The Alto Mayo Conservation Initiative

Distinctive features

The Alto Mayo Protected Forest (AMPF) covers approximately 182,000 ha of land in the Peruvian Amazon of high value for biodiversity conservation and watershed protection. The Alto Mayo forests also store a significant amount of carbon. Conserving the Alto Mayo forests is considered critical for mitigating global climate change, conserving biodiversity, and ensuring the provision of ecosystem services to the local population. For these reasons, the Peruvian government established the Alto Mayo Protected Forest in 1987 as part of the National System of Protected Areas.

Despite the designation of the Alto Mayo forests as a Natural Protected Area (NPA) by the State, insufficient funds for managing the area, the building of a national highway, and the high rates of migration to the Amazon region have resulted in widespread settlement inside the area, making it one of the NPAs with the highest deforestation rate in Peru. The threats to the area have increased in the last decade with the linking of the highway to other regional mega-development projects and the rising price of coffee -the main crop grown in this area-, leading to increasing deforestation and the subsequent loss of ecosystem services.

In response, Conservation International Foundation (CI) and its allies in the region designed the Alto Mayo Conservation Initiative (AMCI), whose main goal is to promote the sustainable management of the AMPF and its ecosystem services for the benefit of the local populations and global climate change mitigation. Project activities will include improving the governance and enforcement capabilities for AMPF; signing Conservation Agreements with local farmers to increase the productivity and sustainability of their coffee plantations and promote sustainable land use practices that will reduce deforestation and forest degradation; environmental awareness and involvement in the conservation for communities; and integrating the AMPF in the broader policy agenda and ensuring that the AMCI is developed in line with and as a model for the nested approach to REDD-plus.

	Heading	Explanation
	Locational factors	
	**Location**	The Alto Mayo Conservation Initiative (AMCI) is implemented within the Alto Mayo Protected Forest (AMPF) in San Martin region, northern Peruvian Amazon protected by the State
	Size	Project area: 153,929 ha Reference area: of 580,616 ha. The reference area encompasses the project area and the leakage belt. Leakage monitoring area: [size not given in VCS PD] Leakage management area: [size not given in VCS PD] Activities to reduce deforestation and prevent leakage will take place in the Restoration and Special Use Zones of the AMPF, in line with the land use restrictions established by the AMPF Master Plan and its respective zoning regulations
	Land cover	The predominant forest type is humid-evergreen forests (cloud forest) covering 95% of the project area. Premontane and dwarf forests are also part of the landscape
	Land use (drivers of forest change)	**Direct drivers** ▪Coffee production is the major driver of deforestation in the project area. It is the main economic activity for local communities despite the illegality under the land use restrictions of the NPA. The conventional coffee production techniques used by the vast majority of coffee producers are highly unsustainable and most coffee producers convert plantations to pastureland and deforest new areas to establish new coffee plantations ▪Other drivers, such as the conversion of forest to pastureland and subsistence agriculture, illegal land trafficking and road construction, are less significant and are linked to coffee production directly or indirectly ▪At a smaller scale, illegal logging operations and the collection of firewood for domestic or commercial purposes further degrade forests **Underlying causes** ▪Growing local populations and the lack of income generating opportunities are the underlying causes that begin the cycle of deforestation ▪Poor soil conditions, lack of political support for conservation, and the limitations of the AMPF park service in enforcing the land use restrictions of the NPA are other underlying drivers
	Basic project features	
	**Objectives**	The overall objective of the AMCI is to promote the

	sustainable management of the AMPF and its ecosystem services for the benefit of the local populations and the global climate. Its specific objectives are: ▪ Improving the governance for the AMPF ▪ Reducing pressure on the forests and biodiversity of the AMPF ▪ Producing benefits to local population ▪ Ensuring the long-term financial sustainability for management of AMPF ▪ Integrating the AMPF into broader development processes
Proponent/s	Conservation International Foundation (CI), a global, non-governmental organization (NGO) based in Washington D.C. (USA), with offices in more than 30 countries; through its Peru office (CI-Peru). CI Peru has initiated a variety of pilot projects related to payment schemes for environmental services, especially those related to REDD-plus. CI-Peru consists of a multidisciplinary team of 14 Peruvian staff members, who are experts in both social and natural sciences.
Actors involved in project design and implementation and their roles	▪Conservation International Foundation (CI) overall control and responsibility of the AMCI initiative and is in the process of obtaining an administration contract to co-manage the AMPF together with the local Head Office of the National Service of Natural Protected Areas by the State (SERNANP). ▪Servicio Nacional de Áreas Naturales Protegidas por el Estado (SERNANP) – The National Service for Natural Protected Areas Protected by the State (SERNANP) is the government agency responsible for establishing the technical and administrative criteria for the creation and protection of National Protected Areas in Peru. SERNANP participates in the AMCI through the AMPF Head Office (Jefatura) which is its decentralized branch in charge of managing and protecting the AMPF in the field in accordance with an approved Master Plan. The AMPF Head Office is responsible for signing and monitoring Conservation Agreements with the local population, and is the ultimate authority within the AMPF. ▪Asociación para la Investigación y Desarrollo Integral (AIDER) – a Peruvian institution with over 18 years of experience in managing natural resource conservation projects in the Amazon. It holds administration contracts for two NPAs in Peru, both of which are REDD projects undergoing VCS and CCB validation. AIDER is a technical advisor to the AMCI project, responsible for conducting the biomass inventory of the AMPF, doing background analysis of the agents and drivers of deforestation,

		supporting project implementation and contributing to the development of the Project Design Documents (PDD). ▪Sociedad Peruana de Derecho Ambiental (SPDA) – The Peruvian Society for Environmental Law (SPDA) is an organization dedicated to integrating environmental conservation into development policies to achieve a sustainable society. SPDA is a legal advisor to the AMCI project and provides support on issues related to right of use, NPA law, land tenure, administration contracts, Conservation Agreements, and others. ▪Asociación Ecosistemas Andinos (ECOAN) – a Peruvian NGO with more than ten years of experience in implementing conservation projects and conducting research on flora and endangered bird species in Peru. It will be responsible for working directly with local settlers to design and implement Conservation Agreements in the field.
	Tenure and Carbon rights holder/s	Tenure Alto Mayo Protected Forest (AMPF) is public land, owned by the Peruvian Government. The Servicio Nacional de Areas Naturales Protegidas por el Estado (SERNANP) is responsible for its management with the authority to grant access and use rights for environmental services. Carbon rights In 2020, CI has successfully obtained the administration contract, and now holds rights to co-manage the AMPF and to grant carbon rights
	Upfront financing	CI has provided funding for the project design, fieldwork, calculations, and preparation/submission of required project documentation. In 2009, CI received US$ 3.15 million from the Walt Disney Company for the AMCI
	Start date	15 June 2008
	Crediting period	20 years
	Baseline emissions	
	Methodology used	VCS methodology VM0015, Methodology for Unplanned Deforestation, version 1.
	Reference data (unplanned deforestation/degradation)	Reference period: 10 years (1996 to 2006) Types of data used: ▪Landsat 5 TM – 1996, 2001, 2006, 2007, 2008; Landsat 7 ETM – 2001; CBERS (2.5 m resolution) 2008; RapidEye – 2008, 2010. Airplane aerial survey 2010 ▪Data on elevation, precipitation, slope, socio-economic and cultural conditions, as well as outputs from a workshop on drivers and agents for deforestation.

Reference data (planned deforestation/degradation)	Not applicable
Stratification of project area	▪Forest land is stratified by elevation, namely pre-montane forest, found between 500-1000 metres above sea level (mabsl); cloud forest, located between 1000 and 2500 mabsl and covering 95% of the project area; and dwarf forest with shorter vegetation found above 2500 mabsl ▪For non-forest class (deforested land use), one broad class was used due to the high uncertainty in distinguishing areas covered by each of the non-forest classes present in the reference region (i.e. coffee plantation, pastures and fallow)
Deforestation rate and location	**Historical** 0.12% per year (1996-2001) and 0.36% per year (2001-2006) **Projected** The rate of baseline deforestation is estimated by extrapolating the historical trend observed within the reference region **Likely baseline scenario** ▪Continued illegal deforestation and conversion of forest to other land uses mainly coffee plantations and subsequently pastures, despite being in violation of the NPA legislation. ▪No significant logging for timber, fuel wood collection or charcoal production is taking place in the baseline scenario ▪The drivers of deforestation are more correlated with forest accessibility rather than with biophysical characteristics, and deforestation would occur independently of the altitude and/or slope **Modelling procedure** ▪Step1: Definition of boundaries, including spatial and temporal boundaries, carbon pools and sources of GHG emissions ▪Step 2: Analysis of historical land-use and land-cover change - Landsat-5 and Landsat-7 images were used to produce a base map, which was further refined using additional imagery acquired in circa 2001, and circa 2006 to create a multi-temporal map with minimal cloud cover (less than 0.4%) ▪Step3: Analysis of agents, drivers and underlying causes of deforestation and their likely future development through the review of expert opinions and interviews with local experts, and a participatory workshop

	-Seven agent groups were identified, which are coffee producers as main agent group, followed by a number of less significant agent groups including cattle farmers, subsistence farmers, local politicians promoting the illegal construction of infrastructure, illegal loggers and timber merchants, land traffickers, and firewood collectors ▪Step4: Analysis of constraints to the further expansion of deforestation in terms of biophysical and socioeconomic factors -The categories of drivers identified for the area include access to the forest via rivers, proximity to urban centres and road infrastructure within the project area and reference region, and terrain conditions ▪Step5: Projection of future deforestation in terms of the quantity and location -Cumulative Deforestation Model (CDM) as described in approved VCS Methodology for Avoided Mosaic Deforestation of Tropical Forests (VM0009) was used to estimate the rate of baseline deforestation -The portion of the annual areas of baseline deforestation for each forest class within the project area and leakage belt was determined using GIS -The Land Change Modeler (LCM) was used for spatially explicit modelling of future land use change to produce deforestation risk map - Mapping of the locations of future deforestation and estimation of the quantity of deforestation that will happen in the baseline scenario using GIS ▪Step6: Definition of the land-use and land-cover change component of the baseline, through calculation of baseline activity data per forest, per post-deforestation forest class , and per LU/LC change category ▪Step7: Estimation of baseline carbon stock changes and non-CO_2 emissions
Carbon pools	**Carbon pools included** ▪Aboveground tree biomass ✓ ▪Belowground tree biomass ✓ ▪Non-tree woody biomass ✓ ▪Litter × ▪Dead wood × ▪Soil × ▪Wood products × **Estimation method** ▪A forest inventory for the entire AMPF (completed in 2011) includes a total of 175 plots measured in the field, 119 of which were located within forested areas and 56 were located within non-forested areas

▪Field measurements focused on above-ground biomass, while below-ground biomass was estimated through default root-to-shoot ratios and data provided in scientific literature and following IPCC Guidance (IPCC, 2003 and IPCC, 2006) [sampling design and field measurement methods are described in Sup.Inf_Meth_04a-d; not available on VCS website]

▪Average carbon stocks were estimated based on field measurements of forest classes present in the project area and leakage belt, as well as non-forest classes projected to exist in the project area and leakage belt under the baseline scenario; and carbon stocks existing in leakage management areas

▪Due to the high uncertainty in mapping the post-deforestation classes, the project combines the common non-forest classes (conventional coffee plantations, pasture land and fallows) into a single non-forest class and estimated the weighted-average carbon stock based on the area fraction observed in the field

▪ Aboveground tree biomass

-For broadleaf species, which are predominant in the forest inventory (82.6%), allometric equations were derived from a study developed by Alvarez et. al. (2012) in the nearby forests of Colombia

-For palms (6.2%) and lianas (10.5%), equations were derived from a study developed by Sierra et. al. (2007) in pre-montane forests sites in Colombia

- For the wasai palm (0.2%) and Cecropia (0.4%), equations were derived from Pearson et. al. (2005)

▪Aboveground non-tree woody biomass

--For coffee species, allometric equations were based on Pearson et al. (2005) while for fallows, the same equations were used as for the forest classes (Alvarez et al., 2012).

- Above-ground biomass of pastures was estimated through destructive sampling

▪Belowground tree biomass

-Below-ground carbon stocks of forest classes were estimated based on root-to-shoot ratios provided by Cairns et al. (1997) (cited in IPCC, 2003) for broadleaf and cecropia species

-For palms, the standard root-to-shoot ratio for tropical rainforests (0.37)was used, as established by the IPCC (2006)

-Below-ground carbon stocks of non-forest classes were estimated based on the root-to-shoot ratios used for forest classes in the case of fallows based on IPCC AFOLU Guidelines, and the value of Siles et al. (2010) was used to estimate the belowground carbon stocks of

		coffee plantations
	Carbon stock changes	Carbon stock changes in the project area were estimated by subtracting the annual area of the final non-forest class multiplied by its average carbon stock from the annual deforested area per forest class multiplied by the respective average carbon stock
	GHG emissions:	▪CO_2 emission resulting from biomass burning and livestock emissions are conservatively excluded from the baseline for this project ▪ Emissions from the application of organic fertilizers for coffee plantations was estimated as 0,41 tCO_2e in the baseline period, and considered to be insignificant ▪Non-CO_2 greenhouse gasses resulting from forest fires are conservatively excluded from the baseline, as data on forest fires in the project area and reference region are unavailable to provide acceptable estimates of non-CO_2 emissions
	Net emissions without project	8,879,998 tCO_2e (2009-2018)
Project GHG emissions reduction strategy		
	**Scope**	Avoided Unplanned Deforestation and/or Degradation
	Activities	AMCI will implement a broad range of strategic activities, including: ▪Working and collaborating with SERNANP and the AMPF local Head Office to improve the governance and enforcement capabilities for AMPF through the administrative contract ▪Promoting sustainable land use practices that will reduce deforestation and forest degradation within and beyond the AMPF's boundaries through the signing of Conservation Agreements (CAs) with local farmers - Conservation Agreements (CAs) are being established between local communities and the AMPF Head Office in order to increase the productivity and sustainability of their coffee plantations, thereby increasing individual family incomes and reducing their need to deforest other areas to establish new coffee plantations. ▪Promoting a change in the perception of the local population towards the importance of the AMPF by increasing its environmental awareness and involvement in the conservation of the Protected Area ▪Ensuring the long-term sustainability of the AMCI by creating long-term financial mechanisms through carbon financing and other PES schemes ▪Integrating the AMPF in the broader policy agenda at the local, regional and national level, and ensuring that the project is a model for the nested approach to REDD+

Leakage mitigation strategy	▪ Analysis of the leakage: the project proponent produced a continuous map of the probability of mobility of agents of deforestation ▪ Establishment of the leakage belt: the leakage belt was delineated based on a mobility analysis using a documented participatory rural appraisal accompanied by a spatial analysis. ▪ Establishment of the Leakage Management Areas (LMAs) : LMAs include all non-forest land within and outside the boundaries of the AMPF where activities to minimize the risk of leakage will be implemented ▪Restoration and Special Use Zones of the AMPF: re-zoning the areas of highest deforestation in the AMPF in order to allow project activities to be conducted in these areas in accordance with the AMPF Master Plan and its respective zoning regulations ▪ Conservation Agreements (CAs) with local farmers as a tool to reduce the imminent drivers of deforestation inside the AMPF –coffee production- and prevent leakage of these activities outside the Protected Area by engaging the local farmers in a commitment to achieve measurable forest conservation results ▪Enhancement of agricultural productivity and yield by providing with a technological package that would allow local farmers to produce sustainably grown coffee
Non-permanence risk mitigation strategy	▪ Collaboration among a broad range of partners including responsible government agencies (SERNANP and AMPF Head Office) and local actors with different roles and responsibilities within the project ▪Ensuring long-term sustainability through a change in the land use practices of local coffee growers based on the opportunity cost analysis, the strengthening of the enforcement capabilities of the AMPF Head Office, and a change in the perception of the local population towards the values of the AMPF ▪Strengthening the technical and organizational capabilities of local coffee associations and link them with high-value global organic coffee markets ▪Through the administration contract made in 2012, CI-Peru obtains the right to co-implement the AMPF Master Plan together with the Head Office, and the AMCI can be granted for up to 20 years and is subject to renewals ▪Design to ensure that there are enough funds to sustain the project's operations up to a minimum of fifty years, through the establishment of a Trust Fund capitalized by means of the sale of GHG credits
Additionality	▪Alternative land use scenarios: 3 realistic and credible alternative land use scenarios have been identified that could have occurred on the land within the project

		boundary in the absence of the REDD project activity. Pre-project land use expected to continue; insufficient financing available for other alternatives. ▪Investment analysis: A simple cost analysis was performed. Given the budgetary history, there is no significant increase in financial resources available through SERNANP in the baseline scenario. Without the resources provided by the project, the project activities are not financially viable ▪Barrier analysis: 8 barrier types identified ▪Common practice analysis: No record exists of any project in the region that has performed similar activities that compare to the scale and timeframe of those proposed by the AMCI.
With-project emissions		
	**Effectiveness of measures**	The effectiveness rate assumed for 2009, 2010 and 2011 was 50% (i.e. the project was able to halt half the baseline emissions). It is assumed that the effectiveness would increase gradually until reaching 90% in 2018.
	Carbon stock changes	Calculated using same approach as for baseline establishment
	GHG emissions	▪ The consumption of fossil fuels, as a result of the project activity, is considered insignificant ▪Non-CO_2 greenhouse gasses resulting from burning and livestock emissions in the project scenario are not significant using a quantitative analysis based on the ex-ante procedures provided by the methodology
	Leakage	It is assumed that 5% of the deforestation within the project area in the baseline case will be displaced to the leakage belt in the first 3 years of the project and will decrease annually until reaching 0% in 2018. The ex-ante estimation of decrease in carbon stocks under the baseline scenario within the leakage belt follows the same method used to estimate the carbon stock decrease in the project area. **Deduction** 5.46% (During the first 10 year crediting period)
	Non-permanence risk	**Buffer:** The overall non-permanence risk rating is 2. Ex-ante buffer credits are calculated based on a 10% risk factor estimated following the AFOLU non-permanence risk tool.
	Ex-ante estimated net greenhouse gas emissions reductions	**Total over crediting period:** 4,606,285 tCO_2e (2009-2018) **Annual average:** 515,116.5 tCO_2e **Annual average per ha:** 2.99 tCO_2e
	Monitoring of carbon stock	**Parameters** ▪ i. land-use and land-cover change within the project

	changes and emissions	are, leakage belt and reference area ▪ii. Impacts of natural disturbances and other catastrophic events **Methodologies** ▪i. digital maps based on the Landsat images and GIS analysis ▪ii. medium-resolution satellite images to monitor catastrophic events **Frequency** ▪i. every 10 years or at each baseline revision ▪ii. not given -No monitoring of carbon stocks within the project area: Although protection of forest land by the project will likely lead to an increase in carbon stocks, monitoring of increases in carbon stocks are conservatively omitted because the project does not intend to claim credits for this category -No monitoring of carbon stocks within the leakage management areas: No areas will be subject to planned and significant carbon stock decrease in the project scenario in the LMAs. On the contrary, carbon stocks are expected to increase in LMAs but are conservatively omitted from project accounting -No monitoring of carbon stocks within the leakage belt as this is optional. -The emission factors will be constant during the project lifetime, since the carbon stock of each forest class is considered constant and the post-deforestation class is estimated as the weighted average of all non-forest classes in the historic reference period.
Stakeholder identification and engagement		
	**Stakeholders identified**	▪ SERNANP and AMPF Head Office ▪ Local population and indigenous communities within the AMPF: surveys conducted by the AMCI indicate that the current population is 3,000 to 4,000 families (Pop.12,000 to 16,000) including cultural groups such as indigenous peoples ▪ The AMPF Management Committee, which consists of 59 institutions and represents local and regional governments, public and private sectors, and the local communities
	Identification process	▪ Local population including indigenous communities were studied by review of the existing demographic data and the field interview ▪ Socio –economic surveys were conducted to understand who would be affected by the project activities and to analyse their needs and links to the

		natural resources in the AMPF ▪Divers consultation meetings were conducted with communities' leaders and local population in collaboration with AMFM Head Office -About 1,500 local persons were consulted about the project activities during between November 2008 and April 2012
Full and effective participation		
	**Access to information and consultation**	▪ In addition to the availability of the PDD on the CCBA website, the project proponent distributed ten copies of the PDD to points accessible to members of various communities. ▪ The Project proponent also sent letters to government officials inviting comments on the PDD ▪ 8 meetings were held in communities to present the project and invite comments ▪Radio announcements were used to publicize the project and comment period. ▪The AMCI has developed a communication strategy and formed a team to facilitate dialogue between local population and the AMCI by promoting a better understanding of the Contract Agreement (CA) of the project
	Participation in design, implementation and monitoring	▪The AMPF Management Committee is used as a main mechanism to involve local interests in the project and maintain an open dialogue with various stakeholders ▪A series of stakeholder meetings with local population and government leaders, has provided opportunities for stakeholder feedback both at the planning and project implementation stages ▪ Participatory evaluations were conducted with community members for developing the PDD for CCBA, in order to provides a narrative of both positive and negative anticipated impacts to community groups ▪Participatory evaluation was conducted inviting leaders of indigenous communities within the AMPF to identify indigenous land uses and areas for project implementation, and determine potential impacts ▪Regarding the Contract Agreements (CAs), the technical team visit contracted farmers to discuss progress during the week at every sixth day
	Feedback and grievance redress procedures	▪ CI has developed a procedure by which written grievances can be submitted to the AMPF head office, which is the legal authority in charge of managing the area. The process includes a formal means for documenting any grievances that arise and commits to respond to grievances within 30 days ▪ A booklet was produced to publicize the process to

		community members
	Worker relations and safety	▪CI has developed a comprehensive protocol on worker safety issues ("Iniciativa de Conservación del Bosque de Protección Alto Mayo – Protocolos de Seguridad"). ▪CI has developed and provided a series of training session covering safety and worker's rights
Communities		
	**Without-project scenario**	▪ Continued illegal deforestation and conversion of forest to other land uses mainly coffee plantations and subsequently pastures, which would cause: - soil erosion and damage on water resources -negative influence on agricultural areas and infrastructure - increased risk for economic activity, flooding and human-wellbeing ▪conflictive relationship between AMPF Head Office and local stakeholders such as local settlers and farmer groups, as well as local authorities who recognise illegal habitants within the AMPF ▪continued migration into the AMPF and increased number of people who would not have access to public services ▪ increased demand for forest resources including firewood and construction materials, and land for economic activities
	With-project scenario	**Expected net benefits** ▪Sustainable coffee practice by local population and increased opportunity for coffee associations to access to special coffee markets ▪Capacity building and understanding of local population about the objectives of AMPF ▪ Improved living conditions of local population in accordance with AMPF's objectives ▪Alternative economy and opportunities provided for local population through conservation actions in accordance with AMPF management ▪Maintenance and improvement of ecosystem services of AMPF (water and soil) for human well-being in Alto Mayo region ▪Sustainable management of natural resources in AMPF by local population ▪Strengthen alliance between local population and AMPF Head Office ▪Strengthen governance for the management of AMPF **Possible negative impacts on other stakeholders and mitigation strategy** ▪Possible negative impacts: reducing deforestation

		pressure within the protected area may shift some pressure to lands managed by indigenous communities near the project area, or that patrols in the protected area may impact these communities ▪Mitigation strategy are: -Memorandum of Understanding between the Head of the Regional Federation and Indigenous Awajun the Alto Mayo (FERIAAM) that demonstrates a commitment to conducting project activities in a way that respects the communities' rights -Capacity building for AMPF staff about land use of indigenous groups -Technology and experience transfer about sustainable coffee production to FERIAAM
	Impact monitoring	**Monitoring variables** 59 measureable indicators were developed to provide an objective means of assessing both positive and negative impacts of the project, which have been identified in the project scenario **Methodologies** ▪The impacts are monitored using a variety of data sources, including the results of surveys by the project team, interviews, reports that result from project activities such as trainings or patrols, and statistical evaluations of quantitative indicators of well-being such as household income **Frequency** ▪Annual evaluation (some variables are assessed every2 or 3 years)
Biodiversity and ecosystem services		
	Without–project scenario	▪Fragmented ecosystems, which further provoke forest degradation, damages on original vegetation and increased exposure of native species to invasive ones ▪Loss of habitats for animal species including monkeys and bird species ▪Soil erosion and sedimentation into rivers, and damage on fish species ▪ Continued migrants into the AMPF and associated demand for natural resources including edible animals such as pieles and mascotas
	With-project scenario	**Expected net benefits** The project identifies habitat conservation, avoided fragmentation of ecosystems, maintenance and recovery of endemic and threatened species, reduced pressure on ecosystems from local populations, a strengthened ability of the head of the protected forest to respond to threats, restoration of degraded ecosystems, increased

		valuation of biodiversity by local populations, and reduced illegal extraction of wildlife as positive impacts of the project **Possible negative offsite impacts and mitigation strategy** ▪The negative offsite impacts are primarily related to the potential for the project to shift pressure on the ecosystems of the project area to those outside of the area ▪To mitigate negative offsite impacts, the project includes leakage mitigation measures implemented through Conservation Agreements that transfer technology for sustainable management to local populations, communication efforts designed to sensitize local populations to conservation values, monitoring outside of the project area to detect and respond to any increases in pressure, and efforts to work with authorities in the buffer zone surrounding the project to strengthen governance and build capacity for improved management
	Impact monitoring	**Monitoring variables** The project has developed a protocol for monitoring biodiversity impacts, which includes 61 measureable indicators that provide an objective means of assessing both positive and negative impacts of the project **Methodologies and** ▪The impacts are monitored using a variety of data sources, including, for example, satellite image analysis of deforestation trends and habitat connectivity, direct field observations of species occurrence, observations made by project participants and park guards, records of illegal activities observed by park guards, and expert studies, among other methods **Frequency** ▪Monitoring frequency varies depending on the indicators, for example, land and vegetation cover (ever 2 or 3 years), monkeys (3 times per year), Conservation Agreements (annual)
Progress		
	**Validation**	VCS validation report issue date: 30 July 2012 CCBA validation report issue date: 4 December 2012 (Gold Level)
	Verification	VCS verification: 15 June 2008 to 14 June 2012; 11 December 2012 15 June 2012 to 14 June 2014; 11 August 2015

		CCBA verification at Gold Level: 16 June 2008 to 14 June 2012; 4 December 2012 15 June 2012 to 14 June 2014;02 June 2015 December 2012 (1st) and June 2015 (2nd)
	Credits issued	Number: 1,003,836 As of: 18 February 2016

Further information

- Conservation Internatinoal website:
http://www.conservation.org/stories/alto-mayo-protected-forest/Pages/overview.aspx
- VCS Project Database:
http://www.vcsprojectdatabase.org/#/project_details/944
- CCBA website:
http://www.climate-standards.org/?s=Alto+May

Documents reviewed

VCS Project Description Version 03
VCS Validation Report Version 03: VO12064.00val
1st VCS Verification Reports (121012-01)
2nd VCS Verification Reports (VO14042.00)
Non-Permanence Risk Report No 2 (2008-2012) 2
*The above referenced VCS documents are available at
http://www.vcsprojectdatabase.org/#/project_details/944

CCBA project design document:
CCBA Validation and Verification Report- 12/4/2012
CCBA Verification Report - 6/2/2015
Protocolo de Monitoreo Socioeconomíco
Protocolo de Monitoreo Biodiversidad
*The above referenced CCBA documents are available at
http://www.climate-standards.org/?s=Alto+May