD+, including though subnational planning, stakeholder engagement and capacity building, and MRV support | Peruvian Amazon | MINAM - UNDP-UNEP-FAO | UN REDD | 4,065,779 | 2017-2019 |
| "Resilience" Project, transforming the management of complexes of Protected Areas and landscapes to strengthen landscape resilience | Strengthening of the resilience of vulnerable ecosystems in two PA/landscape complexes against the impacts of CC in order to conserve threatened biodiversity and ecosystem functionality | 9 Amazonian PAs, in the regions of Ucayali, Pasco, Huánuco (RC El Sira), Cusco and Madre de Dios. | SERNANP - UNDP | GEF | 8,991,434 | 2016-2021 |
| "GCP-Coffee" Project: strategies to reduce deforestation and promote sustainable production of coffee in Peru | Contribute to the establishment of a space for relation and participation between the Government, private sector, and multiple actors in the coffee sector, that favours the incorporation of actions for sustainable production of coffee and improves the livelihoods of producers, workers and their families. | Peru, with emphasis on coffee growing regions: Cajamarca, San Martín, Junín, Amazonas, Cusco, Huánuco and Pasco | UNDP | SECO | 750,000 | 2016-2018 |
| Sustainable Agricultural Development to reduce poverty through an environmentally sustainable | Promotion of integrated and sustainable development actions in forest communities, in order to improve quality and life and health and living conditions in families of poor populations of áreas affected by illicit coca production. | La Divisoria (Padre Abad) and Monte Alegre (Von Humbolt and Neshuya | UN Office against drugs and crime | GIZ/BMZ | 1,500,000 | 2011-2016 |

| Project/Programme | Objective | Geographic scope | Responsible | Funding source | Amount US$ | Duration |
|---|---|---|---|---|---|---|
| approach and gender empowerment | | | | | | |
| Strengthening of communities of the Aguaytia Catchment | Increase and strengthening of technical, economic, organizational and environmental capacities of 5 Kakataibo indigenous communities, and 6 villages | Padre Abad and Irazona Districts, Ucayali | Association for Research and Integrated Development (AIDER) | USAID | 1,984,379 | 11/06/2014 - 10/06/2017 |
| Improvement and Development of Capacities in the Production Chain of Organic Cocoa | Improvement of competitive capacities of producers of diversified cacao | Padre Abad District | Sub Regional Head, Padre Abad | DEVIDA | 169,269 | 2016 |
| Training and Technical Assistance in Good Practices for Agricultural Production in crops of Pijuayo for palmito and pineapple | Improvement of the production, and organizational and comercial management in organizations of Pijuayo, for palmito and pineapple as a legal alternative | Centro Poblado Huipoca, Padre Abad province, Ucayali | Provincial Municipality of Padre Abad | | 166,140 | 2016 |
| Improvement and Conservation of Degraded Soils | Recovery of biomass, productive capacity of soils and environmental sustainability | Yuyapichis District, Huánuco | District Municipality of Yuyapichis | | 29,950 | 2016 |
| Strengthening of Legal Agricultural Activities | Provision of assistance for the improvement of production, Increase and strengthening of technical, economic, organizational and environmental capacities in organizations with legal productive activities | Padre Abad and Irazola Districts | DEVIDA | | 989,551 | 2016 |
| Post Eradication Strengthening of Legal Agricullture Activities | Provision of assistance for the improvement of production, Increase and strengthening of technical, economic, organizational and environmental capacities in organizations with legal productive activities | Codo de Pozuzo and Yuyapichis Districts | DEVIDA | | 812,204 | 2016 |
| Formalization and Titling of Rural Lands | Generation of basic conditions for the development of a market for rural lands in the country in order to promote investment in agricultura. Promotion of rational, ordered and sustainable occupation of territory. Promotion of access to adequate economic exploitation of plots, especially in middle and lower sectors. | Districts of Puerto Inca, Yuyapichis, Codo del Pozuzo, Honoria and Tournavista | DRA Huánuco | | 646,804 | 2016 |

| Project/Programme | Objective | Geographic scope | Responsible | Funding source | Amount US$ | Duration |
|---|---|---|---|---|---|---|
| Improvement of Technical and Productive Capacities and Cocoa Quality | Improvement of the competitiveness of the cocoa value chain in Puerto Inca province. | Districts of Puerto Inca, Yuyapichis, Codo del Pozuzo, Honoria and Tournavista | Provincial Municipality of Puerto Inca | | 597,015 | 2016 |
| Communal Association | | Districts of Curimaná, Irazola, Padre Abad | DEVIDA | | 123,937 | 2016 |
| Improvement of the quality of cocoa and linkages top markets of producers in the cocoa value chain | Improvement of the competitive capacities of producers in the cocoa value chain | District of Codo del Pozuzo, Puerto Inca, Huánuco | Municipality of Codo del Pozuzo | National System of Public Investment | 357,039 | To be defined |
| Improvement of Capacities of Farmers in the Rural Zone of Honoria | Improvement of the competitive capacities of maize producers | District of Honoria | Municipality of Honoria | | 356,623 | |
| Strengthening of Forest Activity for the Recovery of Degraded Soils through Agroforestry Systems | Recovery of degraded soils in the area of influence of the La Unión Km. 75 Carretera Federico Basadre - Nuevo Satipo Km. 19 stretch of the Neshuya – Curimana road | Monte Alegre, District of Irazola, Padre Abad, Ucayali | Municipality of Irazola | | 278,293 | |
| Development of capacities for territorial land use planning | Development of capacities of the Huánuco Regional Government, to carry out territorial land use planning in Huánuco Region | Huánuco Region | Regional Agriculture Directorate/ Regional Government of Huánuco | | 41,218 | 2016 |

# I. TECHNICAL AND POLICY OPTIONS FOR REDUCING THE IMPACTS OF OIL PALM IN PERU

**Table 26. Specific proposed solutions to overcome barriers to zero deforestation palm oil production in Peru (source: FCMC/USAID [21])**

| Barrier | Proposed solutions |
|---|---|
| ***Land use regulations and governance*** | |
| Limited institutional and law enforcement capacity compounded by high levels of corruption in regions suitable for palm oil cultivation. | • In coordination with the relevant authorities, support a moratorium on the allocation of state or undefined tenure land to agro-industrial projects until Principal Capacity Land Use maps exist for the Amazon regions.<br>• Invest in strengthening the operational capacity of regional land use and natural resource management institutions, including the recently created Regional Environmental Authorities (Autoridades Regionales Ambientales [ARA]). This strengthening should be synergistic with other Peruvian Government land use governance initiatives currently underway and strengthen law enforcement and provenance tracking systems at the local level.<br>• Support transparency by making land zoning and tenure information available in Geographical Information System (GIS) format on open access web portals, like Global Forest Watch or Google Earth Engine. |
| Unclear land rights and land tenure | • Support land titling initiatives in the Amazon, especially in regard to indigenous people and local populations in the regions of Ucayali and Loreto, to reduce land speculation and the questionable allocation of primary forest lands by regional governments. Synergies with the recently approved Inter-American Development Bank (IADB)-funded Land Cadastre and Titling Project (PE-L1026) should be explored. This work should take place in coordination with civil society organizations, such as the Instituto del Bien Comun (IBC) and the Centro para el Desarrollo del Indigena Amazonico (CEDIA), which have long standing expertise in indigenous community and local people land titling. |
| Complex, contradictory regulatory framework regarding agriculture and forestry | • Support coordination between the Forestry Service (SERFOR), the General Directorate of Agricultural at the Ministry of Agriculture (MINAGRI) and the National Program for Forest Conservation (PNCB) at the Ministry of Environment (MINAM), specifically in regard to the agricultural landscape and palm oil Nationally Appropriate Mitigation Actions (NAMA) currently in development. |
| ***Business and financial incentives*** | |
| Developing plantations on deforested and degraded lands implies higher costs than development in natural forests. | • The additional costs of developing palm oil on degraded and deforested lands should be studied in greater detail, and a financial incentives program for the restoration of these landscapes should be made available to palm oil growers. Incentives could potentially be linked to biochar and biofertilizer production programs from palm oil processing facilities.<br>• This work should build on the Peruvian Ministry of Finance (MEF) and its development partners' ongoing activities to mainstream reforestation and ecosystem restoration projects in the National Public Investment System (SNIP). |
| Smallholders' limited access to credit and financial services that encourage ecological intensification and environmental stewardship | • Develop and implement a Zero-Deforestation Palm Oil Fund (ZDPOF) that would work through Intermediary Financial Institutions to achieve increased yields (from 2T/ha to 4T/ha average), ecological intensification, and environmental stewardship by small and medium size producers. ZDPOF investments would aim to:<br>a) Procure high quality seed (an investment of US$1 per plant produces returns of US$1,000+ over plant lifetime).<br>b) Optimize fertilizer application (which accounts for 50-60 percent of operating costs in industrial plantations).<br>c) Implement harvest best practices to reduce FFB spoilage. |

| Barrier | Proposed solutions |
|---|---|
| | • Disbursements by ZDPOF would be linked through contract to the maintenance of primary forests, especially High Conservation Value (HCV) and High Carbon Storage (HCS) forests as Killeen (2011) proposes, with third-party monitoring of compliance. |
| Limited smallholder-corporate producer cooperation | • Support corporate palm oil processing actors (e.g., Industrias del Espino and Industrias del Shanusi) to invest in the productive capacity and expansion of independent producers, including both small and medium-sized producers. The current association of Industrias del Espino with FREDEPALMA-SM could be a useful example from which to draw lessons. |
| ***Inter-sectorial coordination and knowledge base*** | |
| Absence of Principal Land Use Capacity maps for the Amazon regions. | • Support the development of Principal Land Use Capacity maps between the national and regional governments (possibly using one region of palm oil interest such as Ucayali or Loreto as a pilot) and encourage its integration in the Agro-ecological Zoning (ZAE) and Ecologic-Economic Zoning (ZEE) processes. |
| Limited inter-sectorial and value chain actor dialogue and consensus building. | • Support engagement by different sectors of government and all palm oil value chain actors by supporting participatory fora like the Roundtable for Sustainable Palm Oil (RSPO) in Peru. |
| Limited pure and applied research into sustainable palm oil production and value chains. | • Strengthen collaboration between international (e.g., Consultative Group for International Agricultural Research [CGIAR]); regional (e.g., Corporación Colombiana de Investigación Agropecuaria [CORPOICA], Colombia); and national (e.g., Instituto Nacional de Innovacion Agraria [INIA]) agricultural and forestry research institutions. Emphasis should be placed on linking current research agendas and investments, including INIA's US$100-million IADB-funded agricultural innovation program, which is in initial stages of execution. |

**Table 27. Policy options in response to the drivers of small-patch deforestation in the Amazon [23]**

| Proximate drivers of small-patch deforestation | Location | Land use impact | Incentives and underlying drivers | Viable policy responses |
|---|---|---|---|---|
| Smallholder shifting cultivation | Established landholdings and areas of long-term stable settlement | Diversified mosaic of agriculture, pasture, fallow and forest | Policy makers treat these systems as inefficient, unproductive, and backward, and instead encourage intensification and dependence on narrow range of market commodities | Incentivize diversified farming systems, recognizing their environmental sustainability and importance for livelihoods and food security<br>Recognize forest fallows as a productive land use |
| Recent migrants establishing farms | Forested state land, recent spontaneous settlement, areas with little, or improvised, infrastructure | Initial fragmentation of mature forest areas, increased access facilitates population influx and more forest clearing for agriculture | Lax enforcement allows spontaneous occupation combined with ineffective sanctions for deforestation | Eliminate the requirement for land clearing to establish property claims<br>Enact enforceable zoning to prevent new clearing in certain areas |
| Intensified smallholder annual and perennial production for commercial purposes | In established landholdings | Diversified production mosaics converted into monoculture cash crops plantations, and agroforestry system | Intensification pushed by policy makers (e.g., incentives for mechanized agriculture and monoculture) for higher productivity and economic development | Consider targeted support for diversified farm mosaics by moving away from credit policies that incentivize monoculture |

| Proximate drivers of small-patch deforestation | Location | Land use impact | Incentives and underlying drivers | Viable policy responses |
|---|---|---|---|---|
| Outside investor-driven commercial agriculture and ranching | In established landholdings and in spontaneously settled state forest lands | High-input monoculture (e.g., papaya, maize, and rice) replaces extensive shifting cultivation mosaics | Struggling farmers lease or sell their land to investors; the State is absent from these private agreements | Ensure that such behaviour does not spread into conservation areas<br>Craft market policies like credits and incentives that create enabling conditions for diversified family farm production |

**Table 28. Opportunities for reducing environmental impacts of oil palm production [23]**

| Environmentally critical practices | Environmentally sustainable practices | Measures or tools to facilitate the implementation of the practice |
|---|---|---|
| Planting in areas of primary forest, as opposed to areas of degraded soils that could be recovered. Low productivity on degraded soils leads to excessive fertilisation | Application of inputs to reduce soil acidity, before planting or before fertilizing in the case of acid soils | Programmes to facilitate access to inputs at accessible prices |
| Soil erosion. The use of herbicides can cause pollution and health impacts for workers | Use of vegetative cover such as kudzu, without the use of herbicides | Provision of technical advice |
| Excessive use of fertilisers can have negative impacts on soil and water | Use of fertiliser in appropriate amounts | Provision of technical advice |
| | Use of plant residues as fertilisers | Implementation of a programme for the distribution of residues from processing to producers' farms |
| Use of excessively toxic pesticides | Use of appropriate pesticides, in appropriate quantities | Provision of technical advice |
| Negative environmental impacts from processing plants | Management of waste waters | State supervision, and financing for the installation of treatment facilities |

**Box 8. Potential *for zero-deforestation oil palm expansion***

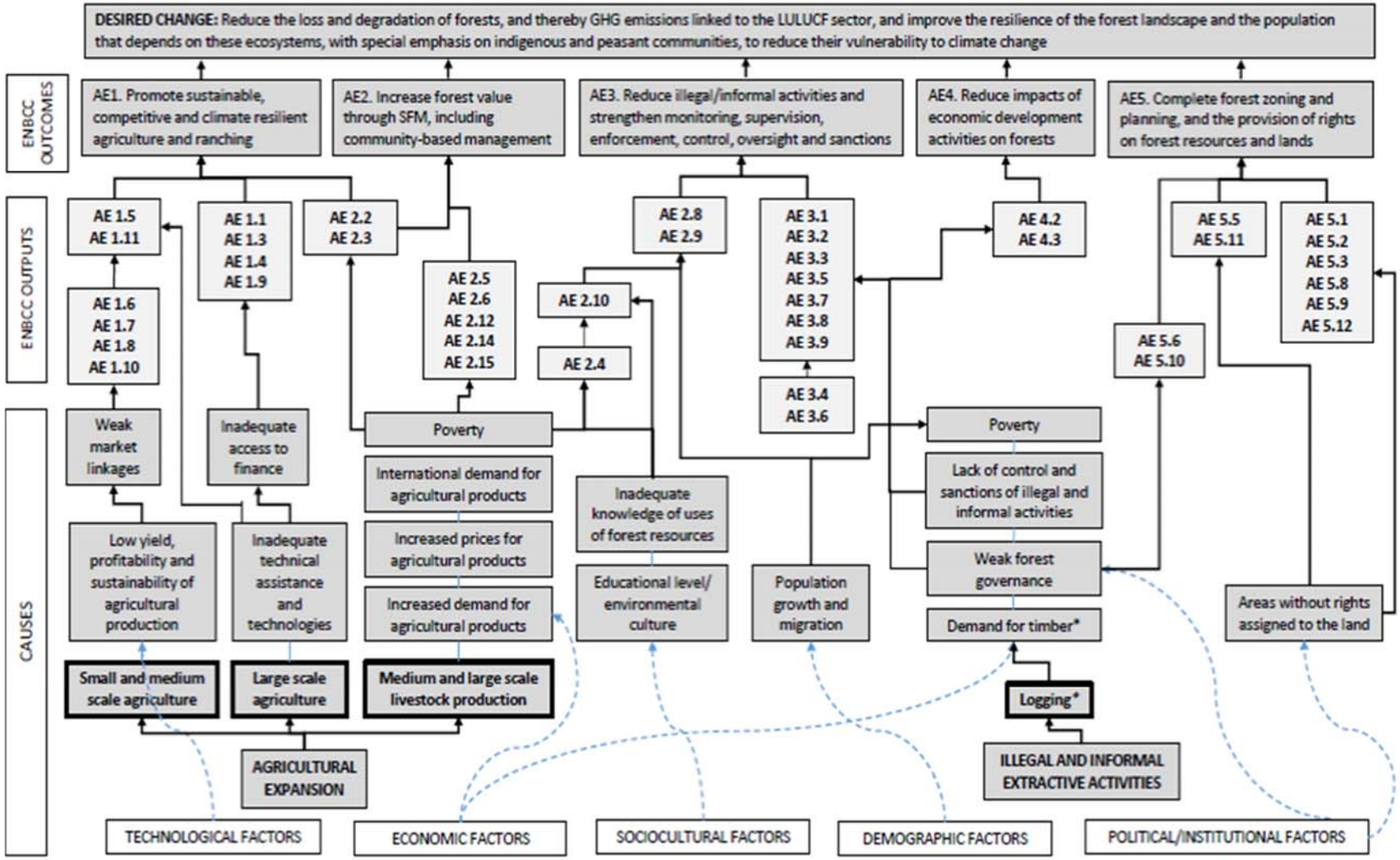
Recent analyses have found that there are around 2.1 million ha of already deforested land in the Peruvian Amazon (out of a total of around 8 million ha of deforested land) that is suitable for palm oil cultivation. 90% of this area is located in the regions of Loreto, Ucayali, Madre de Dios, and Huanuco: a preliminary inspection of high-resolution satellite imagery of all three existing oil palm cultivation clusters in these areas reveals that more than 50% of previously deforested land is currently covered with secondary forest or pastures of marginal economic activity and, therefore, amenable to conversion to oil palm. This preliminary analysis would indicate that there are approximately 1 million ha of deforested lands in the Peruvian Amazon where zero-deforestation palm oil expansion could viably occur. In other words, oil palm plantations could be expanded by a factor of 10 in Peru without having to resort to deforestation of primary forest.

**Box 9.** ***Potential for increasing sustainable supply of palm oil in Peru (source: FCMC/USAID [21])***

Levang and Rival (2014) make general recommendations for sustainable expansion of the palm oil sector, many of which are applicable to Peru:

1. Ecological intensification of existing plantations with the dissemination of selected plant material, well-planned fertilization, and recycling of effluents
2. Conservation of biodiversity and of permanent forest reserves, with priority for oil palm given to the development of zones already deforested or degraded
3. Supervised application of RSPO Principles and Criteria – interpreted in light of local constraints and integrated into national policies and regulations
4. Integration of smallholders in the development of agro-industrial complexes, either through the establishment of production contracts or by measures to support family farming
5. Respect for the rights of indigenous peoples and local communities by obtaining their Free, Prior and Informed Consent (FPIC) and open communication about any new plantations
6. Study of land rights and the land register when this exists, as well as compliance with regulations on the acquisition of land
7. Provision to ensure that donors and international nongovernmental organizations (NGOs) give the oil palm crop a primary role in the reduction of poverty in tropical countries

## J. ASPECTS OF THE ENBCC THEORY OF CHANGE TO WHICH THE PROJECT WILL CONTRIBUTE



## K. INCREMENTAL CONTRIBUTIONS OF THE PROJECT TO THE ENBCC

| Strategic Actions of the ENBCC | Project Outputs | Project Incremental Contribution |
|---|---|---|
| AE.1.1. Agree a route map for coordination between MINAGRI, MINAM and regional governments, focused on consolidating the development of appropriate mitigation actions (NAMAs) in each country, initially for coffee, cacao, oil palm and livestock<br>AE.1.3. Identify and promote agricultural policies and incentives to facilitate highly competitive agricultural and livestock development at different scales, free from deforestation<br>AE. 2.14. Actively promote initiatives integrated with public policies, public and private finance and corporate commitments to conserve forests and develop production chains that do not contribute to ecosystem degradation.<br>AE. 3.1. Establish clear roles and institutional linkages at national, regional and local levels for the prevention, supervision, enforcement, control, oversight and sanction of illegal activities that generate deforestation and forest degradation | 1.1.1 National Sector development policies and plans defined in accordance with land-use policy and plans, including concept of landscape sustainability, and based on root cause analyses<br>1.1.2 Regional and local development plans aligned with NAMAs, Forest and Climate Change Strategy, NBSAP and land use plans, with an approach of landscape sustainability and resilience<br>1.2.1 Commodity platforms established<br>1.2.2 Territorial governance platforms strengthened | Promotion of compatibility and synergies between goals of economic development and environmental sustainability, with the aim of promoting stable landscape mosaics. taking into account:<br>- Demographic trends<br>- Climate change<br>- Differential needs of different sectors of the population (including indigenous groups and women)<br>- Potential implications of plans for land use dynamics at a landscape scale. |
| AE. 5.1. Advance, under the leadership of Regional Forest and Wildlife Authorities (ARFFS) in the zoning and ordering of forests<br>AE. 5.2. Develop systematized and specialized information for the management and ordering of Amazonian forests<br>AE. 5.3. Implementation of forest cadastre at national level,<br>AE. 5.6. Complete the design and consolidate the operation of the National System for Forest and Wildlife Information and the Module for the Monitoring of Forest Cover.<br>AE. 5.12. Support the elaboration of thematic studies that contribute to the development of inputs for forest zoning | 1.1.3 Microzoning that clearly defines areas for forest conservation, restoration and sustainable use plans) | Investment in more fine-grained micro-zoning, to allow the definition of appropriate areas for alternative approaches to land management including conservation, restoration and sustainable use. |
| AE. 5.5. Design approve and implement the complementary dispositions for forest zoning and ordering, and for the emission of enabling titles<br>AE. 5.8. Promote the emission of enabling titles in forests<br>AE. 5.9. Strengthen institutional capacities for the adequate emission of enabling titles and follow-up of the commitments established for beneficiaries<br>AE. 5.10. Support the completion of the national map of principal land use<br>AE.5.11. Support the implementation of the new legal framework on land use change | 1.3.1 Effective and transparent land-use change approval mechanism | Unification and harmonization of mechanisms, to help ensure consistency of approaches and criteria, thereby reducing the risk of conflicts regarding decisions on land-use changes with potential inter-sector impacts |

| Strategic Actions of the ENBCC | Project Outputs | Project Incremental Contribution |
|---|---|---|
| AE. 3.2. Develop and implement a system for the management of multisectoral and multi-level information for improved linkage and effective implementation of actions to combat deforestation and forest degradation<br>AE. 4.2. Ensure coordination and permanent interchange of information, with all involved sectors, on the emission of technical opinions and the emission of environmental permits in the process of environmental impact assessment<br>AE. 4.3. Link information systems for forest management with systems of public investment | 1.3.2 Real-time, transparent monitoring and analysis system to detect illegal deforestation and land-use change, integrated with control mechanisms | Improved resolution, frequency and rapidity of detection; cross-referencing of data on land use conditions and changes with data on land ownership; linkage to governance mechanisms; improved capacities for analysis and interpretation of results; training of decision-makers in using monitoring and analysis tools. |
| AE. 3.3. Strengthen capacities of all actors related to forest landscapes, with special emphasis on personnel of public entities who carry out monitoring, supervision, enforcement, control and oversight of illegal activities that generate deforestation and forest degradation<br>AE. 3.4. Implement cross-cutting policies that help to reduce illegal activities that generate deforestation and forest degradation.<br>AE. 3.5. Strengthen and support the implementation of activities proposed in the National Plan Against Corruption in the Forest and Wildlife Sector<br>AE. 3.7. Actively involve civil society and local communities, especially indigenous communities, and peasants, in the control of deforestation and illegal felling<br>AE. 3.8. Strengthen supervision, enforcement, control and oversight of forests<br>AE. 3.9. Strengthen Specialised Environmental Fiscals (FEMA) to improve their efficiency | 1.1.4 Community life plans elaborated, sensitive to gender and including approach of landscape sustainability | Incorporation of considerations of ecosystem vulnerability, the spatial dynamics of threats, and interactions between livelihood support activities and ecosystem conditions |
| | 1.2.3 Strengthened, gender sensitive community level governance | |
| | 1.2.4 Technical and institutional capacities developed in national, regional and local governments for the implementation of plans, including the elaboration of public budgets | |
| | 1.3.3 Inspection and enforcement capacities to address violations in land-use regulation | |
| | 1.3.4 Community-based monitoring | |
| AE. 3.6. Define the economic value of forests affected by illegal and informal activities | 1.4.1 Cost-benefit analyses of the implementation of policies | Specific focus on financing implications for the implementation of practices compatible with the project's integrated vision of landscape management. |
| AE.1.5. Promote initiatives with the private sector that generate improved environmental and social standards in the agricultural and livestock sectors, especially at the level of investors, associated with finance of businesses in the sector<br>AE.1.6. Promote association between rural producers, to promote and strengthen value chains in conditions of equity with an approach of productive inclusion | 2.1.1 Strategies for market certifications, jurisdictional certification, companies' sustainable procurement policies | Focus on ensuring and realizing market opportunities for forms of production that are compatible with the project's integrated vision of landscape management. |

| Strategic Actions of the ENBCC | Project Outputs | Project Incremental Contribution |
|---|---|---|
| AE.1.7. Promote Access to markets that recognised, value and compensate the origin of products from sustainably managed forests, as well as deforestation-free agricultural products<br>AE. 2.12. To promote the generation of a domestic demand for the goods and services of forests through the promotion of the neutralization of carbon footprints, together with other mechanisms and incentives. | | |
| AE.1.4. Design, promote and implement instruments, as well as mechanisms for payment of environmental services, that motivate the involvement of the private sector with production standards, which include criteria of sustainability and inclusion in finance policies<br>AE. 2.10. Promote the development of incentives for forest conservation, such as conditional direct transfers (TdC) and other mechanisms, in particular those associated with payment for ecosystem services | 1.4.2 Public finance incentives for regional and local governments in support of sustainable landscape management<br>2.1.2 Alliances with private sector and supply-chain actors to support adoption of sustainable practices in landscapes<br>2.2.1 Credit and insurance schemes designed and implemented to benefit sustainable land practices aligned with National Forest and CC Strategy (farmers, communities etc).<br>2.2.2 Cost-Benefit Analyses of sustainable practices developed<br>2.2.3 PES and incentive systems designed to promote the implementation of sustainable resource management practices | Focus on ensuring the availability of appropriate incentives for forms of production that are compatible with the project's integrated vision of landscape management, and on mainstreaming criteria of environmental sustainability into incentive schemes. |
| AE.1.8. Promotion of agroforestry systems, with small, medium and large producers<br>AE.1.9. Promote the development of capacities in the improvement of efficiency and productivity of agricultural and livestock products; forest management; reforestation, and other crops considering emissions as one of the criteria of productivity<br>AE.1.10. Develop technological packages considering technical, financial and productive aspects for deforestation-free commercial crops with low carbon footprint. | 1.1.5 Community life plans elaborated, sensitive to gender and including approach of landscape sustainability<br>3.1.1 Pilot experiences demonstrate sustainable agriculture in practice and facilitate scale-up<br>3.1.2 Pilots of community-based sustainable livelihood support options in indigenous areas<br>3.2.1 TA systems, tools, methodologies and capacities for delivery of technical | Specific focus on ensuring that the menu of productive options that are supported and promoted is compatible with the generation of global environmental benefits, in accordance with the project's integrated vision of landscape management |

| Strategic Actions of the ENBCC | Project Outputs | Project Incremental Contribution |
|---|---|---|
| AE.1.11. To promote the creation of multidisciplinary programmes of technical assistance, with an integrated vision allowing sustainable management of forest landscapes<br>AE. 2.2. Improve the planning of forest use and the application of improved management practices for forest management, promoting the multiple and integrated use of these ecosystem, their resources and the services they provide.<br>AE. 2.3. Promote the identification, diffusion and application of sustainable forest management techniques, including low impact forest extraction, in concessions, communities and private properties<br>AE. 2.4. Promote community-based forest management, link to the vision of development based on the life plans of each community<br>AE. 2.5. Develop specialised programmes that promote the sustainable management of forests associated with timber and non-timber products, wildlife, biobusinesses or ecotourism<br>AE. 2.6. To promote specific programmes for strengthening systems for conservation and sustainable use of Amazon forests<br>AE. 2.8. Generate adequate employment opportunities, especially for the population in conditions of poverty and extreme poverty, to discourage migration to new areas, with forest cover to carry out activities that are incompatible with forests<br>AE. 2.9. Productive projects in and outside forests at national level, that provide improved opportunities for formal work. Revalue traditional knowledge for forest management, in particular for the identification of potential bio-businesses, in inclusive, sustainable and competitive business models | support integrating principles of gender equity | |
| | 3.2.2 Technical assistance programs rolled out in alliance with supply-chain actors and local/regional governments, to deliver support to green commodity producers, integrating principles of gender equity | |
| | 3.3.1 Local restoration initiatives in priority localities | |
| | 3.3.2 Local conservation initiatives in priority localities | |
| AE. 2.15. Promote environmental education and the creation of awareness among citizens regarding forest conservation and the negative impacts of deforestation and climate change | 3.4.1 Systematization of best practices, lessons learned and case studies, including evidence of the special contribution of women and indigenous peoples to the sustainability of Amazonian landscapes | Focus on raising awareness and disseminating knowledge of management practices that contribute to the generation of global environmental benefits, and the project's integrated vision of landscape management project's vision. |
| | 3.4.2 Communications products developed and disseminated | |
| | 3.4.3 System for adaptive management and learning to inform landscape management approaches by decision makers | |

# L. TECHNICAL OPTIONS OF ENVIRONMENTALLY-FRIENDLY PRODUCTION SYSTEMS

**Box 10. Examples of options for improving the environmental outcomes of production systems**

- Diversified shade in coffee and cacao production systems, generating diverse products for farmers and favouring habitat and connectivity value for biodiversity
- Introduction of live fences and dispersed trees in pasture systems, generating diverse products for farmers, providing shade and therefore reducing heat stress affecting cattle, and favouring habitat and connectivity value for biodiversity
- Maintenance of ground cover for weed control and nutrient cycling in oil palm plantations, and application of organic wastes from oil processing as fertilizer, in order to reduce contamination from agricultural chemicals and improve soil health, thereby contributing to the sustainability of production systems and to landscape stability.
- Set-asides and corridors in and around perennial plantations and pasture areas

**Box 11. Case study: Cacao-based agroforestry system with forestry species in Tarapoto [9]**

***Description:*** "Re-agroforestation": production of timber in agroforestry systems established in deforested areas.

***Locality:*** the north of Tarapoto district, in the sectors of Tarapotillo and Shapajillo, on the edge of the Cordillera Escalera mountain range, with small farmers specialized in cacao production.

The production of timber in agroforestry systems has become a common practice in the north of Tarapoto district. Small specialized family farmers manage cacao-based agroforestry systems associated with fast- and slow-growing tree species and temporary crops. These crops are for household consumption and sale, during the first years after the establishment of the system, given that cacao does not generate income until the third year.

Depending on growth and the type of agroforestry arrangement used, the tree species can provide shade for the cacao and generate income in the medium term (after 5-10 years) and long term (more than 50 years). The tree species used are a mix of fast- and slow-growing species, with some market value. Fast-growing species include bolaina blanca (*Guazuma crinita*), capirona (*Calycophillum spruceanum*) and pashaco (*Pithecellobium sp.*). Species such as pumaquiro (*Aspidosperma macrocarpon*), cedar (*Cedrela odorata*), and mahogany (*Swietenia macrophylla*) are slower growing but have greater economic value. There may be as many as 50 trees per hectare, planted not only for production but also for conservation, primarily of water sources.

A limiting factor for this system is the perception by farmers that fast-growing species could compete with the main crop, and that the harvesting of the trees after 6 years may cause damage to the cacao, which at that time will be in production.

Income from the sale of timber from agroforestry systems depends on the species. A producer may have 6-10 mahogany trees per hectare, together with less valuable species such as bolaina, pashaco, pumaquiro, and capirona. A standing tree of mahogany of 3,000 board feet, with a value of 3 soles per board foot, is worth 9,000 soles. Fast-growing species are much less valuable, but can be sold much earlier (typically at around 10 years of age).

**Box 12. Management alternatives proposed by the Alternatives to Slash and Burn (ASB) project [8]**

***Multistrata agroforestry***

Agroforestry LUS systems offer possibilities for income generation that are also relatively environmentally-friendly.

- In Yurimaguas, a **diversified production system with annual crops** started with annual crops in the first two years and later producing timber, poles, coffee and fruit (*Cedrelinga catenaeformis*, *Coffea arabica*, *Colubrina glandulosa*, *Bactris gasipaes*, *Eugenia stipitata* and *Inga edulis*). Centrosema (*Centrosema macrocarpum*) understorey formed the lower strata in the system.

- **Bolaina with annual crops:** annual crops (based on a rice-maizecowpea sequential system) are planted along with bolaina in the initial year of establishment. Bolaina stem prices ranged between US$1.5 and US$4.25, depending upon quality. Production of improved bolaina in production stands with selected germplasm is expected to result in higher and more consistent quality stems and thereby fetch higher prices. The breakeven point for bolaina timber prices is US$4.25, indicating that positive economic returns would be achieved for average prices at or above this level. Results are insensitive to lower timber harvest and thinning costs in this system. Harvest costs can fall to zero without causing the breakeven point to become positive.
- **Bolaina with centrosema:** benefits come from two sources, centrosema seeds for cash sales, and reduced labour for system maintenance (50% reduction in year two and 25% reduction in year three). The maintenance benefit occurs because the centrosema suppresses weed growth while the tree canopy is not yet closed. Conservative estimates are for a bolaina stem price of US$2.85/stem, centrosema seed price of US$4/kg) and centrosema yield of 50 kg/ha; only modest changes in these key variables are required in order to establish economic feasibility (an average price increase for bolaina stems to US$3.57/stem, an increase in the centrosema seed price to US$5.43/kg and an increase in centrosema seed yield to 63.3kg/ha. Harvest and thinning costs would need to fall to 45% of the budgeted value in order to break even.
- **Bolaina with centrosema and annual crops:** combining the two systems above into one integrated system, with annual crops in the first year followed by establishing centrosema for soil cover and seed production in the second year, produces the best economic results. Net cash flow is improved by covering a portion of tree investment costs in the first year from positive cash flow from annual crop production, balanced by cash generated from centrosema seed production beginning in 1999. The likely scenario of higher than budgeted prices for bolaina stems and centrosema seed, plus possibly higher centrosema yields, would increase economic returns to this system.
- *Improved fallows:* An experiment with short-duration planted tree fallows was conducted at Yurimaguas. Managed tree fallows of planted inga (*Inga edulis*) and colubrina (*Colubrina glandulosa*), with and without centrosema cover were compared with the traditional bush fallow in terms of weed suppression and crop production (Alegre et al., 2005).
- *Improved pastures: Brachiaria decumbens* (brachiaria), a grass of African origin, was introduced in the 1970s to improve pasture performance. Its vitality, low labor requirements and easy adaptation to the Aguaytía watershed conditions have lead to its widespread adoption. Between 1982 and 1996, brachiaria use rose from 17% to 40% of total pasture cover (Riesco et al., 1986; Fujisaka and White, 1998; Fujisaka et al., 1999) and is so common that many farmers now consider it a native species. The brachiaria option can increase the stocking rate to 1.5 head ha-1, increase beef production by 0.3 kg head-1 day-1 and increases milk production (Holmann 1999a,b). Brachiaria is burned to control weeds but receives little or no other management. The analysis below refers to brachiaria pastures requiring higher livestock investment costs (US$450 ha-1) and establishment costs (US$40 ha-1) than native pastures. To improve animal carrying capacity of pastures along with milk and beef production, the CIAT Tropileche (tropical milk) project attempted to introduce legumes Arachis pintoi and Cratylia argentena.

## M. TECHNICAL OPTIONS FOR ECOSYSTEM RESTORATION

**Box 13. Examples of restoration options**, in a study site in Campo Verde, Ucuyali **[**28**]**

The study site has very low infiltration rates and flat topography, meaning that tree species that tolerate some water-logging and flooding will be important in restoring degraded pastures. The study suggested that fallows may well be an effective way to restore degraded areas, but further testing of the ecological requirements of candidate species will be needed. Also, increasing the tree diversity in fallow systems such as thickets should be a priority in this landscape, as well as alternating rotations of annual crops with enriched fallows and a permanent tree component.

Proposed options:

- The use of *Inga* sp (Guaba) to improve and protect soil in association with native species (fast growing and slow), with combinations and spatial arrangements to be determined depending on specific site

characteristics, level of degradation and species edaphic-climatic requirements.

- High valuable timber species such as mahogany (*Swietenia macrophylla*), Spanish cedar (*Cedrela odorata*), shihuahuaco (*Dipteryx micrantha*), tornillo (*Cedrelinga cataeniformis*), possibly nursed by fast-growing species such as *Simarouba amara* (marupá).
- High value local *Mauritia flexuosa* (e.g 'shambo' variety planted to recover degraded aguajales and protect water courses and sources).
- Improvement of pastures with leguminous species (eg. *Centrosema* sp.) and use of quality fodder species such as Leucaena. Association with timber species is possible, depending on specific site characteristics, level of degradation and species edaphic-climatic requirements
- Planting of pepper climbing on high value timber species or on living stakes of N-fixing species (e.g. *Gliricidia sepium*) with high-value species planted up to shade tolerance of black pepper

Planting of guaba/pacae (*Inga* sp.) and other native fast growing species with cacao under shade. It is posible to associate medicinal plants (Sangre de grado (*Croton leucherii*), Una de gato (*Uncaria tomentosa*)

**Box 14. Restoration case study: Bolaina in Irazola- production and marketing of timber from fast-growing natural regeneration in family farms [8]**

Location: hamlets of Buenos Aires, Tahuantinsuyo, Puerto Zapote, Chía de Vista Alegre and Porvenir – individual producers of San Alejandro.

The farmers are small specialized producers, who benefit from incentives for the establishment of cacao, and in general are integrated into local markets. The production of the native species Bolaina (*Guazuma crinita*) for sale is part of the traditional management of forest resources by family farmers in low-lying areas, near to rivers and on alluvial soils. These characteristics favour the natural regeneration of this pioneer species, which producers with less capital can management with almost no financial investment and with a low level of technology. Bolaina is a fast-growing pioneer species that colonizes clearings and fallows in areas previously used for temporary crops. It is used for construction, furniture and packing cases. Depending on soil characteristics and management, trees can be commercialized after 5-6 years. The three principal production systems for the species are:

- Natural regeneration, in association with temporary crops
- Agroforestry systems, in association with permanent crops such as cacao, and other planted species
- Monospecific plantations.

To date, a number of entities have supported the establishment of plantations of bolaina, but some producers have expressed a preference for the management of traditional crops associated with natural regeneration of the species. In Irazola, entities that have supported cacao establishment are now promoting the establishment of Bolaina in agroforestry systems. A challenge to the incorporation of Bolaina in cacao farms is the perception of competition, and the risk of damaging the crop when felling the trees for timber, which has led to trees being established in rows rather than dispersed throughout the cacao crops.

To date, there are no direct incentives (financial or technical) in support of the establishment of bolaina either in plantations or in fallow systems: management in fallows is not officially recognised as a form of management as it is based on natural regeneration.

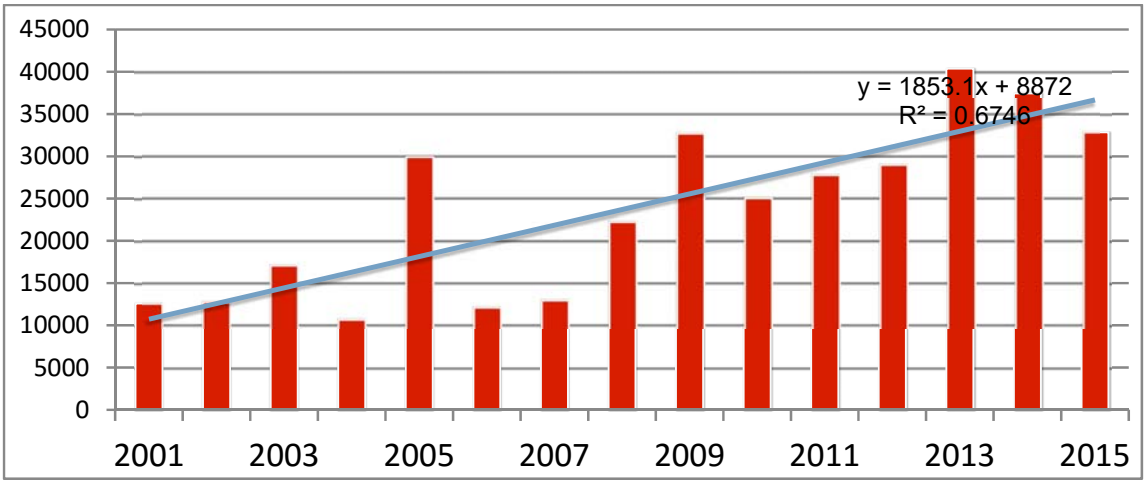
No difference has been found between producers with and without title, with regards to their marketing practices for bolaina. This is usually carried out through informal channels, with the trees being sold standing to intermediary companies, which carry out the harvest: the logs are then transported to local sawmills where they are transformed into pre-dimensioned planks. These are then sold on national markets, principally Lima.

## N. QUANTIFYING CARBON BENEFITS

**Baseline (without project) scenario**

There has been a progressive increase in annual rates of forest clearance in the project area over the period 2001-2013 (Figure 1), but both of the last two years for which data are available (2014 and 2015) have shown significant decreases in the rate of deforestation (of 7% and 12% respectively). The calculations of avoided deforestation presented below assume that, under the without project scenario, the annual rate of deforestation over the project period (mid-2017 – mid-2023) will remain constant, at the smoothed value for 2015 generated by the regression of annual deforestation rates over the 2001-2015 period, of 34,815ha/year. This is based on the assumption that the drivers of continued deforestation (including continued policy and market pressures for the expansion of commercial agriculture and the development of the cattle sector, coupled with increases in annual cropping associated with a combination of population growth, immigration and market demand) will be balanced by factors limiting further deforestation, most notably the increasing marginal cost of establishing commercial crops in increasingly remote areas with difficulties of access and topography, and the increasing scarcity of "open access" land that can easily be developed without challenges from private owners or occupiers, indigenous communities and PA authorities.

**Figure 1. Annual deforestation rates in the target area (ha) (2001-2015)**




In the 2011-2013 period, conversion of forest to other uses accounted for 55% of all land use change, by area; 88% of this forest loss was in the form of conversion to agriculture and 7% in the form of conversion to pasture.

**Table 1. Estimated relative proportions of specific forms of land use change**

| Broad land use change categories (MINAM data for 2011-2013) | | | | Estimated breakdown by specific categories of land use change | | |
|---|---|---|---|---|---|---|
| Overall forest loss | 55% | Forest to agriculture | 88% | Primary forest | Annual crops | 35% |
| | | | | | Cacao | 5% |
| | | | | | Oil palm | 10% |
| | | | | Logged forest | Annual crops | 36% |
| | | | | | Cacao | 3% |
| | | | | | Oil palm | 6% |
| | | | | Other | | 5% |
| | | | | | Total | 100% |
| | | Forest to pasture | 7% | Primary forest | Pasture | 50% |
| | | | | Logged forest | | 50% |
| | | Other | 5% | | Total | 100% |

| Broad land use change categories (MINAM data for 2011-2013) | | Estimated breakdown by specific categories of land use change | | |
|---|---|---|---|---|
| | | Total | 100% | |
| Pasture to agriculture | 10% | Cacao | | 5% |
| | | Oil palm | | 40% |
| | | Other | | 55% |
| | | Total | | 100% |
| Fallow to agriculture | 8% | Cacao | | 30% |
| | | Oil palm | | 20% |
| | | Pasture | | 30% |
| | | Other | | 20% |
| Other | 27% | Total | | 100% |
| Total | 100% | | | |

Table 2 below presents predictions of future trends in land use changes under the without-project scenario. These predictions are calculated as follows:

- Future deforestation rates remain at a constant annual level of 34,815ha (this is the 2015 deforestation value generated by the 2001-2015 regression). This is a conservative assumption that takes into account that deforestation rates have in fact decreased for the last two consecutive years; this may be explained by the remaining available land being subject to increasing obstacles to conversion for agricultural use, in the form of topography, access and conflicts with existing stakeholders and legal categorisations.
- The different categories of forest loss (from primary and logged forest to annual crops, cacao, oil palm and pasture) are all assumed to increase at the same rate.
- The conversion of pasture and secondary vegetation (fallow) to cacao and oil palm will continue at a constant annual rate (the 2012 rate).
- 2012 is taken as a baseline year for predictions of future trends in rates of specific forms of land use change, given that the most recent data on the relative areas of different land use changes are for the period 2011-2013. The relative proportions of different land use changes for the year 2012 are assumed to be the same as over the 2011-2013 period as a whole.

**Table 2. Predictions of trends in forms of land use change which are expected to be affected by the project**

| Year | | Annual forest loss | Primary forest to agriculture | | | Logged forest to agriculture | | | Primary forest to Pasture | Logged forest to Pasture | Pasture to | | Fallow to | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Annuals | Cacao | Oil Palm | Annuals | Cacao | Oil Palm | | | Cacao | Oil palm | Cacao | Oil palm | Pasture |
| | | | 35% | 5% | 10% | 36% | 3% | 6% | 50% | 50% | 5% | 40% | 30% | 20% | 30% |
| 2012 | | 28,983 | 9,002 | 1,286 | 2,572 | 9,259 | 772 | 1,543 | 885 | 885 | 209 | 1,673 | 1,665 | 1,110 | 2,374 |
| 2013 | | 40,379 | 12,541 | 1,792 | 3,583 | 12,900 | 1,075 | 2,150 | 1,232 | 1,232 | 209 | 1,673 | 1,665 | 1,110 | 2,374 |
| 2014 | | 37,444 | 11,630 | 1,661 | 3,323 | 11,962 | 997 | 1,994 | 1,143 | 1,143 | 209 | 1,673 | 1,665 | 1,110 | 2,374 |
| 2015* | | 34,815 | 10,813 | 1,545 | 3,089 | 11,122 | 927 | 1,854 | 1,063 | 1,063 | 209 | 1,673 | 1,665 | 1,110 | 2,374 |
| 2016* | | 34,815 | 10,813 | 1,545 | 3,089 | 11,122 | 927 | 1,854 | 1,063 | 1,063 | 209 | 1,673 | 1,665 | 1,110 | 2,374 |
| 2017* | | 34,815 | 10,813 | 1,545 | 3,089 | 11,122 | 927 | 1,854 | 1,063 | 1,063 | 209 | 1,673 | 1,665 | 1,110 | 2,374 |
| Project period | Mid 2017* | 17,408 | 5,407 | 772 | 1,545 | 5,561 | 463 | 927 | 531 | 531 | 105 | 836 | 832 | 55 | 1,187 |
| | 2018* | 34,815 | 10,813 | 1,545 | 3,089 | 11,122 | 927 | 1,854 | 1,063 | 1,063 | 209 | 1,673 | 1,665 | 1,110 | 2,374 |
| | 2019* | 34,815 | 10,813 | 1,545 | 3,089 | 11,122 | 927 | 1,854 | 1,063 | 1,063 | 209 | 1,673 | 1,665 | 1,110 | 2,374 |
| | 2020* | 34,815 | 10,813 | 1,545 | 3,089 | 11,122 | 927 | 1,854 | 1,063 | 1,063 | 209 | 1,673 | 1,665 | 1,110 | 2,374 |
| | 2021* | 34,815 | 10,813 | 1,545 | 3,089 | 11,122 | 927 | 1,854 | 1,063 | 1,063 | 209 | 1,673 | 1,665 | 1,110 | 2,374 |
| | 2022* | 34,815 | 10,813 | 1,545 | 3,089 | 11,122 | 927 | 1,854 | 1,063 | 1,063 | 209 | 1,673 | 1,665 | 1,110 | 2,374 |
| | Mid 2023* | 17,408 | 5,407 | 772 | 1,545 | 5,561 | 463 | 927 | 531 | 531 | 105 | 836 | 832 | 555 | 1,187 |
| 2023 | | 34,815 | 10,813 | 1,545 | 3,089 | 11,122 | 927 | 1,854 | 1,063 | 1,063 | 209 | 1,673 | 1,665 | 1,110 | 2,374 |
| **Project period total (no project)** | | 208,892 | **64,879** | **9,268** | **18,537** | **66,733** | **5,561** | **11,122** | **6,375** | **6,375** | **1,254** | **10,036** | **9,989** | **6,660** | **14,244** |
| **Project effect (%)** | | | -20 | -30 | -30 | -20 | -30 | -30 | -20 | -20 | 15 | 20 | -20 | -20 | -20 |
| **Net effect due to project (ha)** | | | **-12,976** | **-2,781** | **-5,561** | **-13,347** | **-1,668** | **-3,337** | **-1,275** | **-1,275** | **188** | **2,007** | **-1,998** | **-1,332** | **-2,849** |

**With project scenario**

The project will generate carbon and other environmental benefit through the strategies summarised in Table 3.

**Table 3. Project strategies for each form of deforestation in the target area**

| Change sought | Strategies | Environmental Benefits |
|---|---|---|
| **Reduction** in conversion of **original (primary) forest** to | | |
| **14. forest disturbed by logging** | through:<br>- improved governance of illegal logging | Protection of BD values, carbon stocks and ecosystem services of primary forests |
| **15. annual crops and pasture** | through:<br>- improved governance of forest clearance by colonist farmers and ranchers<br>- improvement of sustainability and stability of existing pasture systems, through their conversion to silvo-pasture systems (13), in order to reduce the need to expand into forest areas<br>- improvement of the sustainability of existing annual crop production systems through their conversion into agroforestry systems (see 11), in order to reduce the need to expand into forest areas | |
| 16. **perennial crops** (cacao and palm) | through:<br>- improved governance of forest clearance by palm and cacao growers<br>- improvement of mechanisms and criteria for land use planning, titling and authorisation of land use changes<br>- market-based instruments, including application of certification and industry standards<br>- expansion instead into already deforested areas (see 12) | |
| **Reduction** in conversion of **original forest disturbed by logging** to | | |
| **17. annual crops and pasture** | through:<br>- improved governance of forest clearance by colonist farmers and ranchers<br>- support to declaration and community-based management of local forests (*bosques locales*)<br>- improvement of sustainability and stability of existing pasture systems, through their conversion to silvo-pasture systems (13), in order to reduce the need to expand into forest areas<br>- improvement of the sustainability of existing annual crop production systems through their conversion into agroforestry systems (see 11), in order to reduce the need to expand into forest areas | Protection of BD values, carbon stocks and ecosystem services of disturbed (logged) original forests |
| 18. **perennial crops** (cacao and palm) | through:<br>- improved governance of forest clearance by palm and cacao growers<br>- support to declaration and community-based management of local forests (bosques locales)<br>- improvement of mechanisms and criteria for land use planning, titling and authorisation of land use changes<br>- market-based instruments, including application of certification and industry standards | |
| **Reduction** in conversion of **secondary forest/fallow** (*purmas*) to | | |
| **19. annual crops** | through:<br>- provision of technical and financial support for improvement in the sustainability and productivity of annual cropping practices in cyclical production systems, to reduce area needs | Protection of BD values, carbon stocks and ecosystem services of secondary forests |

| Change sought | Strategies | Environmental Benefits |
|---|---|---|
| | - motivation by sustainability, productivity and livelihood benefits | |
| **20. pasture** | through:<br>- improvement of sustainability and stability of existing pasture systems, through their conversion to silvo-pasture systems (13), in order to reduce the need to expand into forest areas<br>- motivation by sustainability, productivity and livelihood benefits<br>- provision of technical and financial support | |
| 21. **Perennial crops** (cacao and palm) | through:<br>- substitution by expansion of perennial crops instead into already deforested areas (see 12)<br>- improvement of mechanisms and criteria for land use planning, titling and authorisation of land use changes | |
| **Reduction** in conversion of **annual crops** to | | |
| **22. pasture** | through:<br>- conversion instead into agroforestry systems (see 11),<br>- motivation by sustainability, productivity and livelihood benefits<br>- provision of technical support | Reduction of pasture expansion displacing annual crops into forest areas |

The expected effects of the project on the predicted without-project rates of land use change are shown in Table 4.

**Table 4. Predicted impacts of the project in terms of avoided deforestation**

| | A. Conversion without project (ha)[53] | B. Predicted % project impact on loss rate | C. Conversion with project (ha) (A – D) | D. Avoided deforestation (ha) (A x -B%) |
|---|---|---|---|---|
| **Unlogged forest to** | | | | |
| Annual crops | 64,879 | -20 | 51,903 | 12,976 |
| Cacao plantations | 9,268 | -30 | 6,488 | 2,781 |
| Oil palm plantations | 18,537 | -30 | 12,976 | 5,561 |
| Pasture | 6,375 | -20 | 5,100 | 1,275 |
| **Logged forest to** | | | | |
| Annual crops | 66,733 | -30 | 53,386 | 13,347 |
| Cacao plantations | 5,561 | -30 | 3,893 | 1,668 |
| Oil palm plantations | 11,122 | -30 | 7,786 | 3,337 |
| Pasture | 6,375 | -20 | 5,100 | 1,275 |
| **Secondary forest to** | | | | |
| Cacao plantations | 9,989 | -20 | 7,992 | 1,998 |
| Oil palm plantations | 6,660 | -20 | 5,328 | 1,332 |
| Pasture | 14,244 | -20 | 11,395 | 2,849 |
| **Totals** | **219,744**[a] | | **171,346** | **48,398** |

[a]Differs from the total in Table 2 above because it only includes those deforestation processes on which the project will have an effect

[53] From "Project period – no project" row of Table 2 above

**Table 5. Predicted impacts of the project in terms of conversion of pasture to perennial crops**

| | A. Conversion without project (ha)[54] | B. % project impact on rate | C. Conversion with project (ha) (A + C) | D. Net effect (ha) (A x B%) |
|---|---|---|---|---|
| Pasture to cacao | 1,254 | +20% | 1,505 | 251 |
| Pasture to oil palm | 10,036 | +40% | 14,050 | 4,014 |

**Table 6. Other land use changes to result from the project**

| From | To | Area (ha) |
|---|---|---|
| Agriculture | Diverse tree-rich agricultural systems | 10,000 |
| Degraded areas | Restored forest | 4,000 |

The carbon benefits from the project are estimated in terms of lifetime direct as well as indirect GHG emission avoided over the default time horizon of 20 years under the IPCC guideline and the guidance of the GEF Tracking Tool for LULUCF. For this project, the durations of implementation phase and the capitalization phase are defined as 6 years and 14 years, respectively.

**Table 7. Per hectare CO2 values by land use, used in Ex-ACT calculations of CO2 balances**

| | Biomass | | | | Soil carbon[c] | Total |
|---|---|---|---|---|---|---|
| | Above ground | Below ground | Litter | Dead wood | | |
| Primary forest | 112.0[a] | 28.3[a] | 3.7 | 0.0 | 60.0 | 204.0 |
| Pasture | 2.66[b] | | | | 60.0 | 62.66 |
| Annual crops | 5.0[c] | | | | 28.8 | 33.8 |
| Logged forest | 89.6[d] | 22.6[d] | 2.96[d] | 0.0 | 60.0 | 175.2 |
| Secondary forest | 50.0[b] | | | | 60.0 | 110.0 |
| Degraded forest | 22.4 | 2.56 | 0.74 | 0.0 | 60.0 | 85.7 |
| Perennial/tree crops (0-5 years) | 10.0[c] | | | | 60.0 | 70.0 |
| Agroforestry systems | 10.0[e] | | | | 60.0 | 70.0 |

[a]Reference level for Peru
[b]Inventario Nacional de Gases de Efecto Invernadero (INGEI) 2012, MINAM (http://infocarbono.minam.gob.pe/wp-content/uploads/2016/03/2012.pdf)
[c]ExACT default value
[d]Logged forest biomass is assumed to be 80% of primary forest value
[e]Degraded forest biomass is assumed to be 20% of primary forest value

## Direct lifetime GHG emission avoided

In the GEF Tracking Tool for Climate Change Mitigation projects, direct lifetime GHG emissions avoided are the emissions reductions attributable to the investments made during the project's supervised implementation period, totalled over the respective lifetime of the investments. The variables and assumptions used for the calculation are shown below.

**Table 8. Key variables and assumptions used in Ex-ACT calculations**

| Variable | Value | Unit | Note |
|---|---|---|---|
| Lifetime length for direct GHG emission avoided | 6 | years | 6-year implementation phase plus |
| Lifetime length for indirect GHG emission avoided | 14 | years | 14-year capitalization phase: estimated conservatively at 50% of the direct benefit during the implementation phase given that the areas to be targeted during the implementation phase will be those where there is most potential for avoiding deforestation: beyond them the probable without-project deforestation (and so potential for avoidance) would be limited by access and topographical factors, |

[54] From "Project period – no project" row of Table 2 above

| Variable | Value | Unit | Note | |
|---|---|---|---|---|
| Climate, and Moisture regime | Tropical Moist | - | EX-ACT data | |
| Dominant Regional Soil Type | High activity clay Soils | - | EX-ACT data | |
| Total area of target landscapes | 2.17 million | ha | Project target | |
| Area for GHG emissions calculation in EXACT | 64,593 | ha | 48,398 | ha of avoided conversion of primary, logged and secondary forest to agriculture and pasture |
| | | | 10,000 | ha of improved agricultural production systems |
| | | | 4,000 | ha of forest restoration |
| | | | 2,195 | ha increase in the area of perennial crops established in pasture areas |
| Forest cover loss during 6 years without project (baseline) | 219,744 | ha | Projected conversion of primary, logged and secondary forest to agriculture and pasture | |
| Forest cover loss during 6 years with project (project target) | 159,995 | ha | Project target estimation due to improved governance and promotion of stable production alternatives | |
| Area of avoided deforestation | 48,398 | ha | From Table 4 above | |
| Target benefit area of forest restoration on degraded land | 4,000 | ha | | |
| Target benefit area of improved agricultural production systems | 10,000 | ha | | |
| Increase in the area of perennial crops established in pasture areas | 2,195 | ha | From "pasture to cacao and oil palm" columns, "net effect due to project" row of Table 2 above | |

**Table 9. Summary results table from ExAct (All GHG in tCO2eq)**

| Components of the project | Gross fluxes | | |
|---|---|---|---|
| | Without | With | Balance |
| | Positive = source / negative = sink | | |
| **Land use changes** | | | |
| Deforestation | 56,208,406 | 43,626,339 | -12,582,067 |
| Afforestation | 0 | 0 | 0 |
| Other LUC | 47,159,587 | 35,012,135 | -12,147,452 |
| **Agriculture** | | | |
| Annual | 0 | 0 | 0 |
| Perennial | -44,680,657 | -35,747,691 | 8,932,966 |
| Rice | 0 | 0 | 0 |
| **Grassland & Livestocks** | | | |
| Grassland | 0 | 0 | 0 |
| Livestocks | 0 | 0 | 0 |
| **Degradation & Management** | 0 | 0 | 0 |
| **Coastal wetlands** | 0 | 0 | 0 |
| **Inputs & Investments** | 0 | 0 | 0 |
| **Fishery & Aquaculture** | 0 | 0 | 0 |
| **Total (direct)** | 58,687,336 | 42,890,784 | -15,796,553 |
| **Total (indirect)** | | | -7,898,277 |

## Table 10. Without project carbon loss calculations for LD TT

| | Primary forest to | | | Logged forest to | | | Primary forest to | Logged forest to | Fallow to | | Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Without project (for LD TT)** | **Annual crops** | **Cacao** | **Oil Palm** | **Annual crops** | **Cacao** | **Oil palm** | **Pasture** | | **Cacao** | **Oil palm** | |
| Area of land use change (from Table 2 above) | **64,879** | **9,268** | **18,537** | **66,733** | **5,561** | **11,122** | **6,375** | **6,375** | **9,989** | **6,660** | **205,500** |
| Above ground carbon/ha for start land use (from ExACT) | 115.7 | 115.7 | 115.7 | 115.2 | 50 | 50 | 115.7 | 115.2 | 50 | 50 | |
| Above ground carbon/ha for end land use (from ExACT) | 5 | 10 | 10 | 5 | 10 | 10 | 2.7 | 2.7 | 10 | 10 | |
| Above ground balance/ha | 110.7 | 105.7 | 105.7 | 110.2 | 40 | 40 | 113 | 112.5 | 40 | 40 | |
| **Overall above ground loss (net carbon/ha x area)** | **7,182,143** | **1,072,363** | **2,144,726** | **7,353,981** | **499,471** | **332,980** | **737,589** | **734,401** | **499,471** | **332,980** | **21,979,565** |
| Average above ground loss/ha | | | | | | | | | | | 106.96 |
| Below ground carbon/ha for start land use (from ExACT) | 88.3 | 88.3 | 88.3 | 60 | 60 | 60 | 88.3 | 60 | 60 | 60 | |
| Below ground carbon/ha for end land use (from ExACT) | 28.8 | 60 | 60 | 28.8 | 60 | 60 | 60 | 60 | 60 | 60 | |
| Below ground balance/ha | 59.5 | 28.3 | 28.3 | 31.2 | 0 | 0 | 28.3 | 0 | 0 | 0 | |
| **Overall below ground loss (net carbon/ha x area)** | **3,860,321** | **262,298** | **524,596** | **2,082,071** | **-** | **-** | **180,413** | **-** | **-** | **-** | **6,909,698** |
| **Average below ground loss/ha** | | | | | | | | | | | **33.62** |

# O. STAKEHOLDER ENGAGEMENT PLAN FOR THE IMPLEMENTATION PHASE

CONTENTS

## 1. INTRODUCTION

The Sustainable Productive Landscapes Project (PPS) contributes to the reduction of deforestation, and forest recovery, in production landscapes in Huanuco and Ucayali Regions in the Peruvian Amazon, by supporting natural resource management and production systems that incorporate considerations of environmental sustainability, through an integrated and comprehensive territorial approach that will recognize the complexity of local livelihoods and the landscape-wide scale of the drivers of deforestation, while at the same time taking targeted actions to address producer behaviour in selected sectors that have been identified as constituting particularly significant drivers of deforestation.

The project will consist of three components: 1) Improved policy planning and governance to reduce deforestation and enhance sustainable production; 2) Financial mechanisms and market incentives promote sustainable production practices and 3) Technical capacity installed to restore and sustain ecosystem services in target landscapes.

The project will generate global environmental benefits in the Biodiversity, Land Degradation, Sustainable Forest Management and Climate Change focal areas, working with national, regional and local governments, private sector actors and producers of a range of different scales with the aim of reducing rates of conversion of natural forests to agriculture and ranching by helping to ensure that productive activities are appropriately located in the landscape, supporting environmental governance, and ensuring that producers have access to the capacities and incentives required to enable them to apply sustainable production systems, paying particular attention to oil palm and cocoa production. The outputs will be delivered in such a way as to optimize outcomes for women in terms of capacity development, effective participation in decisions related to resource management and livelihood support, and the distribution of benefits, based on gender analyses and the collection and application of their local knowledge.

The present document outlines the Stakeholder Engagement Plan for the implementation of the PPS Project.

## 2. SUMMARY OF ANY PREVIOUS STAKEHOLDER ENGAGEMENT ACTIVITIES

Participation plans were developed for the project preparations phase to ensure that the needs and priorities of stakeholders at all levels, including women and indigenous peoples, are expressed and taken into account in the formulation and implementation of the project. During the design of the project the strategy was coordinated with MINAM and then with subnational governments and indigenous organizations at national and subnational levels. Considering this interaction, an engagement strategy with indigenous populations was developed.

A workshop specialized in indigenous populations was also held and a specific discussion group was held with women.

After designing the engagement plan, seven thematic workshops were implemented with the overall objective of ensuring that adequate provisions exist to ensure that the interests and priorities of the different groups of actors and related sectors are taken into account in the formulation.

The idea of doing several workshops to contribute to the project was to deal with the diversity of issues with the most representative actors in manageable meetings between 25 and 40 people. The main topic and schedule of the workshops is detailed in following table.

Individuals, groups, and organizations that have been consulted during these events and additional interaction are listed in Annex 3 (attached).

| Table 1. Main stakeholder engagement activities during project preparation phase | | | |
|---|---|---|---|
| **Method** | **Activity - topic** | **Location** | **Date** |
| **Initial workshops and meetings** | Inception workshop | Lima | 12 may 2016 |
| | Information workshop Ucayali and meeting GORE Ucayali | Pucallpa | 9 jun |
| | Meeting GORE Huanuco | Lima | 8 jul |
| **Field missions / interviews** | Visit of multidisciplinary team and meetings with each municipality | Ucayali-Huánuco (project area) | 14-20 aug |
| | Field visit to oil palm and cocoa fields and product processing | Ucayali-Huánuco (project area) | 22-24 set |
| **Specific (thematic) Workshops** | Conservation strategies for biodiversity - ecosystem services - sustainable forest management | Lima | 16 set |
| | Land use classification, zoning and forest zoning | Lima | 22 set |
| | Impact on productive sectors and value chains; Technical and business support to sustainable production systems (national workshop) | Lima | 27 set |
| | Participation of indigenous peoples and women | Pucallpa | 13 oct |
| | Technical and business support to sustainable production systems (subnational workshop) | Pucallpa | 15 oct |
| | Participation and landscape governance | Pucallpa | 20 oct |
| | Incentives and regulation enforcement for sector development | Lima | 11 nov |
| **Strategic meetings** | Meeting with potential strategic partners, complementary initiatives, including co-financers | Lima and Pucallpa | June-March |
| **Workshop** | Validation workshop | Lima | 14 feb 2017 |

## 3. PROJECT STAKEHOLDERS

Project stakeholders were identified at the beginning of the preparation phase in coordination with the Ministry of Environment (MINAM) at the national level, and subsequently at subnational level in coordination with regional and local governments. The typology of stakeholders and main representatives can be found in Table 2. The complete list, including indigenous groups in the territory, can be found in Annex 1. Given the multiple topics and stakeholders that can be involved in the project, seven specific or “thematic” workshops were held during the planning process in order to identify and analyze their interests, priorities, capacities, lessons learnt, and potential to collaborate in relation to the Project. This engagement process was key to include their feedback in project design. Table 3 summarizes the stakeholders' interests, as well as their degree of importance and influence in relation to the project. Table 4 also offers a visualization of the latter.

| Table 2. Project stakeholders | |
|---|---|
| **National Government - Ministries** | MINAM, MINAGRI, SERFOR |
| **Regional Governments** | GORE Ucayali; GORE Huánuco |
| **Local Governments** | Provincial Municipality Puerto Inca (districts: Tournavista, Puerto Inca, Codo de Pozuzo, Yuyapichis, Honoria).<br>Provincial Municipality Padre Abad (districts: Curimana, Padre Abad, Irazola, Alexander von Humboldt, Neshuya).<br>Coronel Portillo (Distrito Nueva Requena) |
| **Indigenous peoples** | AIDESEP, CONAP (National)<br>ORAU(Regional), FENACOCA, FECONAPIA, ARPI (local) (See Annex 1) |
| **Women, including their organizations** | Organización Nacional de Mujeres Indígenas Andinas y Amazónicas del Perú (ONAMIAP), Women groups (farmers; communities) |
| **Small and medium-size farmers** | Associations, farmers' cooperatives, companies, Technical roundtables on supply chains of cocoa, coffee, livestock, oil palm<br>Agricultural Chamber of Ucayali |
| **Private companies (large farmers)** | Plantaciones Ucayali |
| **Environmental and conservation stakeholders** | ECOSIRA, CIMA, IBC, SERNANP, AIDER |
| **Academic, scientific and technical assistance institutions** | INIA- Instituto Nacional de Innovación Agraria ; Programa Nacional de Innovación Agraria ; IIAP - Instituto de Investigaciones de la Amazonia Peruana; ICRAF - Centro Internacional de Investigación Agroforestal; CIFOR - Centro para la Investigación Forestal Internacional; CIAT - Centro Internacional de Agricultura Tropical IVITA,<br><br>UNALM - Universidad Nacional Agraria La Molina; UNU - Universidad Nacional de Ucayali; UNAS- Universidad Nacional Agraria de la Selva; UNIA- Universidad Nacional Intercultural de la Amazonía<br><br>TechnoServe, Carana, UNODC, USAID |
| **Financial institutions** | BCP, BBVA, Interbank,; Scotiabank Perú, Agrobanco MIBANCO, Confianza. Cajas Municipales de Ahorro y Crédito, Cajas Rurales de Ahorro y Crédito |
| **Stakeholders linked to illicit and informal value chains** | Illegal timber extractors; illegal miners; illegal coca cultivators; land traffic actors |

| Table 3. Identification of stakeholders and their interests | | | | |
|---|---|---|---|---|
| **Stakeholders** | **Interests** at stake in relation to project | **Effect** of project on interests **(+ 0 –)** | **Importance of Stakeholder for Success of Project** 1=Little/No Importance 2=Some Importance 3=Moderate Importance 4=Very Important 5=Critical player | **Degree of Influence of Stakeholder over Project** 1=Little/No Influence 2=Some influence 3=Moderate Influence 4=Significant Influence 5=Very Influential |
| National Government - Ministries | Conserve biodiversity and mitigate climate change | + | 5 | 5 |
| | Alleviate poverty | + | | |
| | Increase agricultural commodities production | +/- | | |
| Regional Governments | Territorial planning | + | 5 | 5 |
| | Control forest resources | + | | |
| | Increase farmer productivity/income | + | | |
| | Sustainable agriculture | + | | |
| | Expand agricultural frontier | - | | |
| Local Governments | | | 5 | 4 |
| | Maintain ecosystem services | + | | |
| | Expand agricultural frontier | - | | |
| Indigenous peoples | Conserve biodiversity and sustainably manage their forest resources | + | 5 | 5 |
| | Improve livelihoods and capacities | + | | |
| | | | | |
| Women, including their organizations | Develop and diversify sources of income | + | 4 | 3 |
| | Strengthen their capacities | + | | |
| | | | | |
| Small and medium-size farmers | Increase productivity/income | + | 5 | 4 |
| | Increase access to affordable finance | + | | |
| | Improve technical and organizational capacity and access to markets | + | | |
| | Expand farming area | - | | |
| | Profit generation | +/- | 4 | 4 |

| | | | | |
|---|---|---|---|---|
| Private companies (large farmers) | Eliminate deforestation from their value chain | + | | |
| | Increase agricultural commodities production in forest land | - | | |
| Environmental and conservation stakeholders | Conserve biodiversity and mitigate climate change | + | 3 | 3 |
| | | | | |
| | | | | |
| Academic, scientific and technical assistance institutions | Sustainable management | + | 4 | 3 |
| | Knowledge management | + | | |
| | | | | |
| Financial institutions | Expand loan portfolio to farmers | +/- | 4 | 2 |
| | Expand green loan portfolio | + | | |
| | | | | |
| Stakeholders linked to illegal value chains | Unsustainable extraction / contamination of natural resources | - | 2 | 3 |
| | Encroachment on indigenous lands and other territories | - | | |
| | | | | |

**Table 4. Stakeholder importance and influence matrix**

| | | |
|---|---|---|
| **Importance Low——— >high** | **Group 1:** High Importance/Low Influence Stakeholders<br>- Financial institutions<br>- Academic/Scientific institutions<br>- Women organizations<br>- Small farmers (not associated) | **Group 2:** High Importance/High Influence Stakeholders<br>- National government<br>- Regional and local governments<br>- Small, medium and big farmers<br>- Indigenous organizations and federations<br>- Environmental and conservation stakeholders |
| | **Group 3:** Low Importance/Low Influence Stakeholders<br>N/A | **Group 4:** Low Importance/High Influence Stakeholders<br>- Stakeholders linked to illegal value chains |
| | **Influence**<br>**low ——————————————————————>high** | |

## 4. STAKEHOLDER ENGAGEMENT PLAN

### 4.1 Objective and principles

The main objective of the stakeholder engagement plan is to ensure that the interests and priorities of the different stakeholder groups and related sectors are taken into account during project development stages. Specific objectives include:

- Inform stakeholders of the project goals and approach, achieving their knowledge of the project and its appropriation
- Identify key aspects and strategies for a successful project implementation
- Identify opportunities for institutional collaboration
- Validate the intervention strategy of the project
- Establish grievance mechanisms

The implementation of the stakeholder engagement plan has basic principles that must be fulfilled to be carried out correctly, such as:

**Participation**: open representation of stakeholders should be considered at the local, regional, and national levels. Likewise, intercultural focus should be given to the participation of indigenous organizations and communities, as well as vulnerable social groups.

**Gender equity**: The formulation process should be responsive to the needs of women, identifying socio-economic data disaggregated by gender, and gender-sensitive considerations.

**Respect for cultural diversity**: respect for uses, customs, traditions, and forms of organization and decision-making will be considered.

**Good communication and transparency**: As a project linked to multiple actors and territorial scales, in addition to having a significant importance in resources and time of execution, it is crucial for the leaders of the formulation of the project to manage an adequate communication strategy. This should guide the messages coherently and avoid false expectations or interpretations between groups of actors. Information should be provided transparently, without marginalizing stakeholders who may be interested.

**Optimization and synergy with ongoing initiatives**: it is important to be aware of other initiatives that aim at similar goals, or that are related to the thematic scope of the project, taking advantage of potential synergies, avoiding duplication of efforts and maximizing impact.

### 4.2. Communication

The project will develop a communication strategy, that will take into consideration the present stakeholder engagement plan. This strategy can be adapted depending on the stage of the project, knowledge management progress, and in response to feedback from stakeholders, including from the grievance mechanism.
Considering the diversity of stakeholders, education background, cultures and native languages, communications should adapt the format of information to provide the best level of understanding for the target audience. This is specially important for indigenous peoples, that should consider interpreters and translating information as needed (especially to Ashaninka and Kakataibo languages).
The formats for sharing information are suited to the target audience and topics, and are summarized explained below and linked to the stakeholders in Table 5.

**Project website and social networks**: The project will develop a dedicated Website to inform stakeholders with access to Internet. All the technical information, progress of implementation, partners, and news will be available and accesible to the general public. Social networks such as Twitter should be considered, as long as they are managed and kept up to date appropriately.

**Brochures, bulletins, press releases**: Designed to communicate on innovations, strategies and progress of the project and on topics that the project needs to promote with stakeholders. This can be disseminated also electronically via email lists to stakeholders.

**Policy briefs**: Designed to influence decision makers on main topics of the project, based on scientific evidence and lessons learnt from the project.

**Local radio / TV/ newspapers**: to inform and mobilize local stakeholders for project activities, including rural communities and indigenous groups, as well as civil society.

**Exhibitions**: posters, images as well as news of the project will be displayed at the regional and national office and ready to be displayed in fora and fairs.

**Project monitoring reports**: official reports to be shared with the Steering Committee and Technical Committee, as well as progress on indicators that can be shared with any other stakeholder.

**Table 5. Information formats to be shared with stakeholders**

| Stakeholders / Information formats | Project website and social networks | Brochures, bulletins, press release | Policy briefs | Local radio / TV/ newspapers | Exhibitions (national/regional office) | Project monitoring reports |
|---|---|---|---|---|---|---|
| National Government - Ministries | X | X | X | | X | X |
| Regional Governments | X | X | X | X | X | X |
| Local Governments | X | X | X | X | X | X |
| Indigenous peoples | X | X | | X | | X |
| Women, including their organizations | X | X | | X | | X |
| Small and medium-size farmers | X | X | | X | | X |
| Private companies (large farmers) | X | X | X | | | |
| Environmental and conservation stakeholders | X | X | X | | | |
| Academic, scientific and technical assistance institutions | X | X | X | | | |
| Financial institutions | X | X | X | | | |
| Stakeholders linked to illegal value chains | X | X | | X | | |

### 4.3. Engagement methods

The engagement methodology depends on the type of actor, and its level of detail will depend on how much information is already available from other sources. The following methodological tools will be used.
In case of indigenous stakeholders and women groups, social advisors and expert staff will help to design and facilitate the process and assist with participatory methodologies as well as specialized techniques.

**General workshops**: national and regional workshops are considered at the beginning of implementation process to report on the project and towards the end of the project validation process. These workshops combine representatives of various actors and participate between 30 and 80 people.

**Specific workshops**: workshops that focus on a topic, such as identifying needs for capacity building, technical assistance or generation of alternatives for models of sustainable productive landscapes. Or workshops that are located in specific actors, such as with indigenous communities, women groups, or farmers of a given value chain. These workshops are more focused and mainly to gather or exchange information, so they should not exceed 30 people. For example, in the project, “green commodities platforms” will be

implemented in order to agree on strategies and action plans for the main value chains, with specific methodology through this kind of workshops.

**Strategic meetings**: strategic meetings either bilateral or with target groups of stakeholders will be held. These are important at the level of Regional or Local Governments, or with some Ministries or public entities in particular, as well as with technical assistance organizations. They are also important in the process of identifying strengths that would lead to establishing institutional collaboration arrangements during project implementation.

**Expert consultation**: consult with recognized experts, in the main thematic areas of project intervention for strategic aspects, baseline, assessment of barriers and solutions. In some cases they may be individual interviews and in others the format will be a work session involving no more than 10 experts.

**Field visits**: presence in the field, and field visits to project area are fundamental for engaging with rural actors.

**Interviews and surveys**: in some aspects, it will be more efficient and effective to incorporate the information and opinions of those involved through structured or semi-structured surveys, which will be applied both in the field and in electronic format, according to the corresponding actor.

**Project Committees**: the governance of the project considers spaces of interaction with partners and stakeholders, and they therefore play a key role in stakeholder engagement. Although the Steering Committee is a more high level space and meets yearly, a Technical Committee formed by the same organizations of the Steering Committee (but with technical staff) will handle more frequent issues related to day-to-day implementation. Also, the Advisory Committee is very inclusive for the participation of stakeholders including civil society, and some of the engagement processes can be developed in this instance.

**Participation in processes / initiatives**: a key aspect is to build on pre-existing processes, platforms of discussion, or initiatives that are already convening stakeholders in the search for solutions to the problems facing the project. For example to processes linked to climate change mitigation, deforestation-free agriculture, restoration of degraded areas, among others. Many of these are led by public agencies.

**Table 6. Engagement / consultation methods with stakeholders**

| Stakeholders / Methods | General workshops | Specific workshops | Strategic meetings | Expert consultation | Interviews | Field visits | Steering Committee (& Technical) | Advisory Committee |
|---|---|---|---|---|---|---|---|---|
| National Government - Ministries | X | X | X | X | | | X | X |
| Regional Governments | X | | X | | | X | X | X |
| Local Governments | X | | X | | X | X | | X |
| Indigenous peoples | X | X | | | X | X | | X |
| Women, including their organizations | | X | | | X | X | | X |
| Small and medium-size farmers | X | X | X | | X | X | | X |
| Private companies (large farmers) | X | X | X | | X | | | X |
| Environmental and conservation stakeholders | X | | | X | | | | X |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Academic, scientific and technical assistance institutions** | X | X | | X | | X | | X |
| **Financial institutions** | X | X | X | X | | X | | X |
| **Stakeholders linked to illegal value chains** | | | | | X | | | |

## 5. TIMETABLE

| Table 7. SEP Timetable<br>Activity | Semesters (6 years) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Inception workshop (national and subnational) | X | | | | | | | | | | | |
| Communication strategy, SEP update and SEP validation with stakeholders through workshops | X | X | | | | | | | | | | |
| Grievance mechanism in place, including response | X | X | X | X | X | X | X | X | X | X | X | X |
| Selection of pilot areas for sustainable agriculture and sustainable forest management, engaging farmers, native communities, and women for its operation and adoption | | X | X | | | | | | | | | |
| Conformation and facilitation of agricultural commodities platforms with wide stakeholder participation | | | X | X | X | | X | X | X | X | X | X |
| Stakeholder engagement through capacity building processes and technical assistance in the landscape (technical; planing; organizational; business) | | X | X | X | X | X | X | X | X | X | X | |
| Supervision of compliance of safeguards for indigenous peoples | X | X | X | X | X | X | X | X | X | X | X | X |
| National Steering Committe sessions | X | | X | | X | | X | | X | | X | X |
| Technical and Advisory Committee sessions | X | X | X | X | X | X | X | X | X | X | X | X |
| Project monitoring with participation of rural stakeholders and government | X | X | X | X | X | X | X | X | X | X | X | X |
| Knowledge management including systematization, testimony and perceptions of stakeholders | | X | X | X | X | X | X | X | X | X | X | X |

## 6. RESOURCES AND RESPONSIBILITIES

### 6.1. Resources

The Project Manager will be responsible for implementing the stakeholder engagement plan and achieving its objectives. The Project Manager will organize the project team for carrying out the specified stakeholder engagement activities and manage the grievance mechanism, according to the objectives and principles of the plan, and depending on the type of stakeholder. The project team involves several key disciplines for a successful engagement: a Monitoring and Evaluation Specialist; a Social, Gender and Indigenous Specialist; an Environmental Planning Coordinator; a Production Systems Coordinator; a Regional (subnational) Coordinator; as well as a Communications Specialist, among others. Therefore, it's a matter of team organization for achieving a successful engagement for all key stakeholders, preventing and managing risks.

As was mentioned earlier, with some specific stakeholders such as indigenous groups, if necessary, a qualified stakeholder engagement facilitator may be hired to undertake portions of the stakeholder engagement activities.

In terms of efficiency of the project, as can be noted in items 4.2, 4.3 and 5, some of the engagement activities are specific, but others can be integrated or combined with technical activities, capacity building, knowledge management, communications, and committee reports. Taking that into consideration, we present a budget that involves additional resources for ensuring that the stakeholder engagement plan is achieved appropriately.

**Table 8. SEP Budget (considering only additional items)**

| Item | Cost (US$) |
|---|---|
| Inception workshop (national and subnational) | 10,000 |
| Interpreters - translators | 6,000 |
| Dedicated information, communication materials, press | 10,000 |
| Additional local workshops | 12,000 |
| Qualified stakeholder engagement facilitators | 15,000 |
| Specific travels, meetings, and field visits due to SEP | 15,000 |
| Grievance mechanism implementation | 4,000 |
| Sistematization and lessons learnt (additional costs) | 14,000 |
| **Total** | **$ 86,000** |

## 7. GRIEVANCE MECHANISM

The grievance mechanism of project stakeholders is carried out according to the following steps:

Stakeholder grievances or complaints will initially be directed to the technical coordination level closest to the impact perceived or received. At the subnational level, including field operations, complaints should be directed by any stakeholder representative to the project's Regional Coordinator in Pucallpa. The Regional Coordinator will inform immediately the Project Manager and provide background information in order to assess the origin and level of the

problem, evaluate alternatives for solution and coordinate means of communication with stakeholders involved. If a solution is possible and simple, a response may be dealt at the subnational coordination level. Depending on the issue or stakeholder, a clarification call, meeting, a field visit and/or written response to the stakeholder(s) will be necessary to overcome the situation.

If the problem is more complex or at the national level, complaints should be directed to the Project Manager, who will evaluate the solution and response. Managerial and technical solutions can be handled directly by the Project Manager with options for communications but finally submitting a written response to the stakeholders involved. If the issue entails a political or more strategic Government vision, the Project Manager will coordinate with the Project National Director for an official response from the Government. More complex suggestions or complaints related to the strategy and approach of the project may involve consultation with the Project's Technical or Steering Committee before providing a response.

Despite the complexity of the complaint, any complaint should be registered by the project M&E specialist and include a written record of how it was dealt with and when it was responded to the complainant. The Project Implementation Unit will receive training of the procedures related to the grievance mechanism.

## 8. MONITORING AND REPORTING

Stakeholder engagement activities will be integrated in the regular monitoring of the project, for which the M&E Specialist is responsible, in coordination with the Project Manager. Therefore, progress on the SEP will be reported in the M&E official reports.

**Annex 1. Indigenous Communities and their organizations in the project area**

| Region | Province | District | Indigenous Community | Local Federation | Regional Organization | National Organization |
|---|---|---|---|---|---|---|
| Huánuco | Puerto Inca | Tournavista | Naranjal | FECONAPIA | ARPI SC | AIDESEP |
| | | Puerto Inca | Cleyton | | | |
| | | | Sata Teresa | | | |
| | | | Las Golondrinas | | | |
| | | | Tsirotzire | | | |
| | | Yuyapichis | Santa Isabel de Pachitea | FECONAPIA | | |
| | | | Tahuantinsuyo (Nuevos Unidos) | UNAY | | |
| | | | Guacamayo | | | |
| | | | Santa Isabel | FECONAYA | | CONAP |
| | | | San Juan de Pachitea | | | |
| | | Codo del Pozuzo | Los Angeles del Río Pozuzo | FECONAYA | | CONAP |
| | | | Santa Marta | FENACOCA | ORAU | AIDESEP |
| | | | Alianza de Santa Marta - Unipacuyacu | | | |
| | | Honoria | Dos Unidos | FECONAPIA | ARPI SC | |
| | | | Nueva Alianza | | | |
| Ucayali | Padre Abad | Irazola* (San Alejandro) | Puerto Nuevo | FENACOCA | ORAU | AIDESEP |
| | | | Sinchi Roca I | | | |
| | | | Sinchi Roca II | | | |
| | | Curimaná | Cocama | sd | | |
| | | Padre Abad (Aguaytía) | Puerto Azul | FENACOCA | ORAU | AIDESEP |
| | | | Mariscal Cáceres | | | |
| | | | Yamino | | | |
| | | | Santa Rosita de Aguaytia | | | |
| | | | Santa Rosita de Apua | FECONASHCRA | | CONAP |
| | | | Santa Rosa | | | |
| | Coronel Portillo | Nueva Requena | Shambo Porvenir | FECONASHCRA | | CONAP |
| | | | Santa Clara de Uchunya | | | |

Source: AIDESEP and CONAP, August and October 2016.
Total: AIDESEP 19 Indigenous Communities; CONAP 7.
sd= no affiliation.

**Annex 2. Productive Stakeholders**

**Nueva Requena (Provincia Coronel Portillo, Región Ucayali)**

- Asociación de productores agrarios Perla Bendita
- Asociación agraria de cacaoteros de Nueva Requena
- Asociación de productores agropecuarios rio bajo-Aguaytia-Naranjal
- Asociación de productores agropecuarios emprendedores de Caribe
- Asociación de productores agropecuarios el Naranjal
- Asociación de productores de maíz de Esperanza
- Asociación de productores agropecuarios perseverantes de San Pablo de Juantia
- Asociación de regantes de san pablo de Juantia
- Asociación de regantes de nuevo Paraiso
- Asociación de productores agropecuarios Nuevo Eden
- Asociación de regantes los Angeles
- Asociación agraria de cacaoteros de bajo Rayal
- Comunidad nativa Shambo Porvenir
- Comunidad nativa Santa Clara Ushuya

**Irazola (Provincia Padre Abad, Región Ucayali)**

- Asociación de Cacaoteros Tecnificados de Padre Abad-ACATPA
- Cooperativa Cacaotera San Alejandro (CACSA),
- Comité Central de Productores Agropecuarios de San Alejandro (COCEPASA), Asociación de Productores Cacaoteros Tecnificados del Valle del Shambillo (APCTVASH)
- Oleaginosas Amazónicas S.A. OLAMSA
- Comité Central de Palmicultores de Ucayali-COCEPU
- Cooperativa Campos Verdes
- Asociación de Productores de Leche de la Carretera Federico Basadre- APROLECAFEBA
- Asociación de Productores de Leche de Ucayali, APROLEU
- Comunidad nativa Sinchi Roca I,
- Comunidad nativa Sinchi Roca II
- Comunidad nativa Puerto Nuevo

**Curimaná y Padre Abad (Provincia Padre Abad, Región Ucayali)**

- Crédito y ahorro alianza al progreso
- Asociación de productores agroindustriales y pisicultores del caserío Nueva Alianza
- Comité de cacaotero caserío Nueva Alianza
- Comité de productores agropecuarios en el rio de Tahuapoa- sector Venadal
- Comité de productores agrarios del caserío Nuevo Paraíso- Curimana
- Comité de productores agrarios "sembrando del futuro del caserío Monte Sinai
- Comité de productores agrarios del caserío de Amazonas km. 24 int.7carretera Neshuya - Curimana .
- Comité de productores agrarios del Caserío Nuevo Porvenir km 29 int. 12 carretera Neshuya - Curimana
- Comité de productores agrarios del caserío Nueva Meriba km 24 int. 4 carretera Neshuya - Curimana
- Comité de productores agrarios Flor de Valle: km 23 int. 4 carretera Neshuya - Curimana
- Cooperativa ecológica agroindustrial de Curimana ltda
- Comité central con desarrollo al futuro de Curimana

- Asociación de productores de arroz la perla escondida
- Asociación de productores de arroz espiga dorada - caserio las Mercedes
- Asociación de cacaoteros fino de aroma
- Comunidad nativa Yamino
- Comunidad nativa Mariscal Cáceres
- Comunidad nativa Santa Rosa
- Programa de Mujeres Emprendedoras en el distrito de Neshuya
- Asociación de Mujeres de Monte Alegre Padre Abad
- Asociación de Mujeres Emprendedoras Flor de Boquerón
- Asociación de Productores Plataneros del Caserío Los Olivos (Aplacao)
- Asociación de Plataneros Tecnificados Agropecuarios de Aguaytía (APTAA)
- Centro Único de Agricultores Productores Plataneros de Padre Abad (CUAPPA

**Puerto Inca (Provincia Puerto Inca, Región Huánuco)**

- Asociación central de mujeres emprendedoras para el desarrollo económico y social
- Comité de productores de cacao de Santa Rosa de Pata
- Asociación de piscicultores Causachum Allpa de Nuevo Trujillo
- Comité de productores cacaoteros de Pueblo Libre
- Asociación agropecuaria San Pedro y San Pablo
- Asociación central de piscicultores de la provincia de puerto inca
- Empresa comunal de servicios apropecuarios - Ecomusa "Unión y Trabajo"
- Empresa comunal de servicios apropecuarios - Ecomusa "Sungaritos"
- Empresa comunal de servicios apropecuarios - Ecomusa "Nuevo Porvenir"
- Empresa comunal de servicios apropecuarios - Ecomusa "Rey David"
- Asociación de productores de carne bovina
- Asociación de productores agropecuarios y ganaderos "Tres Unidos"
- Asociación de productores agropecuarios forestales "Loreto"
- Cooperativa agraria cacaotera Puerto Inca cacpi
- Comité de productores cacaoteros de Nuevo Trujillo - coprocant
- Comité de productores cacaoteros orgánicos de Nuevo Porvenir – coprocao
- Comunidad nativa Cleyton
- Comunidad nativa Santa Teresa
- Comunidad nativa Las Golondrinas

**Yuyapichis (Provincia Puerto Inca, Región Huánuco)**

- Asociación de productores agropecuarios Los Amigos de Pampa Hermosa
- Comité de productores cacaoteros de Unión Vista Alegre
- Comité de productores agropecuarios de La Libertad
- Comité de productores de cacao de Pampa Hermosa de Pompeyo
- Comité de productores de cacao de Nuevo Dantas
- Comité de productores de cacao de Pampa Hermosa
- Comité de productores de cacao de Santa Rosa de Yanayacu
- Comité de productores cacaoteros ecológicos de Yanayaquillo
- Comité central de cacaoteros del rio Pachitea de Yuyapichis
- Comité de productores cacaoteros de Monterrico
- Comité de productores cacaoteros de agro unión Huacamayo
- Comité de productores cacaoteros de San Juan de Pachitea

- Comité de productores cacaoteros de Dorado
- Comité de productores cacaoteros de las Palmas
- Asociación de Mujeres Emprendedoras de Monte Rico
- Comunidad nativa Tahuantinsuyo
- Comunidad nativa Huacamayo
-

**Codo del Pozuzo (Provincia Puerto Inca, Región Huánuco)**

- Asociación de ganaderos y agricultores de Codo del Pozuzo
- Asociación de productores agropecuarios e hidrobiológicos conservacionistas del distrito de Codo del Pozuzo
- Comité de productores cacaoteros orgánicos del distrito de Codo del Pozuzo
- Asociación de productores agropecuarios de Pueblo Libre de Codo del Pozuzo
- Asociación central de cacaoteros orgánicos y afines del distrito de Codo del Pozuzo
- Asociación de productores agroforestales de la comunidad nativa de Santa Martha.
- Asociación agropecuaria y forestal Alto Quintore de Codo del Pozuzo.
- Asociación de productores agropecuarios y forestales del caserío agua blanca-Codo del Pozuzo.
- Asociación de productores agropecuarios y forestales margen derecha Codo del Pozuzo- Nueva esperanza.
- Asociación de agricultores y ganaderos Codo del Pozuzo (AGACOP)
- Asociación de productores agropecuarios y forestales del caserío alto Camantarma - rio Lazaro.

**Tournavista (Provincia Puerto Inca, Región Huánuco)**

- Asociación de productores agrosilvo pastoril
- Asociación de productores agropecuarios para el desarrollo integral
- Comunidad nativa El Naranjal

# P. GENDER ANALYSIS AND STRATEGY

**Gender Strategy for the GEF Project**

TABLE OF CONTENTS

## I. JUSTIFICATION

Gender is a social, cultural and historical creation. In most societies, men and women are assigned different responsibilities, rights, benefits and opportunities in their activities, in access to control of resources and in decision-making processes. The Gender Strategy of GEF Child Project on Sustainable Productive Landscapes in Peruvian Amazon seeks to identify the gender gaps and relationships, and differentiated needs, benefits, impacts, access to resources and differences between man and woman, under a participatory approach to define appropriate measures to:

- Promote gender equality in landscape productive activities
- Promote women's economic and social autonomy.
- Strengthen inclusive and effective governance.
- Mainstream interculturality and participation.
- Ensure concern on human rights in public policies.

Gender is part of the social system. Therefore, it is necessary to consider its analysis into policies related to local and national development. The Gender Equity Index (IEG) measures the gap between men and women in education, economic activity and political empowerment. The GEI in Peru is 0.433[55], close to that of Brazil's, which means a 43.3% loss in progress made regarding those three aspects, due to gender inequality.

According to the Environment and Gender Index (EGI), which is an initiative of the IUCN Global Gender Office - the EGI monitors progress toward gender equality and women's empowerment in the context of global environmental agreements - Peru is 26$^{th}$ in a ranking of 73 countries, classified as a country of "moderate performance" regarding gender and environment issues.

In Latin America[56], around 30% of women are property owners, but they only receive 5% of agricultural extension services. Oftentimes also, they are assigned to apply pesticides and fertilizers, because they are more accurate and/or because it is a less physically demanding task. Additionally, women are more vulnerable to climate change, affected by lower food supply, more susceptible to diseases and assigned to look for clean water sources. When women control the additional revenue, they have invested more (than men would do) in food, clothes, health, and education for their children, which has an immediate positive effect in family well-being, as well as in the generation of human capital in the long term and, hence, in economic growth.

The Gender strategy of GEF Project on Sustainable Productive Landscapes in Peruvian Amazon has three parts: Gender Analysis, Gender action plan and recommendations for the implementation.

[55] INEI, 2015. Perú Brechas de Género 2001 – 2013 (Peru Gender Gaps, 2001 – 2013). It points out that the GEI measurement goes from 0 (no inequality in reproductive health, maternal mortality and adolescent pregnancy), to (empowerment, political participation and access to education and participation in the work force) to 1 (there is complete inequality).

[56] Mainstreaming Gender in National Commodity Platforms. Final Version. August 2016. UNDP.

## II. GENDER ANALYSIS

This is a quick assessment of gender gaps in the GEF's intervention area in Huánuco and Ucayali.

### a. POPULATION

The population within the Project area consists of 92,000 inhabitants per the 2015 INEI Census, with 11% of male population higher than female population. The Male predominance places women in a numerical disadvantage.

TABLE 1. POPULATION ACCORDING TO SEX IN THE PROJECT INTERVENTION AREA. INEI 2015

| Region | Population (1) | Sex % | Poverty (2) and extreme poverty ( 3) | Farming area | Province | District | Population (4) | Men % | Women % |
|---|---|---|---|---|---|---|---|---|---|
| Huánuco | 860,537 | 51% men 49% women | 40.1% poverty 11.5% extreme poverty | 3.8% | Puerto Inca | Tornavista | 4,585 | 52.7 | 47.3 |
| | | | | | | Puerto Inca | 7,784 | 53.6 | 46.4 |
| | | | | | | Yuyapichis | 6,154 | 55.2 | 44.8 |
| | | | | | | Codo del Pozuzo | 6,603 | 56.2 | 43.8 |
| | | | | | | Honoria | 6,303 | 57.1 | 42.9 |
| Ucayali | 495,522 | 53% men 47% women | 13.4% poverty 2.1% extreme poverty | 6.0% | Padre Abad | Irazola -and subdivisions | 24,833 | 57.3 | 42.7 |
| | | | | | | Curimaná | 4,988 | 58.4 | 41.6 |
| | | | | | | Padre Abad | 25,971 | 53.7 | 46.3 |
| | | | | | Coronel Portillo | Nueva Requena | 5,538 | 56.5 | 43.5 |
| | | | | | | | 92,759 | **55.6** | **44.4** |

Source: (1) INEI, 2015. Peruvian Population Status (2) Statistical Newsletter I-2015. Department of Huánuco. (3) Situation in Peru's Amazon region in 2015 (Meneses et al. 2015) (4) INEI, 2015. Estimated population projected per district, 2000-2015

The Life Expectancy at birth (LEB) of women is 75.3 years. It is 73.1 years in Ucayali and 72.7 years in Huánuco. In case of men, LEB is 69.9 years, 67.9 years in Ucayali and 67.5 years in Huánuco.

### b. ROLES AND ECONOMY

The Climate Change Gender Action Plan for Peru validates an analysis of gender roles for the Peruvian Amazon, also considering indigenous populations.

Forestry activities are usually differentiated by gender,[57] while men are usually interested in forest products for sale, mainly timber products, women are devoted to using and managing non-timber forest products for food and nutritional security, survival, feeding, small farming and health (firewood, medicine, fodder for animals and natural fertilizers). Women often have very specialized knowledge of forests regarding species diversity, order and use for different objectives and a good understanding of conservation practices. Since men get revenue through forest timber activities, they have less incentives in participating in conservation actions.

Table 2. Roles as perceived by indigenous men and women in the Peruvian Amazon: Ucayali

[57] Diagnóstico de Género en la Amazonía: Loreto, Madre de Dios, San Martín y Ucayali USAID, 2013 (Gender Diagnose in the Amazon)

| Men's role | Women's role |
|---|---|
| · In charge of supplying food from farming, hunting, gathering and fishing in places far from home.<br>· Responsible for supplying materials to build the home, furniture, canoes or tools.<br>· Their productive activities are aimed not only at supplying family consumption, but also at the local market to get money to buy manufactured products in the city which the family requires.<br>· Mainly in charge of commercial, representation and leadership tasks in the community and before external institutions.<br>· They eventually migrate to look for work in other places of the Amazon or the capital. | · In charge of supplying the home with: water, fuel for cooking and food from orchards close to the home.<br>· Responsible for preparing and managing daily feeding, as well as for health prevention and care of their family members.<br>· In charge of producing crafts, textiles, basket, pottery or ornaments for the family or for sale.<br>· Their participation is not visible in communal planning and decision making processes or in trips with their husbands to buy or sell in the city.<br>· When men migrate to the city, women assume many of the roles and responsibilities traditionally assigned to men. |

Source: Gender and Climate Change Action Plan. MINAM – UNDP 2016

Although indigenous women depend on forest and wildlife resources to a greater extent, they do not participate in decision-making spaces and their concerns are seldom valued by community leaders.

Women's insertion in the labor market has meant an increase in their work load. Besides their responsibilities as salaried workers, women are almost exclusively responsible for their family care due to a traditional gender-based division of labor. Women work 9 hours and 15 minutes more per week than men and, in average, they devote more time than men to domestic work. In spite of that, in 2013 women earned in average 30.3% less than their male counterparts.

### c. GENDER ANALYSIS IN THE AGRICULTURAL PRODUCTIVE SECTOR

The results of the IV National Agricultural Census (CENAGRO) in 2012 showed that there are 2.246.702 people devoted to agricultural activities. Of these, 30.8% (691.921) are women and 69.9% are men. In comparison with the 1994 Census, the number of women devoted to agricultural activities was one half (15%) approximately. This means that in an 18-year period the participation of women in agricultural activities has doubled or that it has become more visible.

As a consequence of this increase in the participation for production, the women's role in the agricultural sector has become more important (quoted in Tafur et al 2015).

In the GEF project intervention area, according to the Agricultural Census, there are about 16.120 farming units (FU). Of these, 81.2% are under the charge of men and only 18.3% under the charge of women. In terms of surface area, the gap increases. Men manage 86.6% of surface versus 13.4% by women.

According to age, men under 45 years of age are in charge of 53.5% of the surface area while those older than 45 keep 46.5%. In the case of women those who are under 45 years of age are in charge of 46.5% as compared to 42.9% in the hands of older women. This shows that younger women concentrate more farming units in the women group.

As for **participation in farming work**, there are 55,733 household members for the total 16,120 FU and 82% are men while only 18% are women. This percentage does not show the participation of women in farming work.

As for **farming practices** developed by men and women 56.5% of men use any of the main farming inputs such as seeds and/or certified seedlings, organic manure, chemical fertilizers, chemical insecticides, non-chemical or biological insecticides, herbicides, fungicides, and full use of them, against 43.5% that uses none of these. In the case of women producers, 52.2% use inputs against 47.8% that do not use them.

Biological control and organic certification knowledge is low for men and very low for women.

As for **energy use** in farming practices, both men's and women's FU mostly use human energy sources. This shows that farming activities are artisanal and manual in the GEF project intervention area.

Data referred to **training and technical assistance**. 80 to 81% of men say that they have not received any kind of training or technical assistance in their farming work. Only between 18-19% of both sexes stated they did. This figure leaves much room for implementing the project.

Data on the kinds of **jobs** related to salaried work in the farming sector are not very encouraging. Most men, 96.4%, work on a temporary and only 3.6% of the work force is permanent. The case of women is similar, 95.3% of women work on a temporary basis and only 4.7% do so permanently. In this case, men and women are in the same position of insecurity considering that most FU owners are men, they will be the most affected.

The INEI 2007 native community census shows that 77.8% of the indigenous population works in agriculture, cattle raising, hunting and forestry at survival or less scale. This information corresponds to the Ucayali region native communities per economically active population activity (14 and older). Regarding the gender division, out of this 77.8% more than 70% are men and almost 30% are women.

Published in Peru: Ethno-socio-demographic Analysis of Amazon Native Communities, 1993 and 2007. INEI.

#### d. EDUCATION

Per INEI, to 2013, 28.6% of women who spoke a native language were illiterate in comparison to 6.9% of men, which shows a considerable gap to be covered.

In the different districts of the intervention area, 95.6% of men who are in charge of an Familiar Units have some kind of education and only 4.6% have no education. In the case of women, 88.6% of women owners in charge of an FU have some kind of education versus 12.9% with no education. This results in a higher number of less educated women in charge of an FU.

This data also shows the scope of work in the project and the advocacy work to be conducted with women.

Lack of identity document is related to educational level and, in turn, has personal, institutional and banking consequences. These points at access level and at impact on personal procedures such as registration of goods, banking activity, loans, land titling, etc. Therefore, it is relevant within the project.

Although some percentages are not very high, the trend should be to reduce or eliminate lack of identity documentation among 100% of the population. The following shows information on this.

#### e. POLITICAL PARTICIPATION

Regarding leadership, the national average showed a slight increase in women participation as mayors or local authorities from 2.7% to 3.8% between years 2011 to 2014. In the project area, there is a high level of female leadership and local representativeness. The Provincial Mayor of Puerto Inca Province (Huánuco) and two district mayors are female (out of 5 districts). Studies –such as the USAID study- also showed that living in a rural area, belonging to an indigenous population, not speaking Spanish and being a woman are the most evident vulnerability conditions to identify gender inequality gaps in the Peruvian Amazon. They found that when women are given access to decision making they generally tend to have a more environmentalist vote than men. Therefore, women participation in forest governance has a more positive impact on forest conditions and conservation.[58]

#### f. GENDER RELATIONSHIPS AND WOMEN IN AMAZON SOCIETY

Generally, the role of men and women in Amazon societies are simple: men work in the fields to supply inputs for survival (hunting, fishing and agriculture) while women do household duties, although they can also participate in

[58] USAID, 2013. Diagnóstico de Género en la Amazonía (Gender diagnose in the Amazon): Amazonas, Loreto, Madre de Dios, San Martín and Ucayali.

farming and fishing. The division is not too rigid, because men are seen who carry out house chores (cooking, taking care of children, etc.) and women working in the farms, hunting, cleaning, etc. Likewise, there is diversity on how women participate in 'public' life or decision-making.[59]

Currently, women participate more often in workshops and assemblies. Although they seldom speak with the same strength as men, they will express an opinion only if it is a topic of their interest or directly related with their daily life. When you interact with women, they show a wide knowledge of the environment regarding food and medicinal plants. They can locate plants and easily identify native flora properties. They commonly participate on issues related to environmental care and threats to the environment. Currently, women are also part of the community Board and they can manage their position there.

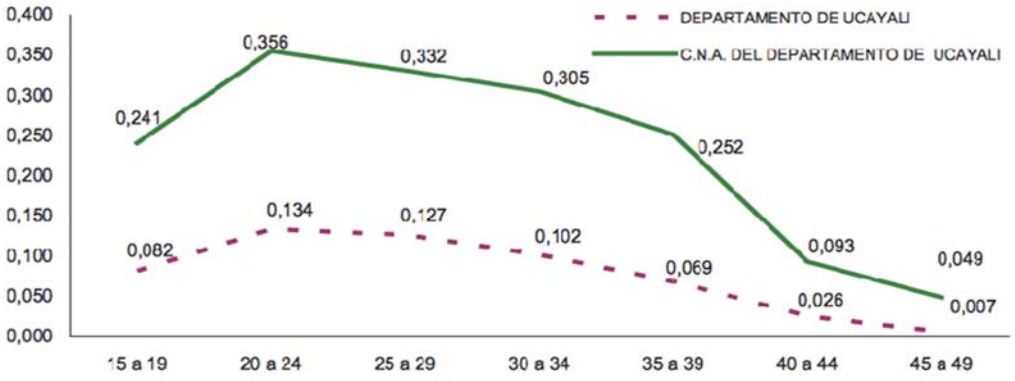
In some communities there is also the position of women leaders, who is capable of convening all of the women and coordinating different activities for the common good, such as cleaning the village and other activities in the communal space, besides manufacturing crafts (a traditional role). According to their idiosyncrasy, a woman leader is chosen because she gets along with her husband, has a family that is an example for others, and has good talking and information capacities regarding the women's situation. She has a good knowledge of myths and legends. She knows how to manufacture crafts and also knows and teaches magic songs. Revitalizing the language and conveying ancestral knowledge and technologies are strengths assigned to women in many cases. They transmit the mother tongue from one generation to the other.[60]

Considering the socio-political and cultural barriers, in some cases many women face discrimination or they are threatened with social sanctions if they speak up. Therefore, women with similar priorities and interests gather in a group, creating a safe environment so that they can have a collective and unified voice, and so that they can develop confidence and skills to strategically participate in decision making and influence the implementation of processes that affect them.

**g. BIRTH RATE**

In the Ucayali department, the fertility structure shows an early peak. This means a high contribution by adolescent fertility and it is high until 35 to 39 years of age. The global fertility rate (GFR) is much higher than the regional average. The indicator is 8.14 children per woman for Amazon native communities, while it is 2.73 children per woman in the department.

GRAPH 1. DEPARTMENT OF UCAYALI: RATE PER FERTILITY AGE AND AMAZON NATIVE COMMUNITIES, 2007




Leg

Fuente: INEI – II Censo de Comunidades Indígenas de la Amazonía Peruana, 2007 - Censos Nacionales 2007: XI de Población y VI de Vivienda.

| Departamento de Ucayali: department of Ucayali | C.N.A. del departamento de Ucayali: department of Ucayali amazon native communities |
|---|---|
| Source: INEI – II Census of Indigenous Communities in the Peruvian Amazon, 2007 – 2007 National Censuses: XI Population Census and VI Housing Census | |

[59] Pitman et al. 2012

[60] Pitman et al. 2012 Published in: Perú: Anaĺisis Etnosociodemografíco de las Comunidades Nativas de la Amazoniá (Ethno-socio-demographic Analysis of Native Communities in the Amazon), 1993 and 2007. INEI.

## III. GENDER ACTION PLAN

Mainstreaming gender through the project's Gender Action Plan is an opportunity to increase the effectiveness of the project itself in enhancing global environmental benefits and sustainable development by promoting issues related to gender equality and women's empowerment.

This Gender Action Plan provides a concrete road map to implement the GEF-6 Sustainable Productive Landscape in Peruvian Amazon, by incorporating gender responsive approaches and indicators which will be annually monitored review, while building on the existing and planned gender strategies included in the Country Program Document (2017- 2021) of UNDP Peru.

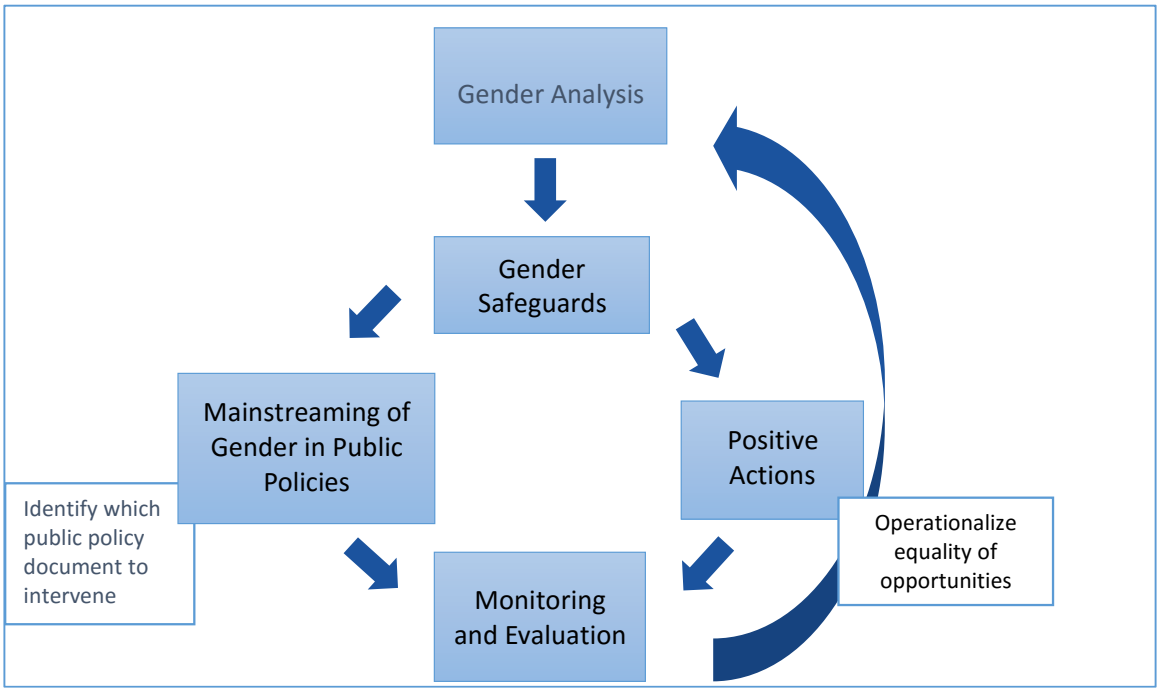



Figure: Gender Action Plan flow

### a) MAINSTREAMING GENDER IN PROJECT'S RESULTS FRAMEWORK

The Gender Action Plan cuts across project components trough Outcomes and Outputs and in the project's monitoring and evaluation indicators.

This section refers to the project's Results framework and the gender actions to be taken during implementation. Mainstreaming gender in the results framework has been done by applying the UNDP's Gender Marker, identifying women involvement approach for each outcome and output level of proposed components, and proposing Positives Action to be taken in order to ensure gender equality.

The **UNDP Gender Marker** is a tool that rates gender mainstreaming and equality at the activity level on a scale from zero to three. For this purpose, a Gender Rating requires projects to rate all project activities in terms of how they contribute to gender equality and women's empowerment. Each Project Outcome/ Output is assigned a rating of 0, 1, 2 or 3, as follows:

- **Gender Rating 3**, Activities that have gender equality as a principal objective,

- **Gender Rating 2,** Activities that have gender equality as a significant objective,
- **Gender Rating 1,** Activities that will contribute in some way to gender equality, but not significantly,
- **Gender Rating 0**; Activities that are not expected to contribute noticeably to gender equality.

**Women Involvement**

**Women Decision taking;** women take actions on decision making with equal share of benefits

**Direct Participation**: when there is an intervention in the ground with a specific call for women and directed participation in meetings, workshops, etc.; and

**Indirect Participation**: when the gender approach has to be evidenced, but there is not necessarily a direct call for or intervention by women.

GENDER INTEGRATION WITHIN THE PROJECT'S OUTCOME FRAMEWORK

| Components, Outcomes and Outputs | Gender Rank | Women involvement | Positive Actions |
|---|---|---|---|
| **COMPONENT 1. Improved planning, policies and governance framework to reduce reforestation and strengthen sustainable production** | | | |
| Outcome 1.1 Land use policies and plans are strengthened and aligned through the ministries at national, regional and local level | | | |
| 1.1.5 Sector development national policies and/or plans are defined in harmony with policies and plans on soil use, including the concept of landscape sustainability | 2 | Indirect | Communication and meetings with women |
| 1.1.6 Regional and local plans are aligned with the National Forest and Climate Change Strategy and the soil use plans with an approach of sustainable landscape | 2 | Indirect | Communication and meetings with women |
| 1.1.7 Micro-zoning to clearly define areas for conservation, restoring and sustainable soil use (to local and regional development plans) | 1 | Indirect | Communication and meetings with women |
| 1.1.8 Community life plans that are sensitive to gender are prepared with sustainable landscape approach | 3 | Decision Making | Include indigenous women decision making and sharing benefits |
| Outcome 1.2 Strengthen governance for developing public policies, soil use management and decision making in a participatory and inclusive way | | | |
| 1.2.4 National green commodities platforms are established | 2 | Direct | Women interests and needs are attended in technical working groups |
| 1.2.5 Strengthened territorial governance platforms (decision making mechanisms and tools) | 2 | Direct | Include indigenous women in decision making |
| 1.2.6 Strengthened gender-sensitive community governance | 3 | Decision Making | Include indigenous women in decision making and benefits sharing |
| 1.2.4 Technical and institutional capacities developed in national, regional and local governments, including preparation of public budgets | 1 | Indirect | Communication and meetings with women |
| Outcome 1.3 Strengthened monitoring, surveillance and control capacities | | | |
| 1.3.5 Effective and transparent approval mechanism for changes in soil use | 0 | | |

| Components, Outcomes and Outputs | Gender Rank | Women involvement | Positive Actions |
|---|---|---|---|
| 1.3.6 Transparent satellite monitoring system to detect illegal deforestation and change in soil use in real time, integrating it with other control mechanisms | 0 | | |
| 1.3.7 Inspection and control capacities to tackle with soil use regulation infringements | 0 | | Participation in training |
| 1.3.8 Community Monitoring (indigenous forest surveillance) | 2 | Direct | Participation in exercises and trainings |
| Outcome 1.4 Increased public financial flow to support effective territorial governance | | | |
| 1.4.2 Identified financing gaps for policy implementation | 1 | Indirect | Female grant revenue |
| 1.4.2 Public financial incentives for regional and local governments to support landscape sustainable management | 1 | Indirect | Gender component |
| **COMPONENT 2. Market mechanisms and incentives to promote sustainable production practices** | | | |
| Outcome 2.1 Productive and commodity trade chains have provided producers with incentives for sustainable production | | | |
| 2.1.3 Strategies to promote market certification. Territorial certification schemes and corporate policies for sustainable procurement | 1 | Indirect | Certification for women groups |
| 2.1.4 Alliances in cooperation with the private sector and productive chain actors to support adoption of sustainable practices in landscapes | 1 | | With gender-equitable systems |
| Outcome 2.2 Other sustainable economic activities in the territory are supported and articulated to market | | | |
| 2.2.1 Strategies to promote development of sustainable economic activities (free from deforestation) integrated to market | 1 | Direct | At least one activity aimed at women |
| 2.2.2 Articulation of activities with market, financial and public incentives | 1 | Indirect | Men and women |
| Outcome 2.3 Land users access financing to support conservation and natural resource sustainable management | | | |
| 2.3.1 Loan and insurance schemes fostered to benefit sustainable practices in lands aligned with ENBCC (farmers, communities, among others) | 1 | Indirect | Schemes include gender analysis |
| 2.3.2 Cost analysis – Benefit of developed sustainable practices | 1 | Indirect | Schemes include men and women |
| 2.3.3 Incentives fostered to compensate land users for implementing sustainable economic practices and sustainable ecosystem management | 2 | Direct | Schemes include men and women |
| **COMPONENT 3. Installed technical capacity to restore and maintain eco-systemic services in target landscapes** | | | |
| Outcome 3.1 Demonstrated sustainable production models to enable scaling up at landscape level | | | |
| 3.1.1 Pilot sustainable farming experiences fostered to facilitate scaling up (includes access to markets) | 3 | Decision making | Include indigenous women decision making and benefits sharing |
| 3.1.2 Pilot of sustainable community production and management experiences in indigenous territories | 3 | Decision making | pilots lead by women |
| Outcome 3.2 Producers and communities enabled to implement more sustainable practices | | | |
| 3.2.1 Technical aid systems, methodology and capacities for technical aid supply, including gender approach | 3 | Decision making | Include indigenous women decision making and benefits sharing |
| 3.2.2 Technical Aid Programs established in alliance with actors of the productive chain and regional/local | 3 | Decision making | Include indigenous women decision |

| Components, Outcomes and Outputs | Gender Rank | Women involvement | Positive Actions |
|---|---|---|---|
| governments to supply support to producers of green commodities, including gender approach | | | making and benefits sharing |
| Outcome 3.3 Restoration of landscapes and conservation programs with public and private participation | | | |
| 3.3.1 Local restoration initiatives in prioritized areas | 1 | Indirect | |
| 3.4.3 System for adaptive management and learning to inform decision makers about landscape management approaches | 1 | Indirect | |
| Outcome 3.4 Knowledge in support of sustainable management of productive landscapes in the Peruvian Amazon | | | |
| 3.4.1 Systematization of best practices, lessons learned and case studies, including evidence of women's and indigenous peoples' special contribution to Amazon landscape sustainability | 3 | Decision making | special contribution of activities performed by women |
| 3.4.2 Developed and disseminated communicational products | 2 | Direct | With gender-sensitive language |
| 3.4.3 Systems for adaptive management and learning to inform decision makers about landscape management approaches | 2 | Indirect | With gender approach |

## b) GENDER INDICATORS IN THE GEF PROJECT OUTCOME FRAMEWORK

Mainstreaming the gender perspective in the project results considers a valuation of implications both for men and women in any planned action, without undermining the project intervention framework context.

TABLE 14. GENDER INDICATORS IN THE GEF PROJECT Results FRAMEWORK

| Indicator | Baseline value | Mid-term Target | Target value |
|---|---|---|---|
| **Objective:** To generate multiple global environmental benefits by applying an integrated approach to Amazonian landscape management | | | |
| **22.** Number of people **(by gender and ethnicity)** obtaining net livelihood benefits as a result of the application of sustainable forms of production and resource management[61] | To be confirmed through household surveys and focus groups.<br>In the target area, the number of farmers or "producers" is approximately 16,100 (2012) and the population of inhabitants of indigenous communities is 5,000 (2015). | - 2,000 small producers<br>- 300 members of indigenous communities | Increased levels of livelihood benefits as a result of the increased application of practices that contribute to environmental sustainability and landscape stability, in:<br>- 6,000 small producers<br>- 700 members of indigenous communities |
| **Component 1:** Improved policy planning and governance to reduce deforestation and enhance sustainable production | | | |
| **Outcome 1.1: Land-use policy and planning strengthened and aligned across sectors at national, regional and local levels** | | | |
| **23.** Number of land-use policy and planning instruments developed and aligned, including the approach of landscape sustainability, resilience and **inclusiveness**[62][63] | Mid-level zoning completed<br>No forestry zoning<br>No micro-zoning to date<br>10 indigenous life plans<br>*Regional Development Plans, Local Development Plans and Sector Development Plans make reference to environmental issues but do not specifically provide for an integrated approach to the management of production landscapes* | - 1 Regional Development Plans,<br>- 7 Local Development Plans, covering the whole project area<br>- 2 Sector Development Plans<br>- 65,000 ha covered by micro-zoning<br>- 8 additional indigenous life plans | - 2 Regional Development Plans and<br>- 10 Local Development Plans, covering the whole project area<br>- 2 Sector Development Plans<br>- 100,000 ha covered by micro-zoning, focused on priority localities<br>- 12 additional indigenous life plans |
| **8.** Levels of direct participation of different stakeholder groups (**including women and indigenous people)** in participation structures at regional and local levels making decisions related to the | *Baseline value to be determined at project start* | | *Target to be defined at project start* |

[61] Relates to UNDP IRRF Indicator 2: # of jobs and livelihood options created through the management of natural resources, ecosystem services, chemicals and wastes, by sex and urban/rural location); in this case, the quantitative target refers to numbers of people with improved livelihoods, not necessarily the number of new jobs or livelihood options.

[62] **SFM1/1 Indicator 1** Area of high conservation value forest identified

[63] BD4/9 **Indicator 9.2** The degree to which sector policies and regulatory frameworks incorporate biodiversity considerations and implement the regulations; CC2/4 **Indicator 5.** Degree of support for low GHG development in the policy, planning and regulatory framework

| Indicator | Baseline value | Mid-term Target | Target value |
|---|---|---|---|
| sustainable, integrated and inclusive management of landscapes | | | |
| **Component 2: Financial mechanisms and market incentives promote sustainable production practices** | | | |
| **Outcome 2.1: Green commodity value chains have provided incentives to farmers for sustainable production** | | | |
| **14.** Number of viable business plans for sustainable economic activities developed and implemented | 0 | Viable business plans implemented for at least three sustainable economic activities, **with benefits for men and women.** | Viable business plans developed and implemented for at least three sustainable economic activities, **with benefits for men and women.** |
| **15.** Volume of credit, incentives and insurance, by **number of farmers and area** covered, disbursed to benefit sustainable resource management practices or subject to criteria of environmental sustainability[64] | To be determined at project start (there are two REDD projects covering the project area but no conditional direct transfers) | US$15 million in the Peruvian Amazon as a whole; **numbers of farmers and gender breakdown** to be determined at project start | US$40 million in the Peruvian Amazon as a whole; **numbers of farmers and gender breakdown** to be determined at project start |
| **Component 3: Technical capacity installed to restore and sustain ecosystem services in target landscape** | | | |
| ***Outcome 3.1: Sustainable and inclusive production models demonstrated to enable scaling-up to landscape level*** | | | |
| **16.** Number of actors that learn about sustainable management practices and their benefits as a **result of the pilots**[65] | 0 | Experiences, including those developed by women, demonstrated in pilots to 500 actors with potential to replicate and/or disseminate them | Experiences, **including those developed by women**, demonstrated in pilots to 1,500 actors with potential to replicate and/or disseminate them |
| **17.** Numbers of farmers (**male and female**) in target areas receiving technical and financial support for the application of sustainable management practices[66], and applying enterprise and organizational development plans necessary for these practices to be viable and sustainable | In 2012 (CENAGRO):<br>- There are 16,120 farmers in the target area<br>- In 2012 2,488 male farmers (18.9% of the total) and 531 women (**18% of women farmers**) received technical training or business advice<br>- 1,961 farmers were receiving finance | - 2,000 farmers receive technical assistance (1,640 men and 360 women) for the application of sustainable management practices<br>- 1,000 farmers receive financial assistance for the application of sustainable management practices<br>- 5,000 farmers are implementing necessary enterprise and organizational development plans | - 4,550 farmers receive technical assistance (**3,350 men and 1,200 women)** for the application of sustainable management practices<br>- 3,000 farmers receive financial assistance for the application of sustainable management practices<br>- 1,000 farmers are implementing necessary enterprise and organizational development plans<br>- |
| **18.** Number of farmers (of those who receive | Productivity levels in agricultural | 40% of supported producers (**male** | 25% of supported farmers (**male and** |

[64] SFM1/2 **Indicator 2:** Number of incentive mechanisms to avoid the loss of high conservation value forests implemented.

[65] LD3/4 **Indicator 3.1** Demonstration outcomes strengthen cross-sector integration of SLM

[66] With specific reference to e.g. responsible use of agricultural chemical, IPM, avoidance of clearance of natural vegetation, maintenance of diversity on farm, soil conservation, integrated fire management.

| Indicator | Baseline value | Mid-term Target | Target value |
|---|---|---|---|
| technical assistance), **by area and gender**, with increases in per hectare productivity levels due to the application of the sustainable management practices promoted by the project | commodities are low due to inadequate technology and investment<br>*Baseline productivity levels for participating farmers to be determined at project start.* | **and female)** are applying sustainable practices | **female)** increase their productivity by at least 20% (in terms of productivity or profitability) |

## c) SOCIAL AND ENVIRONMENTAL SAFEGUARDS IN THE GEF PROJECT

The social and environmental safeguards in the GEF Project deal with two potential risks related to Principle 2: Gender equity and women empowerment. The following are proposed mitigation measures.

TABLE 13. MITIGATION AND MANAGEMENT MEASURES ACCORDING TO POTENTIAL GENDER RISKS

| *Risk Description* | *Impact - Probability* | *Significance* | *Comments* | *Description of assessment and management measures as reflected in project design* |
|---|---|---|---|---|
| **Risk 2.2 Could the project potentially reproduce gender-based discrimination against women, particularly regarding participation in design and implementation or access to opportunities and benefits?** | I = 3<br>P = 1 | Low | Women have limited access to natural resources, such as land and water. There is a risk that women may not appropriately benefit from project support to productive activities or financial mechanisms. | - The gender strategy was developed during the PPG phase<br>- The women's perspectives will be considered in Life Plans and development plans<br>- The Project includes positive actions for women based on their expressed interests, such as work on non-timber forest products and agroforestry |
| **Risk 2.3 Women's groups/leaders have expressed concerns about gender equality in connection to the project during the stakeholder participation process, has this been included in the project's general proposal and in the risk evaluation?** | I = 2<br>P = 1 | Low | The project acknowledges the interest of local women in conservation and sustainable landscape use. Communities have already established mechanisms for women to participate in working with Non-timber Forest Products. | - The PPG has promoted women participation through specific workshops and exchanges of experiences<br>- A gender analysis has been conducted to identify gender gaps. The gender strategy was developed during the PPG<br>- The Project's resulst Framework has a gender equity approach<br>- The project also takes into account youth and the opportunity to involve them in restoration activities, as well as in economic diversification<br>- The project adopts measures to guarantee gender mainstreaming |

## d) RECOMMENDATIONS FOR THE IMPLEMENTATION

**Coordination with partners and stakeholder**

1. Intersectoral Coordination (MINAM, MINAGRI and MIMP) gender focal points to harmonize policies.
2. Sensitize national, regional and local counterparts, including training on intercultural and gender approach to become familiarized with local gender socio-cultural aspects to prevent misunderstandings or conflicts.

**Project Implementation Unit**

1- ToR of IU are gender sensitive. According to UNDP policy all the team must have basic knowledge in including gender perspective and/or potential technical capacity for implementation, particularly the General Coordination and the specialist for gender and vulnerable populations who is also in charge of social and indigenous peoples' issues. To guarantee knowledge, UNDP has prepared an updated course for fostering innovative thinking in connection with gender issues titled "Gender Journey Course: Thinking out of the Box," which will be mandatory for those who occupy those positions.

2- Hiring procedures must guarantee equal opportunities of access to the positions in the technical team.

3- Include temporal position/ consultancies of interpreters, translators and intercultural mediators to facilitate the intercultural and gender approach in project actions.

**Communication, knowledge management and lessons learned**

1. Analyze social relationships (including gender), well-being concepts (referring to gender issues).
2. Analyze economic development opportunities differentiating men from women.
3. Predominant expression forms and language, including those of women.
4. Previous experiences of the people with the ministry regarding gender issues.
5. Study daily communication forms and information means used by women. The following are recommended: radio spots, with a translator in the case of indigenous populations; video recording and photograph taking; illustrated cards in Spanish or translated according to ethnic groups with culturally appropriate illustrations and designs regarding gender or different actors.
6. Make visible and systematize the special contribution of women in implementing the PPS Project through: press notes; publications in the institutional web; informative notes in newspapers or other local media; radio, television, social networks, among others.
7. Systematize to acknowledge the lessons learned from project intervention. The technical team will evaluate the dissemination relevance using any of the Project's information and communication mechanisms.

**BIBLIOGRAPHY**

Mateo, S. 2016. Análisis de la situación actual de los grupos vulnerables en el área de intervención del proyecto. Informe Técnico. Proyecto Paisajes Productivos Sostenibles. Fase de Diseño. PNUD. (Analysis of the current situation among vulnerable groups in the project's intervention area. Technical report. Sustainable Productive Landscape Project. Design Phase. UNDP) Lima. Perú.

Mateo, S. 2016. Marco de Gestión Social y Ambiental (y SESP). Informe Técnico. Proyecto Paisajes Productivos Sostenibles. Fase de Diseño. PNUD. (Social and Environmental Management Framework. Technical Report. Sustainable Productive Landscape Project. Design Phase. UNDP. Lima. Perú.

Mateo, S. 2016. Plan de involucramiento de poblaciones indígenas para la fase de implementación. Informe Técnico. Proyecto Paisajes Productivos Sostenibles. PNUD. (Plan for involving indigenous populations for the implementation phase. Technical Report. Sustainable Productive Landscape Project. UNDP) Lima. Perú.

Pitman, N., E. Ruelas I., D. Alvira, C. vriesendorp, D. K. Moskovits, á. del Campo, T. Wachter, D. F. Stotz, S. Noningo S., E. Tuesta C. y/and R. C. Smith, eds. 2012. Perú: Cerros de Kampankis. Rapid Biological and Social Inventories Report 24. The Field Museum, Chicago. http://fm2.fmnh.org/rbi/pdfs/peru24/RI24_SPANISH.pdf

PNUD, 2014. Estrategia de Igualdad de Género del PNUD 2014-2017 El Futuro que queremos Derechos y Empoderamiento. Programa de las Naciones Unidas para el Desarrollo, (UNDP 2014-2017 Gender Equality Strategy. The future we want. Rights and Empowerment. United Nations Development Program. New York, USA.

SPDA, 2014. Política Institucional de Género (Gender Institutional Policy). http://www.spda.org.pe/quienes-somos/politica-institucional-de-genero/

Tafur M, Gumucio T, Turin C, Twyman J, Martinez D. 2015. Género y Agricultura en el Perú: Inclusión de intereses y necesidades de hombres y mujeres en la formulación de políticas públicas (Gender and Agriculture in Peru: Inclusion of interests and needs of men and women when formulating public policies). Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). https://cgspace.cgiar.org/rest/bitstreams/53762/retrieve

UNDP, 2016. Guide to Conducting a Participatory Gender Analysis for projects supported by UNDP with GEF financing.

USAID, 2013. Diagnóstico de género en la Amazonía: Amazonas, Loreto, Madre de Dios, San Martín y Ucayali. (Gender diagnose in the Amazon: Amazonas, Loreto, Madre de Dios, San Martín and Ucayali.) http://www.unfpa.org.pe/WebEspeciales/2013/Nov2013/25NOV/USAID-PRODES-Diagnostico-Genero-Amazonía.pdf

## Q. Bibliography


1. MINAM 2011: El Perú de los bosques. Lima, Peru: Ministerio del Ambiente.
2. MINAM-Programa Nacional de Conservación de Bosques, 2015
3. MINAM. 2010. Estrategia nacional de zonificación ecológica económica y ordenamiento territorial Lima, Peru: Ministerio del Ambiente.
4. Peruvian National Report for the Global Forest Resources Assessment (FAO 2010)
5. MINAM 2011: El Perú de los bosques. Lima, Peru: Ministerio del Ambiente.
6. USAID 2013, published in the Plan of Action for Gender and Climate Change, Peru 2016
7. Perú: Análisis Etnosociodemográfico de las Comunidades Nativas de la Amazonía, 1993 y 2007
8. ALTERNATIVES TO SLASH-AND-BURN (ASB)IN PERU SUMMARY REPORT AND SYNTHESIS OF PHASE II Edited by: Douglas White, Sandra J. Velarde, Julio Alegre, and Thomas P. Tomich
9. Diagnóstico de los productores familiares en la Amazonía Peruana (ICRAF)
10. THE LAUNDERING MACHINE: HOW FRAUD AND CORRUPTION IN PERU'S CONCESSION SYSTEM ARE DESTROYING THE FUTURE OF ITS FORESTS
11. INEI. 2010. *Perú: Anuario de estadísticas ambientales 2010*. Lima, Peru: Instituto Nacional de Estadística e Informática.
12. Piu HC and Menton M. 2014. The context of REDD+ in Peru: Drivers, agents and institutions. Occasional Paper 106. Bogor, Indonesia: CIFOR. Peru Amazonia references\OP-106.pdf
13. Cossío R, Menton M, Cronkleton P and Larson A. 2014. Community forest management in the Peruvian Amazon: A literature review. Working Paper 136. Bogor, Indonesia: CIFOR. Peru Amazonia references\WP136Menton.pdf
14. INRENA. 2007. Bases para la promoción de plantaciones forestales en el Perú. Lima, Peru:Instituto Nacional de Recursos Naturales
15. Cuantificación y Análisis de la Deforestación en la Amazonía Peruana en el Periodo 2010-2011-2013-2014 (MINAM/DGOT August 2015)
16. Iniciativa de Monitoreo Socio-ecológico de la Amazonía Occidental (IMSAO) Western Amazon Sentinel Landscape
17. MAAP #25: Deforestation Hotspots in the Peruvian Amazon, 2012-2014
18. Deforestación y reducción de fuentes de agua en la cuenca del Pachitea: Retos que afrontar para alcanzar el desarrollo sostenible. Instituto del Bien Común, Policy Brief No. 1, febrero 2015
19. Is oil palm agriculture really destroying tropical biodiversity? Lian Pin Koh1 & David S. Wilcove. Conservation Letters 1 (2008) 60–64 c 2008 Blackwell Publishing, Inc. Peru Amazonia references\conl_011_LR.pdf
20. Soil Carbon and Nitrogen Stocks Following Forest Clearing for Pasture in the Southwesten Brazilian Amazon. Neil C, Melillo JM, Steudler PA, Cerri CC, de Moraes JFL, Piccolo MC, Brito M. *Ecological Applications* Vol. 7, Issue 4 (Nov. 1997), 1216-1225.
21. Toward Zero-Deforestation Oil Palm in Peru: Understanding Actors, Markets and Barriers. Forest Carbon, Markets and Communities (FCMC) Program/USAID. March 2015.
22. Análisis Institucional y de Políticas relacionadas con la producción de palma aceitera (2015). Green Commodities Programme/UN-REDD Programme/UNDP.
23. Diagnóstico de Necesidades de Asistencia Técnica, Necesidades de Fortalecimiento y la Oferta de Asistencia Técnica Para Pequeños Productores de palma aceitera de Las Regiones de Ucayali, Loreto y San Martin
24. Is small-scale agriculture really the main driver of deforestation in the Peruvian Amazon? Moving beyond the prevailing narrative Ashwin Ravikumar, Robin R. Sears, Peter Cronkleton, Mary Menton, & Mat´ıas Pe´ rez-Ojeda del Arco Conservation Letters, June 2016, 00(0), 1–8
25. High-yield oil palm expansion spares land at the expense of forests in the Peruvian Amazon. Vıctor H Gutiérrez-Vélez, Ruth DeFries, Miguel Pinedo-Vásquez, María Uriarte, Christine Padoch,Walter Baethgen, Katia Fernandes and Yili Lim. Environ. Res. Lett. 6 (2011) 044029
26. MORALES, Oswaldo ; BORDA, Armando ; ARGANDOÑA, Andrés ; FARACH, Remy ; GARCIA NARANJO, Lenny ; Lazo, Katia La Alianza Cacao Perú y la cadena productiva del cacao fino de aroma. – Lima : Universidad ESAN, 2015. – 182 p. – (Serie Gerencia para el Desarrollo ; 49)

27. León, M.C. & Harvey, C.A. (2006): Live fences and landscape connectivity in a neotropical agricultural landscape. *Agroforest Syst* (2006) 68: 15. doi:10.1007/s10457-005-5831-5; Perfecto I, Rice R.A., Greenberg R. and van der Voort M.E. (1996): Shade Coffee: A Disappearing Refuge for Biodiversity. BioScience Vol. 46, No. 8 (Sep., 1996), pp. 598-608.
28. THE POTENTIAL FOR FOREST LANDSCAPE RESTORATION IN DEGRADED FARMLANDS Filling knowledge gaps on the restoration of degraded smallholder landscape mosaics: Tor-Gunnar Vågen, Valentina Robiglio, Madelon Lohbeck, Clement Okia, Roeland Kindt, Erick Opiyo and Jonathan Cornelius (World Agroforestry Centre)
29. Saenz, G. 2017. JUNPALMA. AGROINDUSTRIA DE LA PALMA ACEITERA: Alternativa Sostenible que Promueve Desarrollo Socioeconómico en la Amazonia
30. UNODC, 2016. Monitoreo de Cultivos de Coca en Peru