SUMMARY

Project Design Document (PDD)
Climate, Community and Biodiversity Standard (CCB)

January – 2014
I. GENERAL INFORMATION

Page document information required by the rules of use of standard CCB

i. Project Name: Evio Kuiñaje Ese Eja Cuana to mitigate climate change, Madre de Dios- Perú

ii. Project Location: Peru, Madre de Dios Region, Province Tambopata

iii. Project Proponent:

 Ese’Eja Infierno Native Community

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v. Project Start date: The project start date is July 1, 2011. The project-crediting period is 20 years (July 1, 2011 - June 30, 2031). The first period of quantifying GHG emission reduction is 10 years (July 1, 2011 - JUNE 30 del 2021)

vi. Whether the document relates to a full validation or a gap validation: Complete Validation
vii. History of CCB Status, where appropriate, including issuance date(s) of earlier Validation/Verification Statements etc: 1 CCB Validation Standard


ix. A brief summary of the project’s expected climate, community and biodiversity benefits:

The project will retain 7,749.93 hectares of rainforest belonging to the Ese Eja Native Community of Infierro. The conservation of these forests provide habitats that favor the development of several species of fauna and flora. In the case of flora there are 16 species threatened status, for the case of wildlife we found 136 species (birds, mammals, amphibians) in threatened status. Also in the project area have been reported between 21 endemic amphibians, mammals, birds, plants.

The project will contribute to the climate change mitigation by avoiding the emission of 1,176,759.99 tCO2-e during the first 10 years of the project. The emissions reduction strategy have 05 strategic results. The budget for implementation is U.S. $ 596,000.00 for the first 05 years of the project.

x. which optional Gold Level criteria are being used and a brief description of the attributes that enable the project to qualify for each relevant Gold Level

Biodiversity and Climate Change Adaptation

Biodiversity: The project area contains some category of threats and endemic species. It is located adjacent to a natural protected area and presents key areas to provide basic needs of local communities. The project will strengthen the surveillance and control systems of the community in coordination with the control and monitoring system of the National Service of Natural Protected Areas (SERNANP).

Climate change Adaptation: The climate change scenario in the Amazon region is complex, with increased rainfall and humidity in some areas, and droughts and heat waves in others. The following impacts are predicted: a) modification schemes growing and dry rivers, significantly reducing the availability of water in some areas of high forest and the intensification of lateral displacement of the rivers in the lowlands, b) changes in vegetal succession and species distribution c) substantial alteration of the population dynamics of species of wildlife, change in behavior, changes in seasonal migrations of fish and birds, and possible extinction of some species, d) reduction and alteration of wetland ecosystems and e) the increase in extreme weather events such as floods, droughts, "cold fronts", wildfires and heat waves (CEPES 2010).
The families of the Infierno community and families located in the project area do agriculture as a basic activity to subsistence, which complement small livestock and fruit production, Brazilian nuts harvesting (Bertholletia excelsa). Changes in rainfall patterns and increased temperature affect the production capacity of these production systems. In that sense families are susceptible to climate change

The project will help conserve forest resources thereby ensuring the provision of ecosystem services, strengthen the capacity of agricultural and forestry practice, agricultural practices to adapt to changing weather patterns and the development of land use planning in the project area ensuring the ecosystem services of the forest in the project area

xi. **Date of completion of this version of the PDD, and version number, as appropriate:**

PDD completed in January 2014, V1

xii. **Expected schedule for verification, if known.**

The project should be verified within 5 years from the date of validation
II. EXECUTIVE SUMMARY

Madre de Dios is the Amazon region of Peru which registers the highest levels of biodiversity in the country, a feature that gave him the title of Capital of Biodiversity of Peru in 1994. It is the natural habitat of endangered wildlife species like the black caiman (Melanosuchus niger), the harpy eagle (Harpy Eagle), giant otter (Pteronura brasiliensis) and forest species of economic importance such as Brazilian nuts (Bertholletia excelsa).

Madre de Dios historically had low levels of deforestation, improved accessibility due to the construction of the Inter-Oceanic Highway South, migration is increasing and therefore the change of land use and forest degradation, the impact can be huge considering the good condition located in this area of the country. In this scenario the advancement of informal gold mining, fueled by the rising price of gold, whose mode of extraction is highly polluting and causing deforestation in adjacent to the rivers of the region adds areas.

The project will be developed in the area of the Infierno Native Community and Ese’Eja Ecotourism Concession located in the Madre de Dios region, these surfaces belong politically to the Tambopata province and Tambopata district, adding a total area of 7,749.93 hectares. The purpose is to conserve the community forests and the ecotourism concession, from the advance of deforestation. The project plan to reduce the pressure to change of land use through the promotion of sustainable economic activities, forest governance and the establishment of conservation agreements in critical areas previously identified. These actions are intended to prevent the advance of agriculture. This actions will be done in partnership and coordination with institutions that currently are conducting conservation activities in the area.

The system of control and surveillance of the community and its concession will be strengthened, emphasizing the formation and operation of forest guards, which have an official recognition of the Regional Forestry and Wildlife Directorate of Mother of God, who comes will also strengthen make a strategy of participation of community members in the community.

With these actions, the project hopes to avoid an average net emissions of 117,676.00 tCO2-e compared to the reference scenario projected during the first period of 10 years, in which, because of migration and occupation of the land which annually promotes the operation of the Inter-Oceanic highway south, has an average of 289.76 has per year deforested.

The project includes benefits for the people concerned and for the conservation of biodiversity, beyond the benefits of reducing GHG emissions. To demonstrate this, the project has applied the standards of the Climate, Community & Biodiversity Alliance (CCBA).
G.1.1 Location of the project and basic physical parameters

Project Location

The project is located in the southwest Amazon of Peru in Tambopata province, Tambopata district, Madre de Dios Department and is part of the buffer zone of the Tambopata National Reserve. It is part of the influence zone of the inter-oceanic highway which is part of the Initiative for the Integration of South American Infrastructure (IIRSA). It is located 18 km away from Puerto Maldonado, capital of Madre de Dios.

The Infierno REDD project area is 7,749.93 ha of forest. 6,484.16 hectares are within the communal area and 1,265.78 hectares are located within the ecotourism concession. The communal area has a property title issued by the Agriculture Ministry Folio No. 0059-76 backed in the Directorial Resolution No. 3909-76-DGRA/AR.

In the case of ecotourism concession the community have the Departmental Resolution No. 137-2006-INRENA, former INRENA, representing the Peruvian State to grant a concession to the community for 40 years in a area of 1,648.29 hectares and Board Resolution 067-2010-AG-DGFFS by which the management plan for ecotourism concession of Ese Eja Native Community of Infierno is approved.

The Executive Director's No. 101-2011-GOREMAD-GGR-PRMFFS/DER dated August 31, 2011, resolved to approve the application for exclusion of agricultural area 116.442 hectares of agricultural land belonging to the Union Chonta Association, overlaid with forest ecotourism concession No. 17-TAM/C-ECO-J-003-06 whose owner is the native community of Infierno. Provided further that the concession area will be 1,531.85 ha, which is ordered by the specification and the location map is correct, as is also appropriate to sign the concession contract for the addendum.

Hydrography

The Tambopata river longitudinally crosses the project area and becomes the main waterway used by community members and other settlers located upstream (tourism businesses, farmers, miners, etc.). The Tambopata river is a tributary of the Madre de Dios River, part of the Amazon basin.

The project area borders the Cococoha and Tres Chimbadas lakes with a water surface of 58 and 59 hectares respectively.

Climate

The climate is subtropical to humid or wet forest with a mean annual temperature of 26°C, ranging between 10°C and 38°C (Rasmanen, quoted by INRENA 2003b). Low temperatures are associated with the entry of cold air masses from Antarctica, leading to locally known as "cold spell" or "surazo" phenomenon, it is characterized by lower temperatures, overcast skies and persistent rain. The cold spell lasts for two to three days but occasionally is longer, especially in the months of June and July, when it occurs more frequently. Maximum
temperatures reach 38°C and regularly in the months of September and October. Annual rainfall ranges from 1,600 to 2,400 mm (Rasanen, quoted by INRENA 2003b) scored two times by the frequency and amount of precipitation: a dry season between April and December, and a rainy season in the months of January to March, although time limits are variable (INRENA 2003b)

Map N° 01. Project Location Map

Map 02. Hydrographic map
G.1.3 limits of the project area and project area

The Infierno REDD project area is 7,749.93 ha of forest. Of these 6,484.14 has are communal area, 1,265.79 hectares of forest are located within the concession ecotourism.

According to the CCB Standard "project area" is defined as the area of the project and the land within the boundaries of adjacent populations potentially affected by the project. After an analysis of the stocks that perform pressure using resources within the territory of the Infierno community, and taking into account the approach that in a REDD project scenario, the town would be the main "affected" by restricting use of resources that would cause potential leaks. This criterion was identify in the following Associations of producers: Alto Loero, Loero, Chonta, Monte Sinai, Ulises Lopez, Union Chonta, La Torre. The project area has an extension of 31,581.55 has.

Map 03. Limits Project Area and Project Area

G3.1 Project objectives in climate, community and biodiversity areas

The overall objective of Infierno REDD project is to contribute to the mitigation of climate change, co generating social and biodiversity benefits.
The specific project objectives were defined in workshop with the Infierno Native Community.

**Climate Objective:** Prevent the emission of greenhouse gases caused by deforestation and forest degradation, contributing to the fight against global climate change. The project will prevent the estimated net benefit issuance of a total of 1,176,759.99 tCO₂-e during the first crediting period (10 years). The average value of net emissions avoided annually is 117,676.00 tCO₂-e compared to the reference scenario projected, which, because of migration and occupation of the land that promotes the operation of the Inter-Oceanic Highway south, coupled with the constant opening of secondary roads, overlapping legal conflict over land rights, expansion of the agricultural frontier and illegal logging and with high impact an average of 289.76 hectares per year would be deforested.

**Community Objective:** Sort the use of natural and cultural resources, to ensure the supply of present and future generations.

**Biodiversity Objective:** Reduce the threat factors for economically important species for Infierno community.

**G3.2 Describe each of the project activities with expected impacts of Climate, Community and Biodiversity and its relevance to the achievement of project objectives.**

To achieve the objectives of Climate, Community and Biodiversity defined. The Infierno REDD project has defined five strategic results.

**Table N°01 REDD Strategy**

<table>
<thead>
<tr>
<th>Líneas estratégicas</th>
<th>Resultados esperados</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic activities</td>
<td>Productive activities in Ese Eja Infierno native community are conducted by community sustainability criteria (economic, environmental and social) and minimizing leakage attributable to the REDD project.</td>
</tr>
<tr>
<td>Control and monitoring</td>
<td>The operational capacity of Infierno native community for community control and surveillance is improved.</td>
</tr>
<tr>
<td>Governance</td>
<td>Infierno native community communards have improved their capacities for governance and biodiversity conservation.</td>
</tr>
<tr>
<td>Communication and dissemination</td>
<td>A communication strategy developed in a participatory way, about ecosystem services, conservation and management of forests in the native community is implemented.</td>
</tr>
<tr>
<td>Conservation agreements</td>
<td>Conservation Agreements have been established with local populations settled in the leakage belt of Infierno native community.</td>
</tr>
</tbody>
</table>
i) Governance is aimed at facilitating the inclusion criteria of transparency, legality, fairness in the processes of decision making and the process by which decisions are implemented at the level of Infierno community and the towns of the project area regarding the management of forest resources.

ii) Economic activities will promote initiatives of low carbon livelihoods as reduced impact forest management, ecotourism, agroforestry, management palms.

iii) The strengthened of community control and surveillance will support to protect and conserve biodiversity in the project area.

iv) Communication and dissemination of the project will help to maintain transparency and develop an adaptive management of the project.

v) Conservation agreements to work with the populations of the project area to minimize the occurrence of leaks.

G3.3 Project location and boundaries of the area or areas where the project will be carried out project activities and the project area and additional surrounding areas that are predicted will be impacted by project activities (e.g., through leakage).

Governance activities were implemented in the project. The control and monitoring activities will be held in the project area with emphasis on vulnerable sectors identified (ecotourism concession, Loero, Chonta, Nueva America). Conservation agreements will be developed in the leakage belt.

The timber activities will be implemented in primary forest, palm management will be implemented in Sehue, Ñape. Agroforestry and reforestation will be held in areas the plots of each Infierno family. Tourism will be held in Centeo ÑAPE and ecotourism concession.

G3.4 Define the term project life and GHG accounting period and explain and justify any differences between them. Define the implementation schedule, indicating key dates and milestones in the project development.

The time life project is:

• Project Start Date: July 1, 2011

• Home GHG accounting: July 1, 2012

• First period for quantification of GHG emission reductions: 10 years (July 1, 2011 to June 30, 2021)

• Credit Period VCS project: 20 years (July 1, 2011 to June 30, 2031)
G.4.1 Identify a single project proponent who is responsible for the design and implementation of the project. If multiple organizations or individuals involved in the development and implementation of the project should also describe the governance structure, roles and responsibilities of each of the organizations or individuals involved.

Project proponents are Ese’Eja the Native Community of Infierno and the NGO Association for Research and Integrated Development – AIDER.

**Table N°02. Description and responsibilities of the project proponents**

<table>
<thead>
<tr>
<th>Entity</th>
<th>Description</th>
<th>Roles/responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ese’Eja Infierno Native Community</strong></td>
<td>The Community as a legal entity is officially recognized by Resolution N° 61-OAJAFORAMS-VII-76 issued on April 20, 1976 issued by the Regional Sub Directorate of Agriculture and registered in the Native Communities of Cusco Records Volume 1 Folio 21 Seat 21 Agrarian Region XX. Also its legal status is duly registered under certificate N°. 11002278 of the Legal Persons Book, Peasant and Native Communities Registration of the Madre de Dios Registry Office. Their social and cultural composition is heterogeneous because it has various ethnic groups inside such as pure Ese’Eja natives themselves, settlers from the forest (riparian descendants from Amazonian indigenous of the northern jungle brought to Madre de Dios for rubber chiefs) highlands of the country and mestizos.</td>
<td>Forest owners committed to work to protect and manage the forest under a REDD+ project. Develop the activities involved in REDD+ strategies to avoid deforestation and forest degradation in the community forest. Comply with the obligations described herein, for forest conservation and generate additional revenue for the development of productive activities compatible with forest conservation.</td>
</tr>
<tr>
<td><strong>Asociación para la Investigación y Desarrollo Integral – AIDER</strong></td>
<td>Peruvian NGO leader on REDD+ and CDM projects, with over 25 years of experience in forestry projects, including forest management, reforestation and nature conservation, working with businesses, indigenous communities and small landowners promoting eco-business.</td>
<td>Design and development of the project. Responsible for validation and verification of the project. Leading social and assist technically and economically to the native community of Infierno, for compliance REDD+ project.</td>
</tr>
</tbody>
</table>
III. SECTION CLIMATE

To determine the carbon stock in the project area and leakage belt, the procedure defined in the Approved VCS Methodology VM0007 Version 1.0 REDD Methodology Modules (REDD Methodology Modules) was followed.

The modules used were:

- REDD Methodological Module “REDD Methodological Framework” (REDD -MF)
- Module VCS VMD0016 "Methods for stratification of the project area” (X -STR)
- Module VCS VMD0001 "Estimation of carbon stored in above and below ground biomass of trees reservoirs and non- living trees” (CP- AB)

For quantification of emissions in the project area has considered only the emissions from the loss of aboveground and belowground biomass caused by the removal of forest cover. No other reservoirs were included as dead wood, litter, soil organic carbon and wood products.

The inventory conducted for determining carbon stock was exploratory, using a fusion of forest inventory methodologies employed by AIDER and standard operating procedures for the measurement of carbon developed by Winrock International. The fusion includes AIDER experience acquired in the implementation of forest inventories in the Ucayali region in the years 2000 to 2002 using the methodology Malleux (1982). This experience incorporate Winrock Int procedures (Walker et al. 2007) that set of nested circular sample plots.

The methodology of the inventory conducted in the project area was exploratory, with a design of optimal stratified sampling, with samples randomly distributed vegetation types identified in the project area. For more details see (VCS VMD0001 "Estimation of carbon stored in aboveground and belowground biomass ” CP- AB)

The estimation of carbon stock was made for air reservoirs and underground reservoir:
7,749.94 hectares of the project area REDD stored a total of 1,165,855.52 tons of carbon was determined, which is equivalent to 4,274,803.58 tnCO2-e for the entire project area.

The leakage belt has an area of 9,357.63 hectare storing total carbon tons 1,193,441.10, which represent 4,375,950.72 tCO2-e for all the leakage belt area.

Map 04. Carbon content in the project area and leakage belt

IV. COMMUNITY SECTION

In the case of Infierno Community are 02 levels of land use rights the family level and community level.

The family level is made up of individual properties that the community give to families. The properties have an average area of 30 hectares given to 115 families, which total 3,359.53 hectares under this level of use. Families are more autonomous ground for decision at this level.

A community level although there is no clear zoning and approved socioeconomic diagnosis identifies an implicit community zoning, which somehow make a way how the community access to natural resources.
Different social groups have sectioned the Infierno community since its beginning due to the process of occupation.

The population is divided into three sectors.

**Table N°03: Implicit Zoning in Infierno Native Community**

<table>
<thead>
<tr>
<th>Type of Zoning</th>
<th>Characteristics and purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communal forest reserve Zoning</td>
<td>Approximately 1436 ha. In this area are located the Hostel Posada Amazonas and Nape Center. But there is a debate. Prohibition wildlife, wood, fruits, building materials extraction, farming and housing.</td>
</tr>
<tr>
<td>“Empty”, “free” Zoning or communal use</td>
<td>Areas outside the family plots and the communal reserve. They are areas away from the river bank.</td>
</tr>
<tr>
<td>Extracommunal Zoning</td>
<td>In the past, the community was territory of the Ese Eja population. It continued to be used after the community formation. There are family Brazilian nuts forests.</td>
</tr>
</tbody>
</table>

Source: AIDER. 2011. Socio economic diagnosis of CN Infierno

According to the socio economic study, Infierno families have quite diversified production systems where slash and burn agriculture is the core business and develop other activities such as: fruit production, raising poultry, livestock, mining products forest (wood, palm leaves), hunting, fishing, wage labor and ecotourism activities through partnership with the company Rainforest Expeditions, the communal enterprise Bahuaja Expeditions or those of family character.

48% of the expenditure incurred by households is spent on food. The ranges of the actual expenditures that represent the basic basket of the families of the community ranging from 400 (four hundred) soles monthly to over 2000 (two thousand) soles per month. Which shows the inside of the distinct levels between community economic development.
V. SECTION BIODIVERSITY

The project area has representative ecosystems of the Amazon Subtropical Biogeographic Province; corresponds to the wet land forest ecoregion of southwestern Amazonia and according to the ecological map of Peru (INRENA, 1994), corresponds to the living area subtropical humid forest (bh-S).

Regarding species diversity, from different research conducted in the Infierno community by different institutions such as Conservation International, Frankfurt Zoological Society, Rainforest Expeditions, AIDER, among others, at the level of biodiversity inventories and management documents as management plans, there have been a total of 770 animal species, 21 of amphibians 678 birds, 52 mammals and 19 reptiles. With regard to vegetation, have reported 213 species of flora, mainly arboreal.

The project area provides habitat that favor the development of several species, the same species that have suffered hunting pressure by the residents of the community that develops this activity ancestrally. The species mostly hunted are deer (Mazama americana), peccaries (Tayassu tajacu) and peccary (Tayassu pecari). This activity is performed for the purpose of consumption.

Also in Tres Chimabadas lakes can be found rivers Wolves (Pteronura brasiliensis) the same as in the 50s suffered a high hunting pressure by the value of their skins. Big cats like the jaguar (Panthera onca) and Leopardus pardalis and Leopardus wiedii were also recorded.

The flora also has a pressure resulting from the use by the villagers, mainly (Bertholletia excelsa), mahogany (Swietenia macrophylla), shiringa (Hevea brasiliensis) and palm (Mauritia flexuosa).

In the case of plant species for the project area. We found 16 species of endangered status. The criteria for this classification are: i) Supreme Decree 043 of the Ministry of Agriculture, ii) The IUCN Red list of Threatened Species (IUCN), iii) Convention of International Trade in Endangered Species of Wild Fauna and Flora (CITES)

In the case of wildlife species for the project area there are 136 species in threatened status including birds, mammals and amphibians The criteria for this classification are: i) Supreme Decree 043 of the Ministry of Agriculture, ii) The IUCN Red list of Threatened Species (IUCN), iii) Convention of International Trade in Endangered Species of Wild Fauna and Flora (CITES)
Photo N° 01. Family of Otters (Pteronura brasiliensis) in Tres chimbadas lake.

Photo N° 02. Specialist social AIDER interviewing villager from Sector Hell Beautiful Big on productive activities
VI. EMISSION REDUCTION STRATEGY

For a better analysis of threats and potentialities to consider in the REDD strategy we have identified the key actors, types of threats, existing economic activities, population, more frequent social and environmental offenses, granted rights, control and surveillance. With these criteria were identified vulnerable areas, including:

- logging area
- Area utilization aguaje
- Conservation Area
- Protection zone
- Agricultural production area
- Area urban sprawl
- Grant ecotourism

Map N° 05. Map of the vulnerable areas identified

The strategy for reducing emissions from deforestation and forest degradation has 05 strategic results. The budget for implementation is U.S. $ 596,000.00 for the first 05 years. The following table is a summary by Strategic Outcome
Table N°04: REDD Strategy of Infierno Native Community

<table>
<thead>
<tr>
<th>Code</th>
<th>Strategic Result</th>
<th>Amount (US $)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1.</td>
<td>Productive activities in Ese Eja Infierno native community are conducted by community sustainability criteria (economic, environmental and social) and minimizing leakage attributable to the REDD project.</td>
<td>146,000.00</td>
<td>31</td>
</tr>
<tr>
<td>R2.</td>
<td>The operational capacity of Infierno native community for community control and surveillance is improved.</td>
<td>129,000.00</td>
<td>28</td>
</tr>
<tr>
<td>R3.</td>
<td>Infierno native community communards have improved their capacities for governance and biodiversity conservation.</td>
<td>108,000.00</td>
<td>23</td>
</tr>
<tr>
<td>R4.</td>
<td>A communication strategy developed in a participatory way, about ecosystem services, conservation and management of forests in the native community is implemented.</td>
<td>30,000.00</td>
<td>6</td>
</tr>
<tr>
<td>R5.</td>
<td>Conservation Agreements have been established with local populations settled in the leakage belt of Infierno native community.</td>
<td>54,000.00</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>467,000.00</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>