The Envira Amazonia Project

A Tropical Forest Conservation Project in Acre, Brazil

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A Climate, Community and Biodiversity Standard Project Design Document
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I. Project Name: The Envira Amazonia Project

II. Project Location: Near city of Feijó, State of Acre, Brazil

III. Project Proponent: CarbonCo, LLC is the lead Project Proponent, along with Carbon Securities and JR Agropecuária e Empreendimentos EIRELI. CarbonCo's contact and address is:

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IV. Auditor: Environmental, Services Inc. (ESI) is the auditor. ESI's contact and address is:

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V. Project State Date, GHG Accounting Period, and Project Lifetime: The Project Start Date is August 2, 2012 with a 10 year GHG Accounting Period and the Project Lifetime is 60 years.

VI. Full or Gap Validation: This CCBS Project Design Document relates to full validation.

VII. History of CCB Status: This is the initial CCBS Project Design Document submitted for validation.

VIII. Edition of CCB Standard Being Used: Third Edition

IX. Summary of Expected Climate, Community and Biodiversity Benefits: The Envira Amazonia Project shall reduce deforestation and mitigate the associated greenhouse gas emissions, directly benefit local communities through various projects and programs such as commercializing the collection of medicinal plants and granting land tenure, and the Project shall conserve the Project Area's rich tropical biodiversity.

X. Gold Level Criteria Being Used and Summary of Gold Level Attributes: The Envira Amazonia Project is seeking Gold Level for climate adaptation, along with Gold Level for exceptional community and biodiversity benefits. The Project shall incorporate climate adaptation measures, promote a pro-poor initiative, and conserve several vulnerable tree species along with numerous endemic bird species.

XI. Date of Completion of this Version and Version Number: This version, Version 1.0, was completed on October 10, 2014.

XII. Expected Schedule for Verification: The Envira Amazonia Project will likely be verified on an annual or biennial basis starting in 2015.

INTRODUCTION

The Envira Amazonia Project ("Project") is a payment for ecosystem services forest conservation project, otherwise known as a Reducing Emissions from Deforestation and forest Degradation (REDD+) project, on 39,300.6 hectares or approximately 97,072.5 acres of privately-owned land in Acre, Brazil.[1] The total property is 200,000 hectares or approximately 494,000 acres and the Project shall seek to conserve the entire property, but the Project activities will specifically focus on the subset Project Area of 39,300.6 hectares.

The three main Project Proponents are CarbonCo, LLC ("CarbonCo"), Freitas International Group, LLC ("Freitas International Group or Carbon Securities"), and JR Agropecuária e Empreendimentos EIRELI. CarbonCo, the wholly-owned subsidiary of Carbonfund.org, is responsible for getting the Project certified and for early-stage Project finance. Carbon Securities acts as a liaison between CarbonCo and JR Agropecuária e Empreendimentos EIRELI, along with acting as a translator and assisting with logistics for site visits. JR Agropecuária e Empreendimentos EIRELI, which translates into JR Agriculture-Livestock and Ventures, is an Acre, Brazil-based company and is primarily responsible for day-to-day management of the Project and the implementation of activities to mitigate deforestation.

The ultimate project activities are to undertake a forest carbon inventory, model regional deforestation and land-use patterns, and mitigate deforestation pressures by utilizing payments for the Project's ecosystem services, along with ongoing monitoring of the climate, community and biodiversity impacts of the Project. In addition to voluntarily foregoing plans to convert the forests to a large-scale cattle ranch, JR Agropecuária e Empreendimentos EIRELI will also implement numerous activities to assist local communities and mitigate deforestation pressures such as: offering agricultural extension training courses; beginning patrols of potential deforestation sites in the early stages of the Project; granting land tenure to local communities; and establishing alternative economic activities including commercializing the collection of medicinal plants and açaí.

The Project is being developed and registered under the Climate, Community and Biodiversity Standard (CCBS, Third Edition) and the Verified Carbon Standard (VCS, Version 3.4). Furthermore, the Project is aligned with the REDD+ Social and Environmental Standards and the State of Acre's Payment for Ecosystem Services (Law # 2.308/2010).

Please contact Brian McFarland of CarbonCo, LLC with any questions, comments or concerns regarding the Envira Amazonia Project 1-240-595-6883 or via email at BMcFarland@CarbonCoLLC.com.

[1] The Term REDD and REDD+ will be used interchangeably. REDD+ includes REDD along with forest conservation, sustainable forest management and the enhancement of carbon stocks. Thus, the Russas Project includes elements of forest conservation, sustainable forest management and reforestation.

GENERAL SECTION

G1. Project Goals, Design and Long-Term Viability

The Envira Amazonia Project has clearly-defined objectives to generate net positive climate, community and biodiversity benefits throughout the Project Zone and over the Project Lifetime. Potential project risks, including natural, anthropogenic and project-level risks, have been identified and shall be both monitored and managed to ensure ongoing net positive benefits.

Project Overview

Project Proponents

The three main Project Proponents are CarbonCo, LLC ("CarbonCo"), Freitas International Group, LLC ("Freitas International Group or Carbon Securities"), and JR Agropecuária e Empreendimentos EIRELI. CarbonCo, the wholly-owned subsidiary of Carbonfund.org, is responsible for getting the Project certified and for early-stage Project finance. Carbon Securities acts as a liaison between CarbonCo and JR Agropecuária e Empreendimentos EIRELI, along with acting as a translator and assisting with logistics for site visits. JR Agropecuária e Empreendimentos EIRELI is an Acre, Brazil-based company and is primarily responsible for day-to-day management of the Project and the implementation of activities to mitigate deforestation.

The Primary Project Proponent is CarbonCo and CarbonCo's contact information is as follows:

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Project's Climate, Community and Biodiversity Objectives

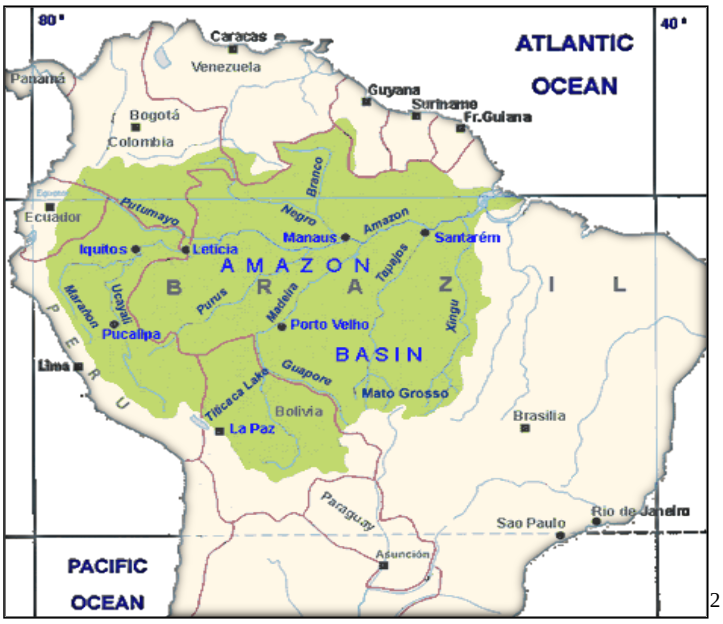
The overarching objective of the Project is to generate sustainable economic opportunities for the local communities and to implement social projects, while mitigating deforestation (i.e., which results in less greenhouse gas emissions) and preserving the tropical rainforest habitat for the Project's rich biodiversity.

By voluntarily foregoing plans to convert the forests to a large-scale cattle ranch and by mitigating local deforestation pressures, payments for ecosystem services will be generated which will enable the implementation of on-the-ground social projects and the creation of economic opportunities for the local communities. Similarly, by improving local livelihoods and creating alternative economic opportunities, there will be less pressure on the forests and a reduction in deforestation. Improving local livelihoods and reducing deforestation are key mechanisms, in addition to the landowners' willingness to forego forest conversion, to preserve the Project's tropical rainforest habitat and its biodiversity.

Project Location and Parameters

The Amazon Basin is approximately 1.4 to 2.3 million square miles and its extensive watersheds – consisting of nearly 363 to 596 million hectares – cover the eight countries of Brazil, Bolivia,

Peru, Ecuador, Columbia, Venezuela, Guyana, and Suriname; 60% of which is considered Brazilian territory. The Legal Amazon of Brazil covers the states of Acre, Amapá, Amazonas, Maranhão, Mato Grosso, Pará, Rondônia, Roraima and Tocantins.



[2]

The following political map is the State of Acre which borders the Brazilian state of Amazonas along with the countries of Peru and Bolivia:[3]

[2] Federation of American Scientists, "Amazon Basin," Available: http://www.fas.org/irp/imint/docs/rst/Sect6/amazon_map01.jpg
[3] V-Brazil.com, "Map of Acre, Brazil," Available: http://www.v-brazil.com/tourism/acre/map-acre.html

More specifically, the Envira Amazonia Project is located in Acre, Brazil and approximately 40 kilometers ("as the crow flies") from the city of Feijó. The entire 200,000 hectare property is located from the Envira River, crosses over the Jurupari River, and stops at the Purus River. To reach the Project Area along with Jurupari River (pictured below), one would drive South from Feijó to Rio Branco for approximately 82 kilometers, then turn right off of the BR-364 Highway, and there is an Ramal approximately 5 kilometers long to the Project Area.

Map 1: Envira Amazonia Project Area (Credit: TerraCarbon)

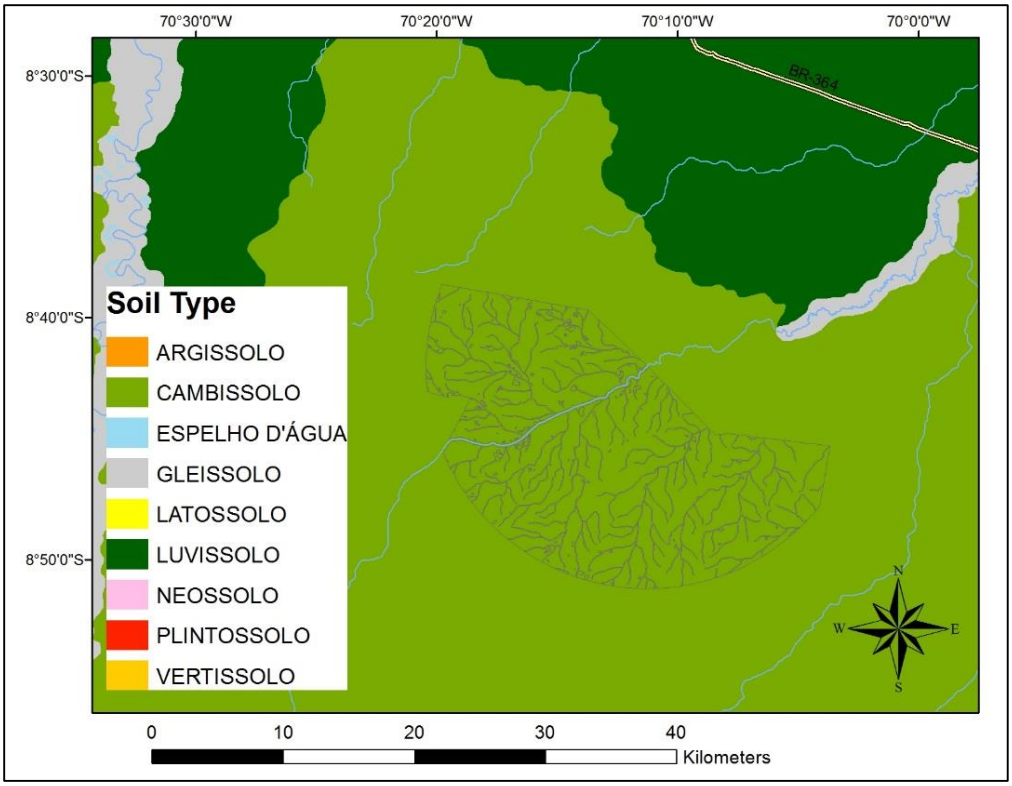
Basic Physical Parameters

The following section will provide the basic soil, topography, climate, temperature, and precipitation, along with the vegetation and forest types of the Envira Amazonia Project.

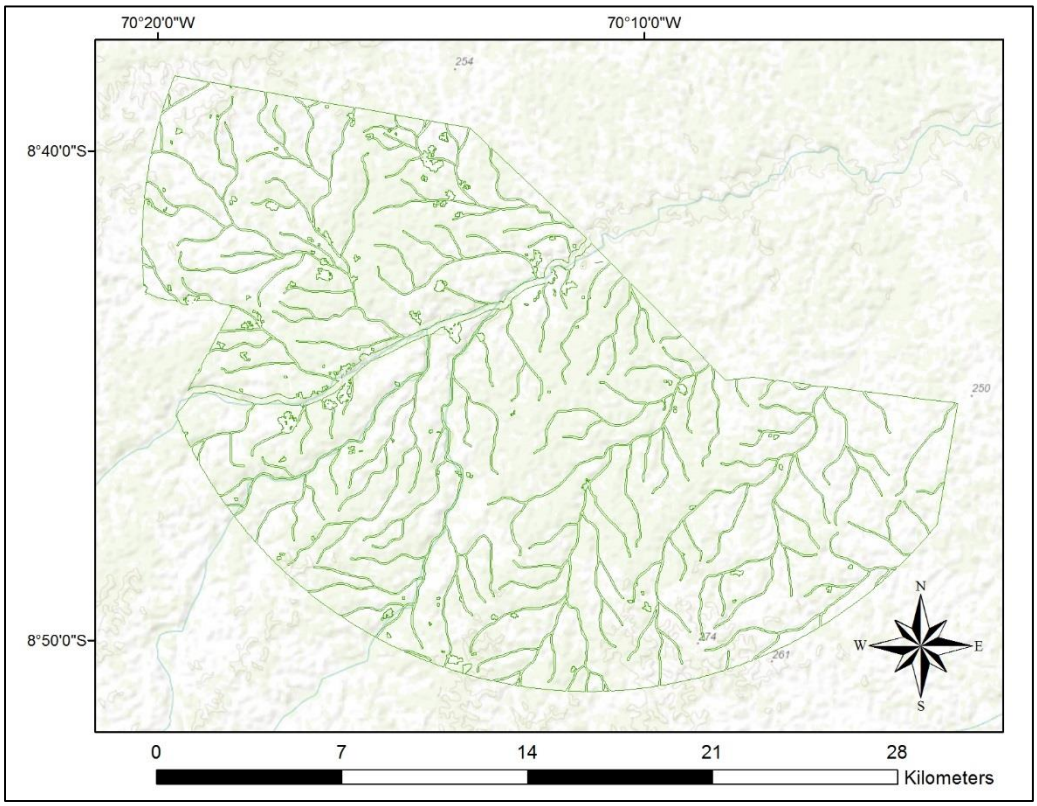
Soil and Topography

The following two maps display the soil and elevation throughout the Project Zone of the Envira Amazonia Project. The region is dominated by eutrophic Cambisols. These moderately drained soils are generally shallow and highly susceptible to erosion.

The topography of the Project Zone is relatively flat, with no elevation over 500 meters.



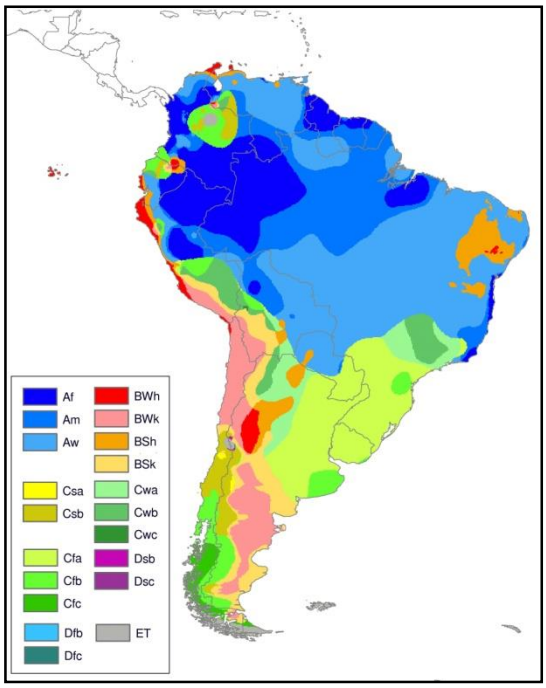
Map 2: Soils throughout Project Area (Credit: TerraCarbon)



Map 3: Topography throughout Project Area (Credit: TerraCarbon)

Climate, Temperature and Precipitation

According to the State Government of Acre, the average annual temperatures in Acre range between 24.5°C and 32°C (i.e., approximately 76° - 90°F), with a pronounced dry and rainy season. The dry season lasts from May through October, while the rainy season lasts from November until April. In addition, the relative "humidity reaches 90%, a rate very high, compared to other Brazilian regions," and the annual rainfall ranges from 1,600 – 2,750 millimeters (approximately 63 – 108 inches).[4] Furthermore, the Köppen classification for Acre and particularly for the Envira Amazonia Project is tropical:



[5]

Types and Condition of Vegetation and Forest

As one of the world's most biologically diverse places on Earth, the Amazon Basin has ecosystems ranging from dense, tropical lowland rainforests and the slopes of the Andes Mountains, to open savannahs and mangrove swamps.

The five main forest classifications in Acre – which cover nearly 72% of the State – are:

- Open forest with bamboo + open forest with palms (40,546 km^2 or 24.69% of State)
- Open forest with palms + open forest with bamboo (22,416 km^2 or 13.65%)
- Open forest with palms + open forests with bamboo + dense forest (21,579 km^2 or 13.14%)
- Open forest with palms + dense forest (16,964 km^2 or 10.33%)
- Open forest with bamboo (16,455 km^2 or 10.02%)

[4] State Government of Acre Portal, "Geographic Data,"

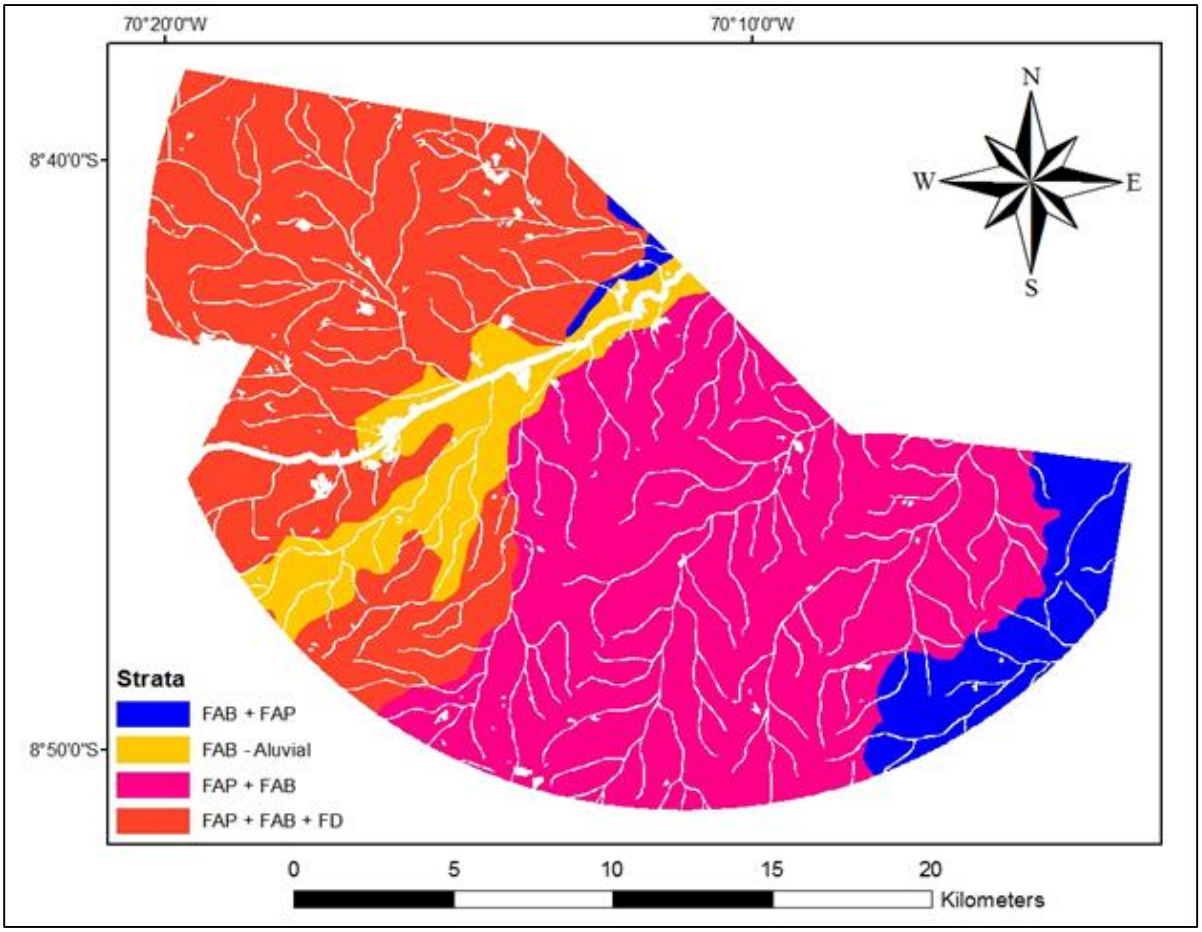
[5] Peel MC, Finlayson BL & McMahon TA (2007), Updated world map of the Köppen-Geiger climate classification, Hydrol. Earth Syst. Sci., 11, 1633-1644.

With respect to these five forest classifications, it is important to note that "the order of typology determines that the first typology is more predominant than the following ones."[6]

Similarly, the Envira Amazonia Project consists of the following four vegetative strata:

Stratum	Stratum Description	Area (Hectares)
FAB + FAP	Open bamboo forest with palm	2,914.6
FAB - Aluvial	Open aluvial forest with bamboo	3,280.9
FAP + FAB	Open palm forest with bamboo	18,305.5
FAP + FAB + FD	Open forest with bamboo and palm and dense forest	14,799.6

Figure 1: Vegetative Strata at Envira Amazonia Project (Credit: TerraCarbon and TECMAN)



Map 4: Vegetative Strata of Envira Amazonia Project (Credit: TerraCarbon)

The forests within the Project Area are primary, tropical forests.

[6] State of Acre and GCF, "Acre GCF Database," Available: http://www.gcftaskforce.org/documents/Final_db_versions/GCF%20Acre%20Database%20(November%202010).pdf, Page 1

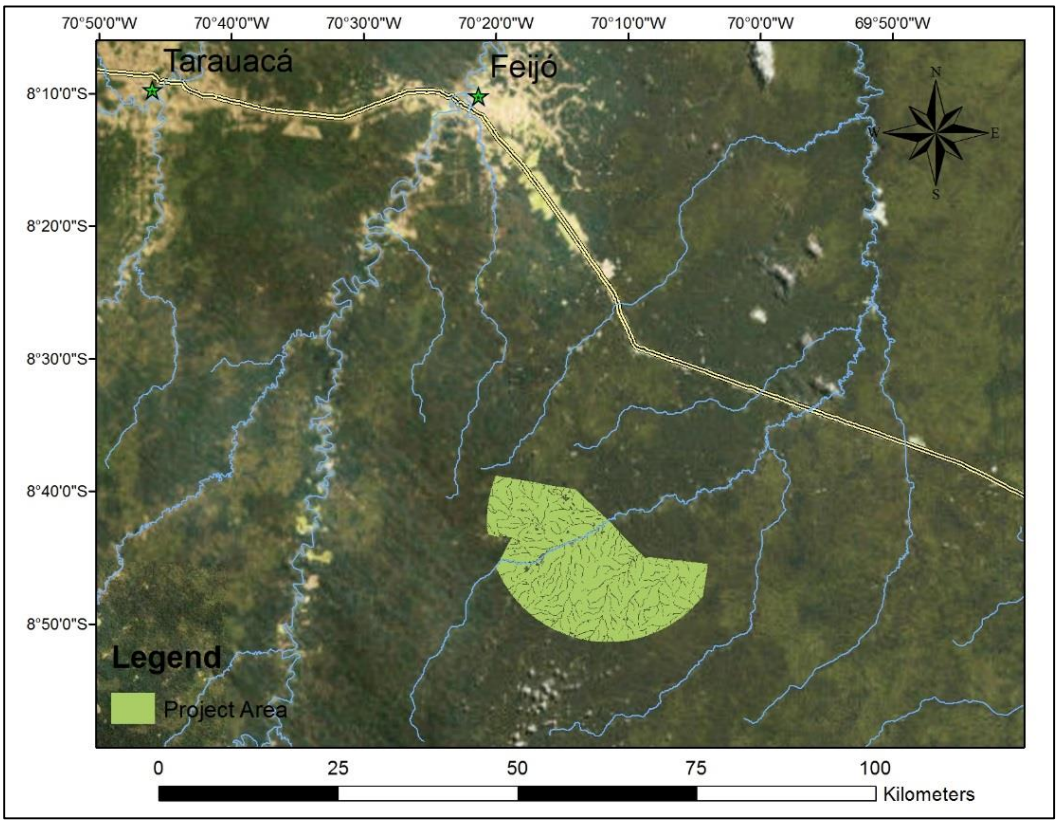
Basic Social Parameters

The families living within the Project Zone, along with the Other Stakeholders on the Envira River, are riverine communities and the majority of the families are former extractivists (i.e., rubber tappers). The Project Zone includes a balance of men and women, with generations of children, parents, and grandparents. All of the families within the Project Zone practice subsistence agriculture, most of the families raise cattle, and many families also raise small animals such as pigs, chickens and ducks. While no communities reported selling timber, many communities utilize charcoal or propane gas for cooking. Many of the families fish in the Jurupari River or in nearby oxbow lakes, and many also hunt within the forests of the Project Zone. Boats, and especially wooden canoes, are a very important mode of transportation for families living throughout the Project Zone. In addition to being former rubber tappers, the local community's ethnicity is further characterized by their Brazilian nationality and a common language (Portuguese), along with shared religious beliefs (Christianity) and customs such as playing soccer, hunting, and agriculture.

Project Design and Boundaries

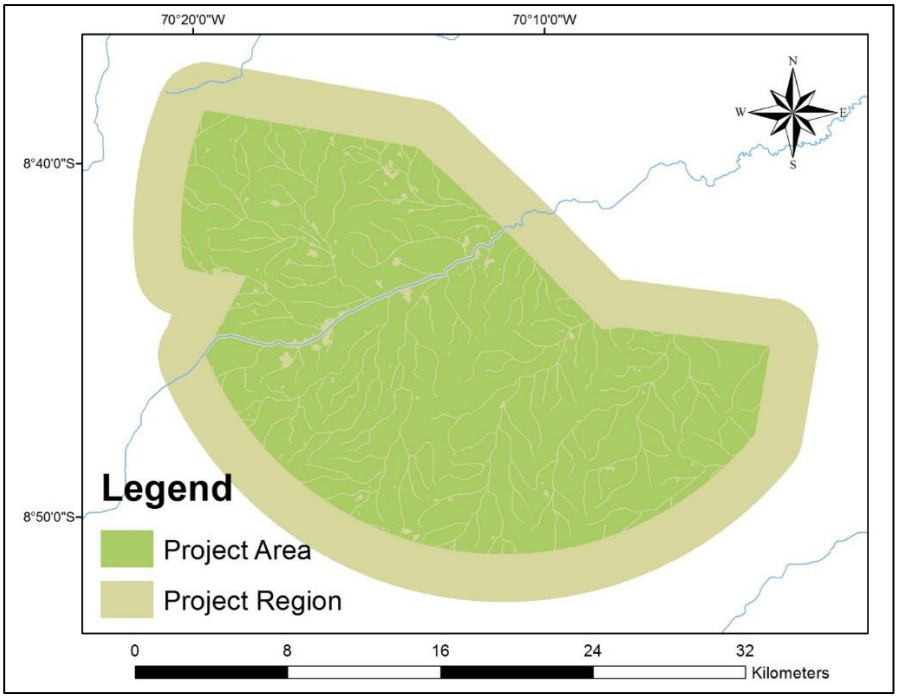
Project Area and Project Zone

The Envira Amazonia's Project Area, which is where project activities shall aim to generate net positive climate benefits by reducing deforestation, is approximately 39,300.602 hectares and located alongside the Jurupari River.



Map 5: Project Area of Envira Amazonia Project (Credit: TerraCarbon)

The Envira Amazonia's Project Zone ("Project Region"), which is where project activities will also be implemented and which shall have an impact on the both the land and community's resources, encompasses the Project Area.



Map 6: Project Area and Project Zone ("Project Region") (Credit: TerraCarbon)

Although outside the Project Zone, the Project Proponents shall also implement project activities throughout the remaining 200,000 hectares and especially with the Other Stakeholders on the Envira River.

Stakeholder Identification and Analysis

The Project Proponents conducted an extensive stakeholder identification and stakeholder engagement or involvement process. For a comprehensive list of the Envira Amazonia Project's stakeholders, please refer *to Appendix C, Stakeholder Identification.*

Stakeholders were primarily analyzed based off their influence and importance, along with their rights, interests and relevance to the Project.

Influence of Stakeholder	**Importance of Stakeholder to Project Achievement**				
	Unknown	**Low**	**Moderate**	**Significant**	**Critical**
Low	Other	Other	Other	Secondary	Secondary
Moderate	Other	Other	Other	Secondary	Secondary
Significant	Secondary	Secondary	Secondary	Secondary	Secondary
Highly Influential	Secondary	Secondary	Secondary	Secondary	Primary

Figure 2, Stakeholder Analysis (Credit: CARE 2002)[7]

[7] CARE (2002), Annex XIV contains guidance on stakeholder analysis in project design: http://www.proventionconsortium.org/themes/default/pdfs/CRA/HLSA2002_meth.pdf

Stakeholders were then categorized according to: Project Proponents, Community and Primary Stakeholders; Secondary Stakeholders; and Other Stakeholders.

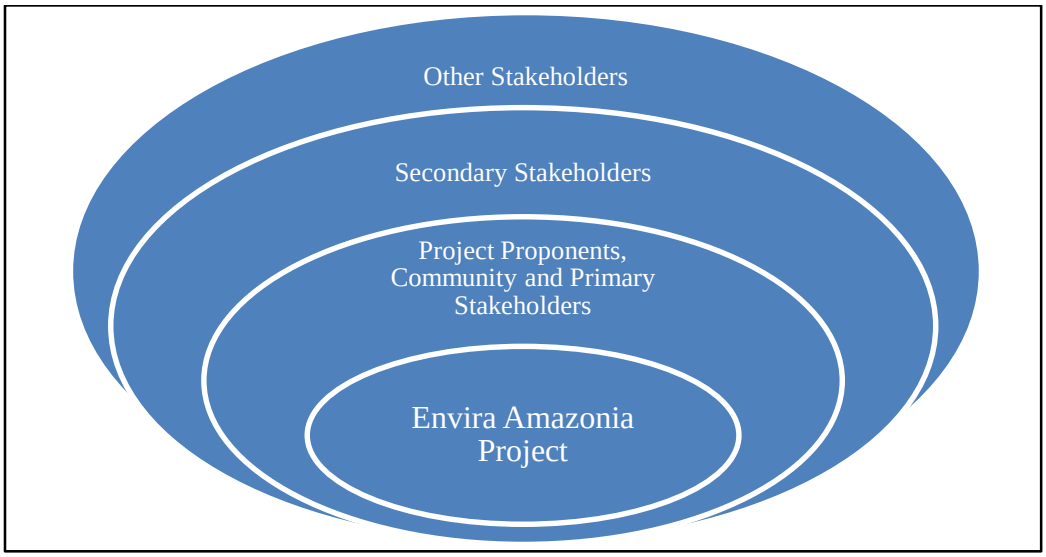


Figure 3: Stakeholder Map

Communities, Community Groups and Other Stakeholders
The following stakeholders, considered primary and secondary stakeholders, were identified and were involved in project design to optimize climate, community and biodiversity benefits while ensuring the Envira Amazonia Project was properly aligned with the State of Acre.

Consultations with all stakeholders, but especially these following stakeholders, shall continue throughout the Project Lifetime:

- JR Agropecuária e Empreendimentos EIRELI
- Families living within the Envira Amazonia Project Zone
- Carbonfund.org Foundation, Inc. and CarbonCo, LLC
- Freitas Group International LLC and Carbon Securities
- TerraCarbon
- TECMAN LTDA
- Professor Antonio Willian Flores de Melo of UFAC
- Ayri Saraiva Rando
- Landowners and families living around the Envira Amazonia Project
- State of Acre, particularly the Climate Change Institute of Acre (IMC)
- State of California, including the California Air Resources Board (ARB) and REDD Offset Working Group (ROW), along with the Governors' Climate and Forest Task Force
- Environmental Services, Inc. (ESI), the Project Auditor
- Verified Carbon Standard Association
- Climate, Community and Biodiversity Alliance

It is important to note that the Project Proponents used socially and culturally appropriate methods for stakeholder consultations and these stakeholder consultations were inclusive of

gender, inter-generations, and language. High Conservation Values were also respected, along with local customs and values. In addition, meetings often took place at the most convenient locations (for example, at the families' homes instead of in Rio Branco) for stakeholders.

A brief summary of project meetings and stakeholder comments have been provided below. Additional information on these meetings can be found in the document "Envira Amazonia Project Meeting Notes" as found in the project database.

March 9-18, 2011 - CarbonCo, Carbon Securities and TerraCarbon traveled to Acre, Brazil to better understand how to implement REDD+ projects in Acre, Brazil. A few key milestones included:

- CarbonCo, Carbon Securities and TerraCarbon held initial meetings with PESACRE (Grupo de Pesquisa e Extensão em Sistemas Agroflorestais do Acre), IPAM (Instituto de Pesquisa Ambiental da Amazônia), FUNTAC (Fundacao de Tecnologia do Estado do Acre), and SISA (System of Incentives for Environmental Services) to gain an understanding of the agents and drivers of deforestation in Acre state, how forest biomass stocks vary across the state, and local REDD+ and forest conservation initiatives;
- Carbon Securities and TerraCarbon met with Acre State Officials, including Monica Julissa De Los Rios de Leal and Eufran Amaral, on Friday, March 18th.
- The Purus Project's design, which would later influence how the Envira Amazonia Project was designed, was revised based off this initial site visit in March 2011. For example, the Project Proponents: began to design the Project around the identified drivers and agents of deforestation (i.e., selection of appropriate VCS methodology); chose the source of satellite imagery (i.e., FUNTAC/Climate Change Institute); and began a close, consultative relationship with the State of Acre.

August 9-18, 2011 - CarbonCo, Carbon Securities, and TerraCarbon visited Rio Branco. A few key milestones included:

- TerraCarbon led a classroom forest carbon inventory training for TECMAN field crew for the Purus Project. TECMAN would later be hired for the Envira Amazonia Project.
- CarbonCo, Carbon Securities, TerraCarbon, and TECMAN met with Acre State officials, including Monica Julissa De Los Rios de Leal and Lucio Flavio, to discuss how to best design the forest carbon inventory to align with the State of Acre's goals and future forest inventory plans. The Project's forest carbon inventory design (for example, the size of each plot and the plot design) was revised based off the State of Acre and TECMAN's input;
- CarbonCo, Carbon Securities, and TerraCarbon visited the Purus Project to train TECMAN's field crew in forest inventory practices and standard operating procedures, which would later be used during the Envira Amazonia Project's forest carbon inventory.
- CarbonCo, Carbon Securities, and TerraCarbon met with Willian Flores to discuss the VCS methodology, VM0007 REDD Methodology Modules, applicable to modeling regional deforestation. Willian Flores would later be contracted for assistance with the Envira Amazonia Project.
- CarbonCo, Carbon Securities, TerraCarbon, and Willian Flores met with Acre State officials, including Monica Julissa De Los Rios de Leal, Eufran Amaral and Lucio Flavio on Tuesday, August 9th to discuss how to best develop the project-level baseline; how

private projects will nest with a forthcoming state-level baseline; and the type of GIS data available from the State of Acre.

November 21, 2011 – CarbonCo spoke with Shaina Brown, Project Director at the Green Technology Leadership Group and Tony Brunello, the REDD Offset Working (ROW) Group's facilitator to better understand the developments in the State of California and how they relate to the State of Acre.

February 10, 2012 – CarbonCo spoke with Natalie Unterstell, the focal point for REDD+ at Brazil's Federal Ministry of Environment. Discussions were based around:

- The role of Brazil's Federal Government in the REDD+ context; Progress of the Amazon Fund; How States, particularly Acre, might nest into the National Government; How Brazil's domestic cap-and-trade market is shaping up; Market mechanisms and REDD+ as potentially eligible offsets; Where to go for REDD+ information on Federal government updates and how to inform the Government of our Project.

August 2, 2012 – CarbonCo, Carbon Securities and JR Agropecuária e Empreendimentos EIRELI signed Tri-Party Agreement

April 5, 2013 - CarbonCo, Carbon Securities, and Ilderlei Souza Rodrigues Cordeiro (owner of Russas Project) met again with Eufran Amaral from the Climate Change Institute to give an update on all the Projects, including informing about moving forward with the Envira Amazonia Project, and received updates on the work of the Climate Change Institute.

April 30, 2013 – CarbonCo held another call with Natalie Unterstell of Brazil's Ministry of Environment to update her that the Purus Project became the first dual VCS-CCBS validated REDD+ Project in Acre and that the Envira Amazonia Project would undergo VCS-CCBS validation later in 2014.

January 31, 2014 – Brian McFarland of CarbonCo presented at the Forests as Capital Conference hosted by the Yale School of Forestry & Environmental Studies' Chapter of the International Society of Tropical Foresters. Brian's presentation gave an introduction to CarbonCo, described CarbonCo's Acre REDD+ Projects, and discussed REDD+ and other conservation financing instruments.

May 7-9, 2014 – CarbonCo, Carbon Securities and TerraCarbon met JR Agropecuária e Empreendimentos EIRELI (particularly Duarte Jose do Couto Neto, Fredis C. Vasques and Jose Elves Araruna Sousa) to discuss the VCS Project Description and CCBS Project Design Document. The conversations focused on identifying proxy sites and further refining the proposed project activities.

May 8, 2014 – CarbonCo, Carbon Securities and TerraCarbon met with the Climate Change Institute to give an update on all Acre REDD+ projects, including the Envira Amazonia Project, and received updates on the latest developments at the Climate Change Institute. More specifically, this meeting was with Monica Julissa De Los Rios de Leal and Magaly Medeiros, the new director of the Climate Change Institute.

May 9, 2014 – CarbonCo, Carbon Securities, JR Agropecuária e Empreendimentos EIRELI (particularly Fredis C. Vasques) and TerraCarbon met TECMAN for a classroom training refresher on the Envira Amazonia Project's forest carbon inventory and standard operating procedures.

May 10, 2014 - CarbonCo, Carbon Securities, JR Agropecuária e Empreendimentos EIRELI (particularly Fredis C. Vasques) and TerraCarbon met TECMAN in the field to further refine field techniques for the Envira Amazonia Project's forest carbon inventory and further reviewed the standard operating procedures**.**

May 13, 2014 – CarbonCo and Carbon Securities met Ayri Saraiva Rando to review community surveys and discuss logistics to visit Envira Amazonia Project.

May 13, 2014 – CarbonCo and Carbon Securities met Fronika de Wit to introduce the Project Proponents, gave an overview of all Acre REDD+ projects underway (particularly the Envira Amazonia Project), and discussed how Fronika de Wit might be able to participate in the Project.

May 19, 2014 – Carbon Securities met with Rodrigo Fernandes das Neves, the State Prosecutor, to discuss the Acre REDD+ Projects including the Envira Amazonia Project, and to get an update on the state-level baseline.

May 20-21, 2014 – CarbonCo, Carbon Securities, and JR Agropecuária e Empreendimentos EIRELI met Maron Greenleaf to introduce the Project Proponents, give an overview of all Acre REDD+ projects underway (particularly the Envira Amazonia Project), and discussed Maron Greenleaf's anthropological research in Acre for her PhD at Stanford University.

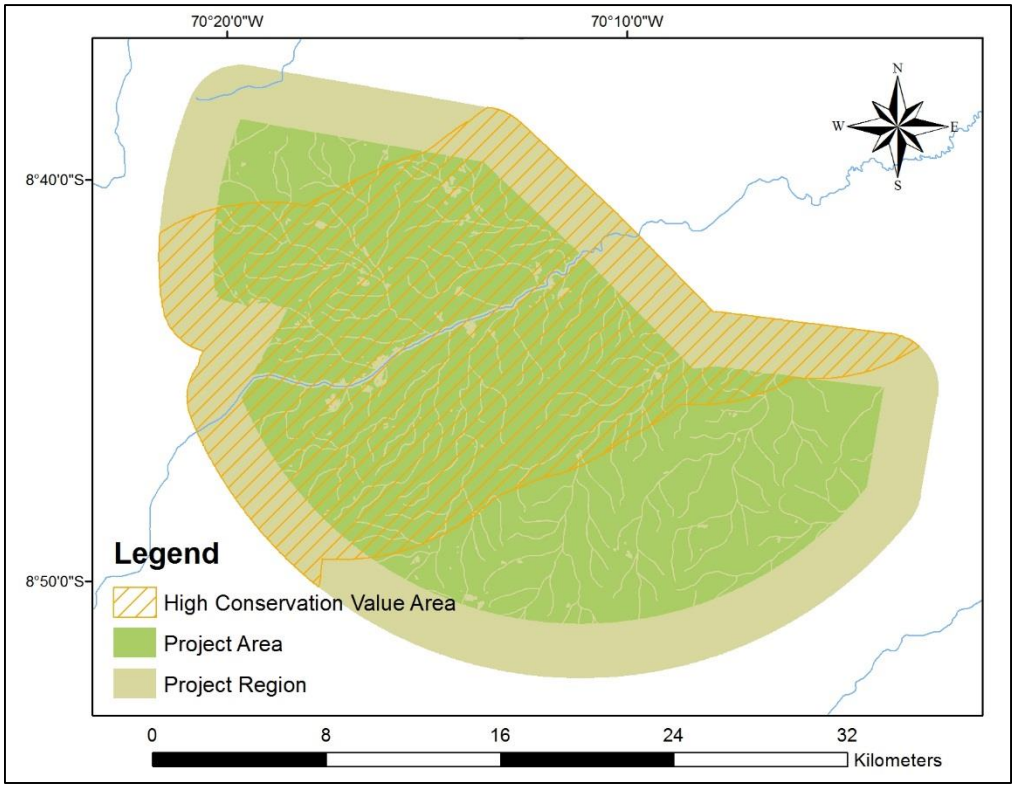
May 20 – June 11, 2014 – Ayri Rando met with a total of 10 families in the Project Zone and 31 families along the Envira River (i.e., outside the Project Zone) to: explain what is REDD+, explain the landowners' proposed activities and explain the overall Project design; discuss the benefits of the Project and listen to the concerns of the local families and listen to the families' anticipated results; inform the families about another visit in October or November to notify them about the CCBS Public Comment Period and another visit in December with an independent auditor; and to conduct research on basic necessities, agricultural needs, and participatory rural appraisals. The Project was significantly revised based off the families' input. For example, the Project was revised by incorporating specific agricultural extension courses, restructuring the Project's implementation schedule, and targeting the needs of women.

June 24, 2014 – Brian McFarland of CarbonCo presented at Ecosystem Marketplace's State of the Voluntary Carbon Market and gave an overview of CarbonCo's work in Acre, Brazil.

August 10-31, 2014: CarbonCo and Carbon Securities contacted several potential contractors to assist the Project Proponents in 2015 with a rapid assessment of endemic and vulnerable bird species throughout the Project Zone. This includes Brazilian biologists Guilherme Serpa, Luiz Henrique Medeiros Borges, Fernando Pacheco, and Tomaz Nascimento de Melo.

September 3, 2014: CarbonCo and TerraCarbon held a call with the VCSA to give an update on the Acre REDD+ Projects, including the Envira Amazonia Project, and discussed the future developments necessary to best position the Acre REDD+ Projects for their potential inclusion in a California compliance carbon market.

Map Identifying Location of Communities and Project
The following map identifies the Project Area, the Project Zone and the locations of High Conservation Value (HCVs) areas.



Map 7: Communities' High Conservation Value Areas (Credit: TerraCarbon)

The communities' HCVs were mapped using a participatory approach. Essentially, a distance of 8 kilometers from the banks of the Jurupari River was determined to be the location of the HCVs which is the area where communities primarily collect food, water, and wood.

Project Activities, Outputs, Outcomes and Impacts
The following section will briefly describe each of the Project's activities and will explain how the activities shall achieve the Project's net positive climate, community and biodiversity benefits by using the Theory of Change causal model.

As noted in the Social Impact Assessment Toolbox, "in simple terms, {the Theory of Change} is a roadmap drawn up by the Project Proponents and stakeholders of how the project plans to get

from Point A (project strategy and activities) to Point Z (project impacts)."[8] Likewise, the Envira Amazonia Project's overall strategies and on-the-ground activities will directly lead to outputs, followed by outcomes, and ultimately by net positive climate, community and biodiversity impacts.[9]

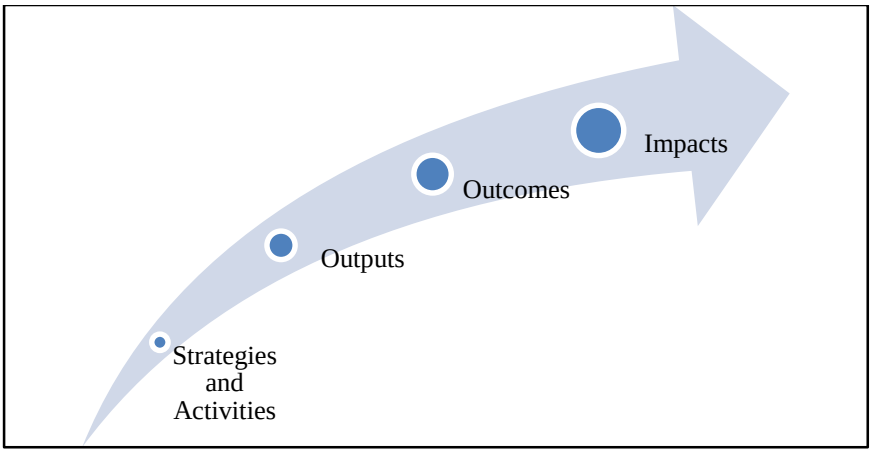


Figure 4: Theory of Change's Progression from Project Strategies and Activities to Impacts

To clearly define activities, outputs, outcomes and impacts, the following definitions were utilized:

"Project *activities* are the physical or implemented activities of the projects.

Project *outputs* are the tangible short-term results of project activities and normally take the form of products or services provided during the project lifetime and as a direct result of project funding.

Project *outcomes* are the direct intended results stemming from the outputs. They are short- and medium term changes experienced by project stakeholders and/or by the physical environment, and are less tangible and easy to measure than outputs.

Project *impacts* are the end results sought by the project, especially as regards net social changes. They may occur as a direct or indirect result of project outcomes."[10]

Climate Project Activities

To achieve the major climate objective of mitigating deforestation and the subsequent release of GHG emissions, the Project Proponents undertook a forest carbon inventory, developed a regional land-use and deforestation model, and are addressing the underlying deforestation drivers to mitigate the release of GHGs with a plan for ongoing monitoring.

[8] Richards, M. and Panfil, S.N. 2011. Social and Biodiversity Impact Assessment (SBIA) Manual for REDD+ Projects: Part 1 – Core Guidance for Project Proponents. Climate, Community & Biodiversity Alliance, Forest Trends, Fauna & Flora International, and Rainforest Alliance. Washington, DC., Page 13.

[9] The linkages between the Envira Amazonia Project's Strategies and Activities, Outputs, Outcomes, and Impacts were conceptualized with assistance from Brigitta Jozan, Independent Advisor

[10] Sources: Based on GEF Evaluation Office and Conservation Development Centre 2009; Schreckenberg et al. 2010.

It is also important to note an additional climate project activity is that JR Agropecuária e Empreendimentos EIRELI has voluntarily foregone plans to convert the forests to a large-scale cattle ranch.

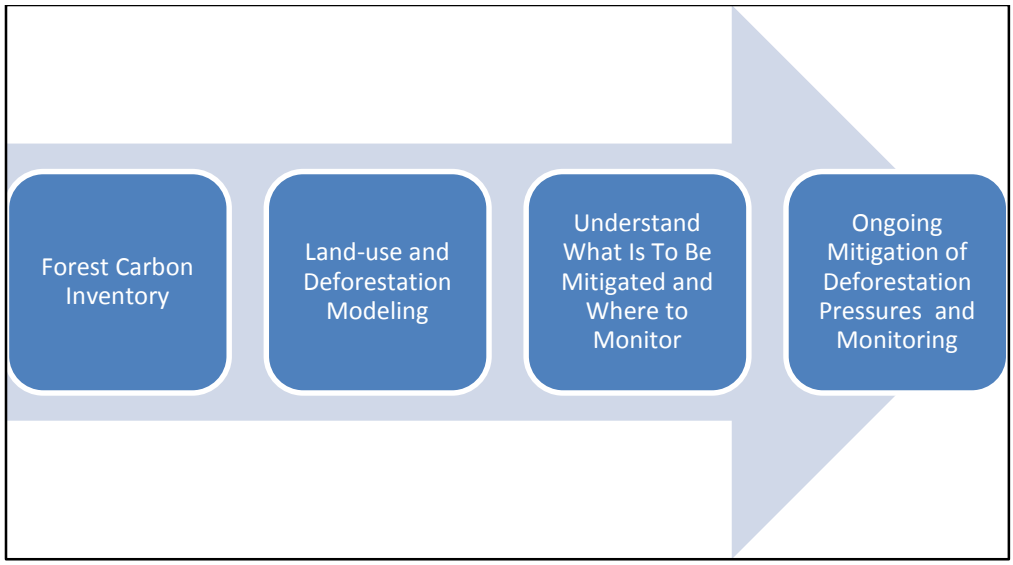


Figure 5: Climate Project Activities

Forest Carbon Inventory

The forest carbon inventory was an important project activity to undertake because it is difficult to manage an objective that is not measured. The forest carbon inventory generated a scientifically robust and statistically accurate representation of the carbon stocks throughout the Project Area of the Envira Amazonia Project. Furthermore, the forest carbon inventory was conducted by the renowned local forestry company TECMAN which is the same firm that conducted the forest carbon inventories at the Russas, Valparaiso and Purus Projects on behalf of CarbonCo. TECMAN's work was overseen by both CarbonCo and the international experts at TerraCarbon. For a more detailed discussion, please see the VCS Project Description.

The following Theory of Change model is for the Envira Amazonia Project's forest carbon inventory.

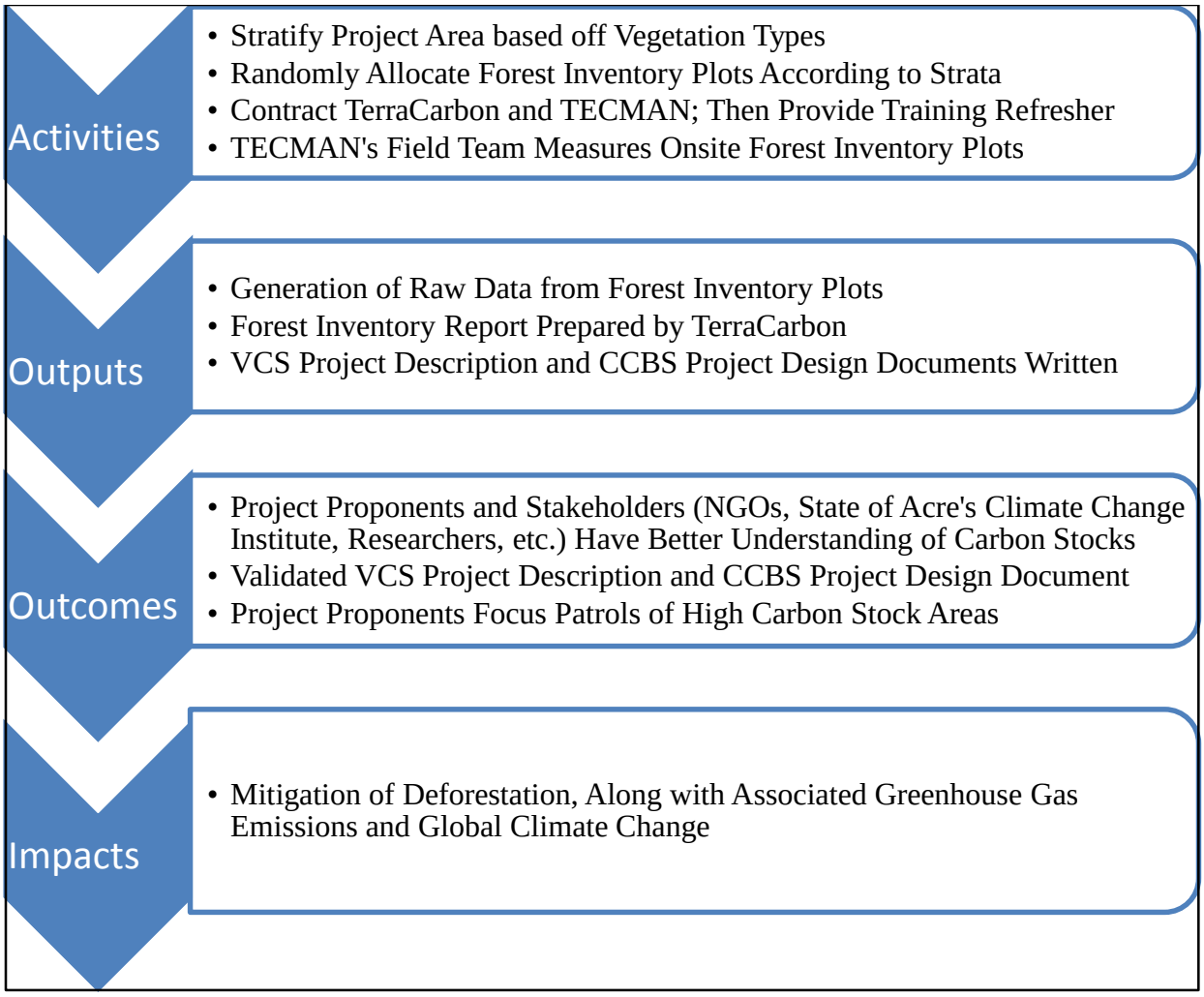


Figure 6: Activities, Outputs, Outcomes and Impacts of Forest Carbon Inventory

Regional Land-use and Deforestation Modeling

Similar to the need for a measurement of carbon stocks, there was a need to develop a regional land-use and deforestation model to determine a performance baseline for the Project Proponents. Using proxy sites, along with satellite imagery and conversations with local communities, the Project Proponents can now predict where (i.e., location), when, and how much deforestation is expected, along with where to assist with leakage mitigation and primarily where to monitor. This regional land-use and deforestation modeling was conducted by TerraCarbon and reviewed by Professor Antonio Flores from the Federal University of Acre. Professor Antonio Flores has provided assistance to CarbonCo's other REDD+ Projects in Acre, including the Russas, Valparaiso and Purus Projects. Again for a more detailed discussion, please see the VCS Project Description.

The following Theory of Change model is for the Envira Amazonia Project's Regional Land-use and Deforestation Modeling.

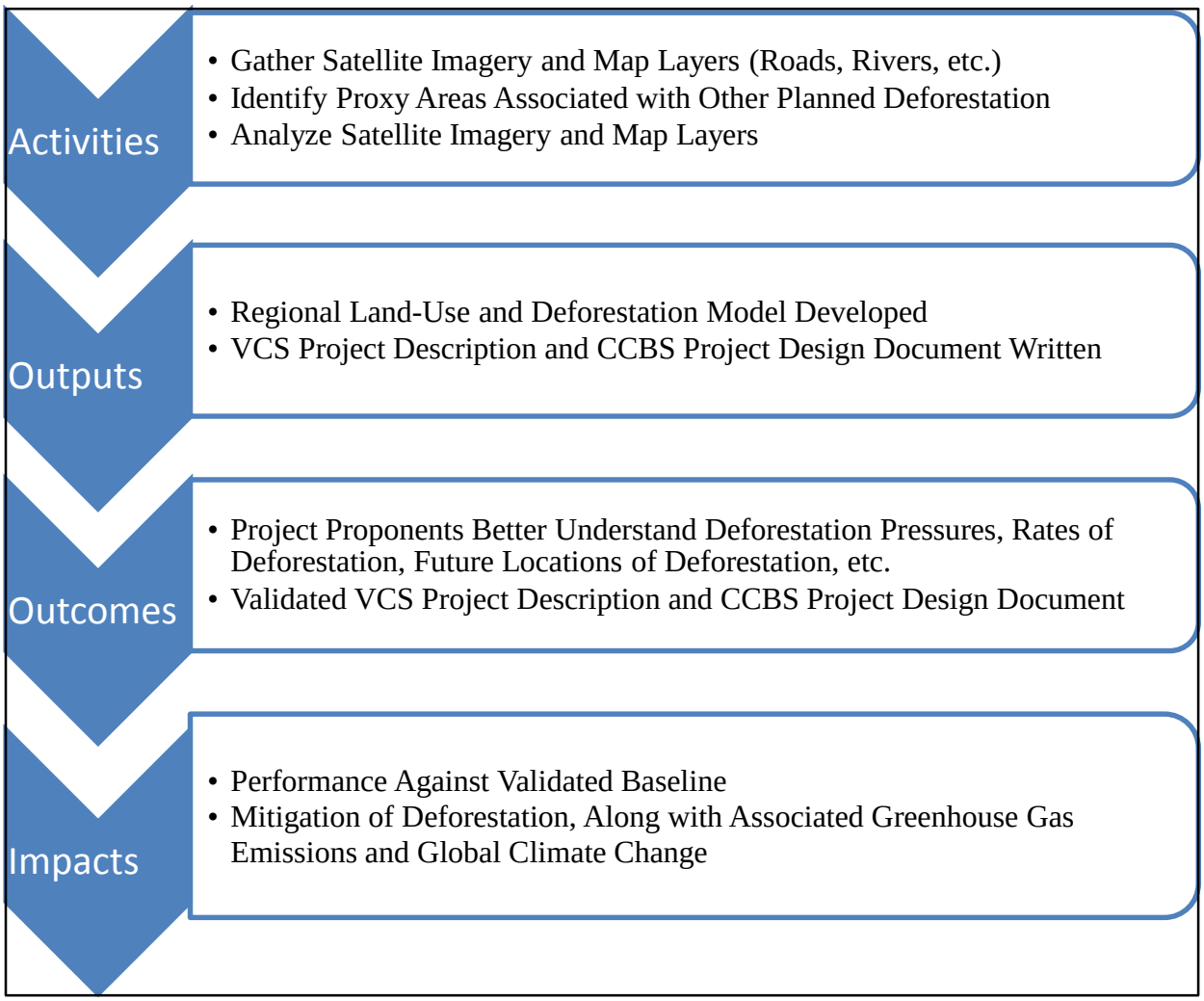


Figure 7: Activities, Outputs, Outcomes and Impacts of Regional Land-Use and Deforestation Modeling

Address Underlying Deforestation Drivers to Mitigate Release of GHGs
While understanding the Envira Amazonia Project's carbon stocks and deforestation scenario, the Project Proponents are now beginning to address the underlying deforestation drivers to mitigate the release of GHGs. In addition to JR Agropecuária e Empreendimentos EIRELI willingly foregoing the conversion of the Project Area's forests to cattle pastures, the Project Proponents will also work with local families to mitigate any unplanned deforestation.

Please see the community section below for the expected outputs, outcomes and impacts of the activities which are aimed at assisting the local communities.

Addressing the underlying deforestation drivers - for example, committing JR Agropecuária e Empreendimentos EIRELI to voluntarily forego conversion of their property' forests and providing agricultural extension trainings to the local communities – is relevant to achieving the climate objective of reducing net GHG reductions by: reducing the communities' dependence on forest resources through intensification of agricultural and livestock practices; by providing

alternative income to both the landowners and the communities; and by providing education about the effects of deforestation and benefits of protecting forest resources.

Develop Climate Monitoring Plan and Monitor Deforestation
The Project Proponents will constantly monitor deforestation by boat along the Envira, Jurupari and Purus Rivers as well as from the State of Acre's satellite imagery.

To review the Theory of Change model for the climate monitoring plan and monitoring of deforestation, please see the Community Section on monitoring for deforestation.

Developing a climate monitoring plan and monitoring deforestation will assist the Project Proponents with achieving the climate, community and biodiversity objectives. Thus, the climate monitoring plan and monitoring of deforestation will result in net GHG emission reductions because such activities will provide an early detection of deforestation, while enabling the Project Proponents to identify the specific drivers and agents of deforestation and to implement the appropriate actions to mitigate such deforestation and subsequent release of GHG emissions. By mitigating deforestation, the Project shall raise carbon finance that will be utilized to assist local communities and to preserve the biodiversity.

Community Project Activities
To generate sustainable economic opportunities and to implement local social projects for communities living in and around the Envira Amazonia Project, the Project Proponents have undertaken, or began to plan for, the following project activities: Project Awareness, Meet Community, and Discuss Project; Design Social Projects and Programs for Community; Implement Social Projects and Programs for Community; Develop Community Monitoring Plan and Monitor Community Impacts.

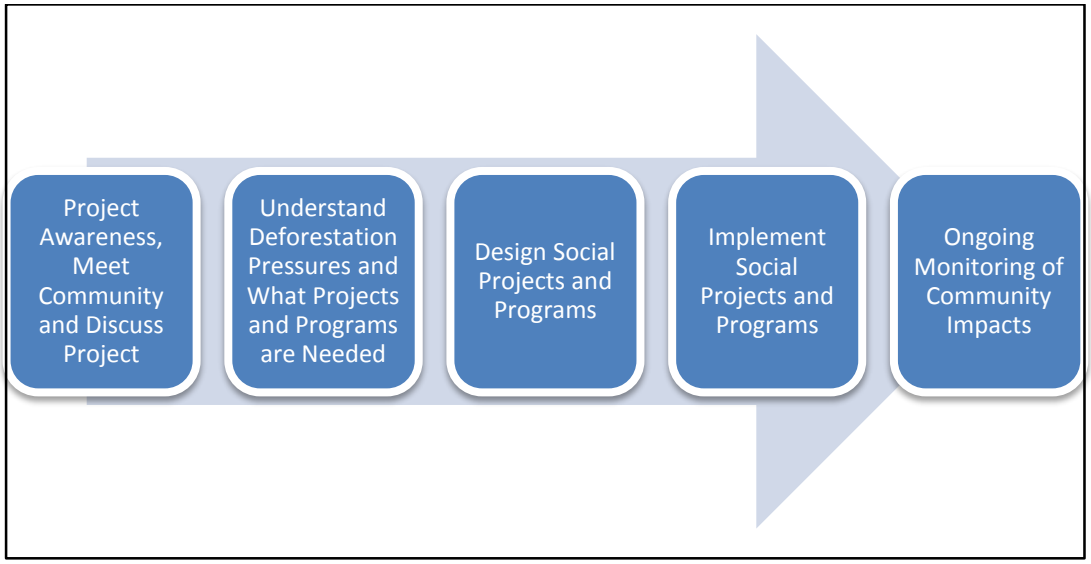


Figure 8: Community Project Activities

Project Awareness, Meet Community and Discuss Project
The communities are an essential component of the Envira Amazonia Project and in 2014, the Envira Amazonia Project was discussed in great detail with the local families to ensure they were fully aware of the Project, were able to contribute to the Project design, able to openly express desired outcomes and concerns, understood the third-party grievance procedure, and were able to voluntarily give Free, Prior and Informed Consent (FPIC).

More specifically, Ayri Saraiva Rando was hired as an independent community specialist and visited a total of 41 families between May 20th and June 11th, 2014.

Local families who wanted to join the Envira Amazonia Project either verbally agreed to join the Project and/or signed an "ata" between May 20th and June 11th, 2014. As of June 2014, all of the community members interviewed within the Envira Amazonia Project Area have either signed the "ata" or verbally agreed to join the Project.

The following Theory of Change model is for the project awareness and meeting communities.

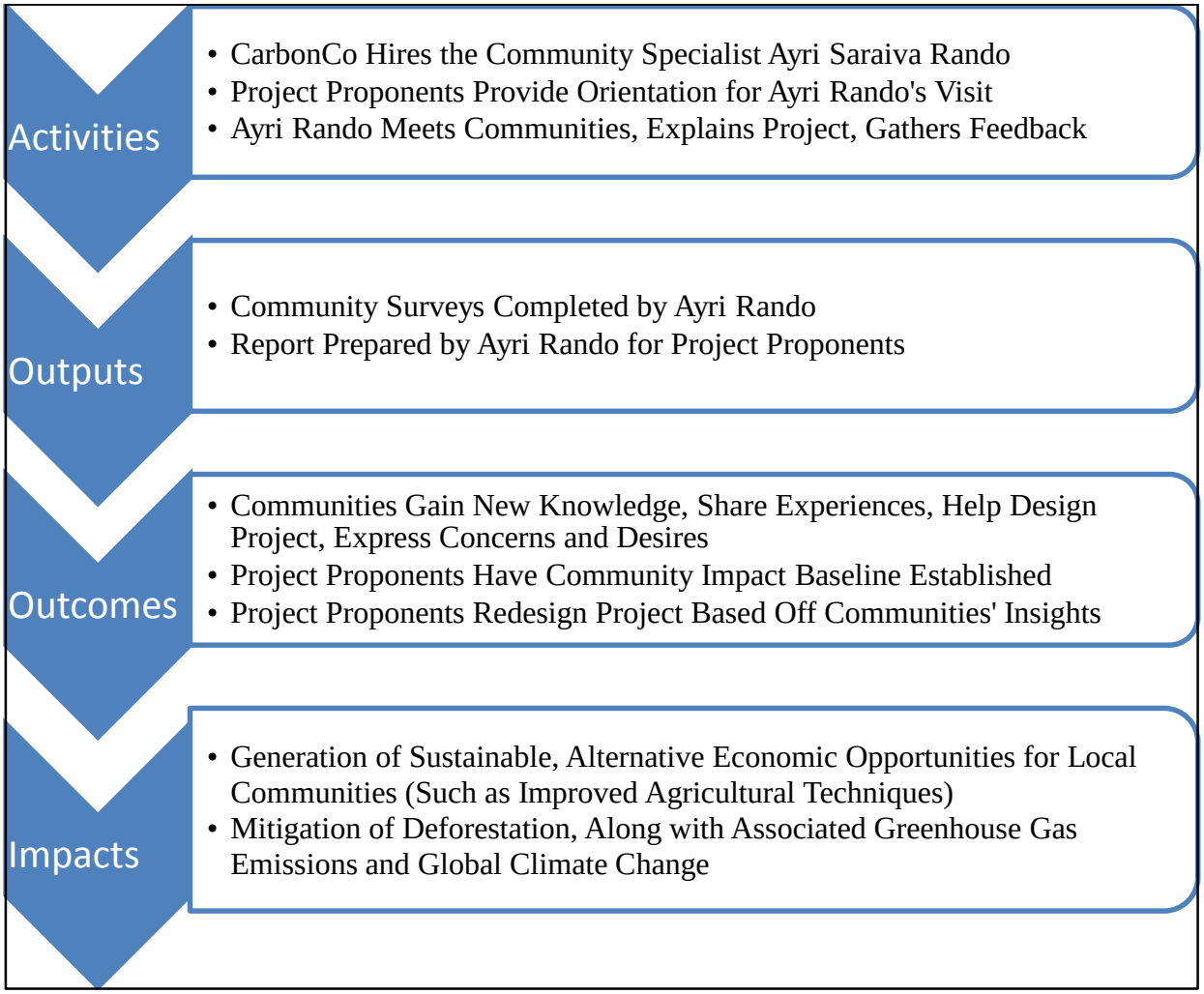


Figure 9: Activities, Outputs, Outcomes and Impacts of Project Awareness and Meeting Communities

Through meeting with the local families, the Project Proponents were able to gain the community's insights about project design and to better incorporate the communities into the Project. As a result, the community objective of generating sustainable economic opportunities and implementing social projects and programs will be best achieved with active, on-going participation and input from the local families.

Design and Implementation of Social Projects and Programs for Community
Social projects and programs for the local families, will not only generate sustainable economic opportunities, but will also result in: less pressure on the local forests; a reduction in deforestation; mitigation of greenhouse gas emissions; and the preservation of biodiversity.

Over the Project Lifetime, JR Agropecuária e Empreendimentos EIRELI would like to further design and implement the following project activities:

- Hire Project Manager
- Initiate Patrols of Deforestation by Boat
- Create Structure for Collection, Processing and Sales of Açaí
- Create Structure for Collection, Processing and Sales of Medicinal Plants
- Reestablish Rubber Tree Collection
- Offer Agriculture Extension Courses
- Help Communities Obtain Land Tenure
- Establish a Headquarters
- Improve and Build Health Center with Dental Clinic

Hire Project Manager
Jose Aurimar Tavares Carneiro (Jose's nickname is "Mazinho") will be the local project manager of the Envira Amazonia Project. Mazinho will help with monitoring for deforestation, along with helping visitors at the Project by providing logistics. Mazinho was born on the property and has good rapport with the local families. Mazinho currently splits his time between staying at his house in Feijó and staying at his house along the Envira River.

In addition to Mazinho's assistance, Francisco Circlandio ("Francisco") will also assist with the project as Francisco lives along with Jurupari River. Francisco is the son of Cazuza Circlandio; Cazuza lives in Feijó and Cazuza's house along the Jurupari River is temporarily serving as the Envira Amazonia Project's informal headquarters.

The following Theory of Change model is for hiring a project manager at the Envira Amazonia Project:

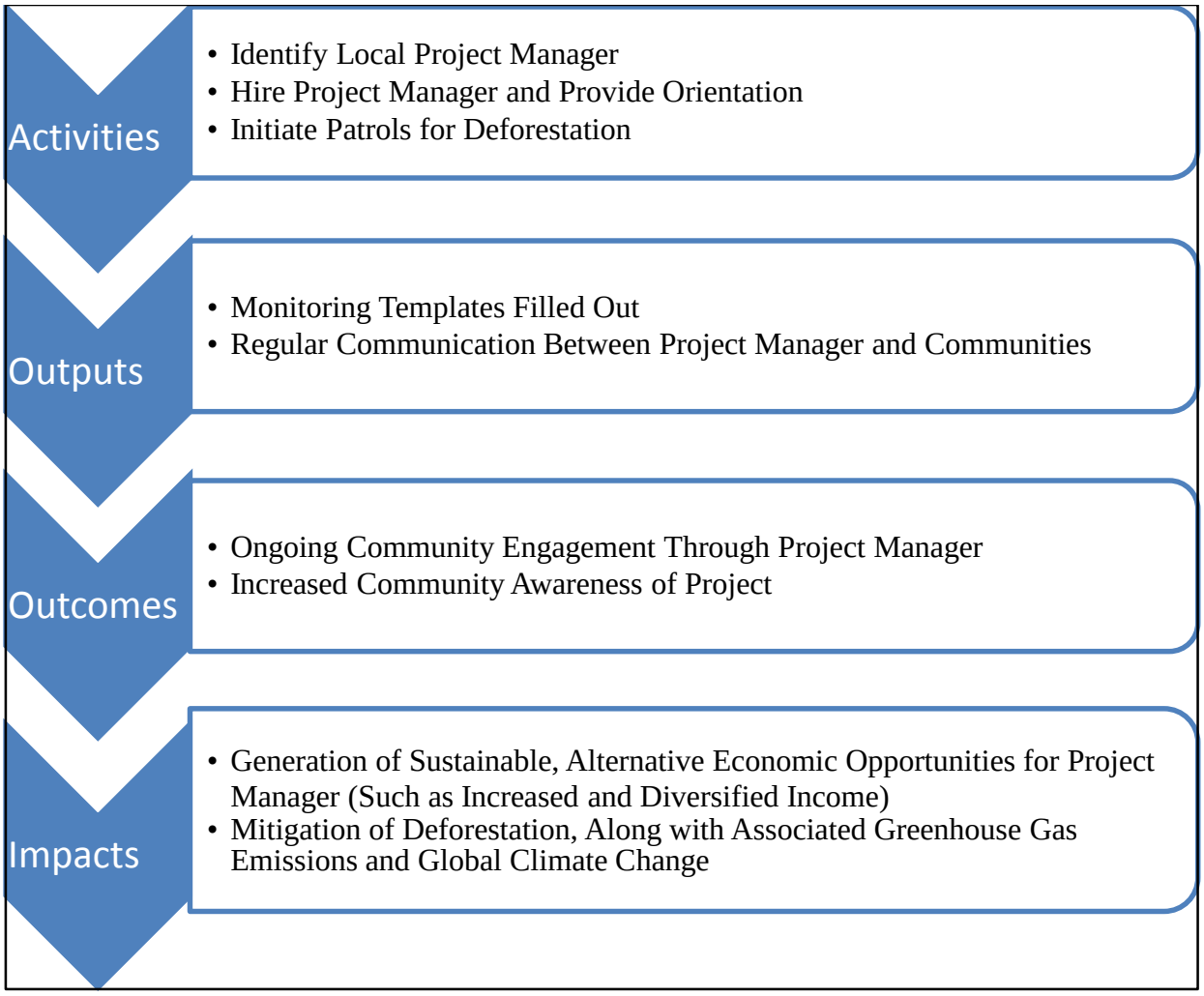


Figure 10: Activities, Outputs, Outcomes and Impacts of Hiring a Project Manager

Hiring a local project manager helps to achieve the climate, community and biodiversity objectives by enabling the Project Proponents to rapidly address deforestation while conserving biodiversity and increasing economic opportunities (both via employment and via carbon finance to implement social projects and programs).

Initiate Patrols of Deforestation

In addition to serving as local project managers, Jose Aurimar Tavares Carneiro (Mazinho) and Francisco Circlandio will both be paid to monitor for deforestation. Mazinho was originally hired back in 2003 to informally monitor the property. Mazinho and Francisco will now officially monitor for deforestation along the Jurupari, Purus and Envira Rivers by boat approximately every 60 days.

JR Agropecuária e Empreendimentos EIRELI ordered a boat with 15 seats and a boat engine in May 2014 which will be used to access the property and for deforestation monitoring. The first formal monitoring will start in June or July 2014.

If and when deforestation is identified, JR Agropecuária e Empreendimentos EIRELI will immediately document and transfer this information to Carbon Securities and CarbonCo. Collectively, CarbonCo and JR Agropecuária e Empreendimentos will discuss the appropriate actions to undertake to counteract any reported deforestation.

The monitors will write down observations in a notebook, document the community meetings, input this data into the monitoring template, and upload the document onto a shared DropBox account among the Project Proponents. The monitoring template includes:

- Name of Monitor
- Date of Monitor
- Communities Visited
- Meeting Notes with Community
- Grievances and Concerns of Community
- Location and Date of Deforestation
- Responsible Actor for Deforestation
- Observations Pertaining to Deforestation
- Biodiversity Observed
- Other Notes Related to the Project

The following Theory of Change model is for patrolling for deforestation throughout the property:

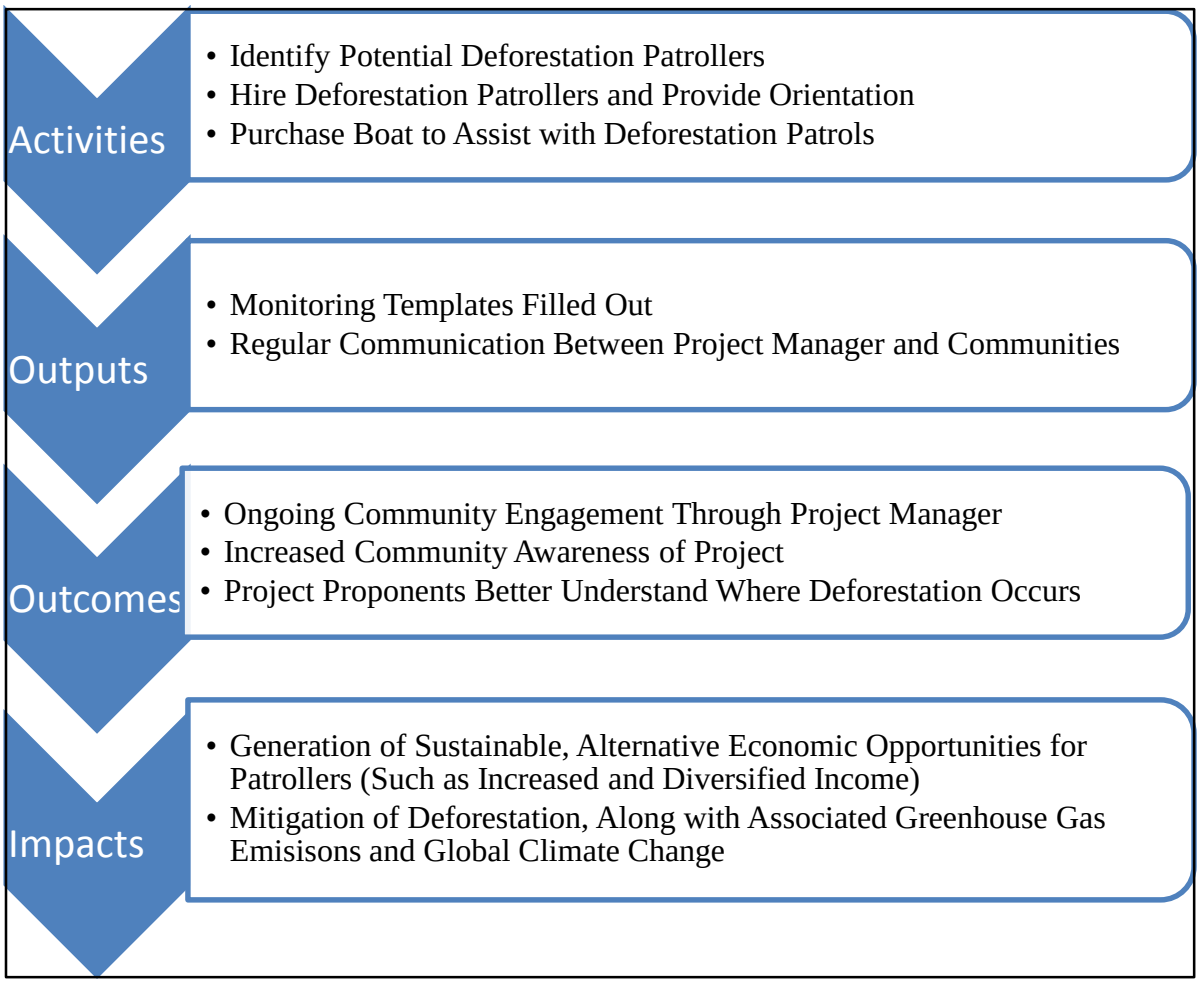


Figure 11: Activities, Outputs, Outcomes and Impacts of Patrolling for Deforestation

The monitoring of deforestation will help the Project Proponents achieve both the climate and community objective. Thus monitoring will result in net GHG emission reductions because such activities will provide an early detection of deforestation, while enabling the Project Proponents to identify the specific drivers and agents of deforestation and to implement the appropriate actions to mitigate such deforestation and the subsequent release of GHG emissions.

Create Structure for Collection, Processing and Sales of Açaí
JR Agropecuária e Empreendimentos EIRELI will develop a structure for the collection, processing, transportation and eventual sales of açaí.

This structure will involve the creation of decentralized units throughout the Project Area, with each unit managed by a local community member. Each unit will collect locally produced açaí berries, the raw berries will be transported to a processing plant, the açaí berries will be processed into açaí juice, and then the finished products will be sold to end consumers.

The following Theory of Change model is for the collection, processing and sales of açaí.

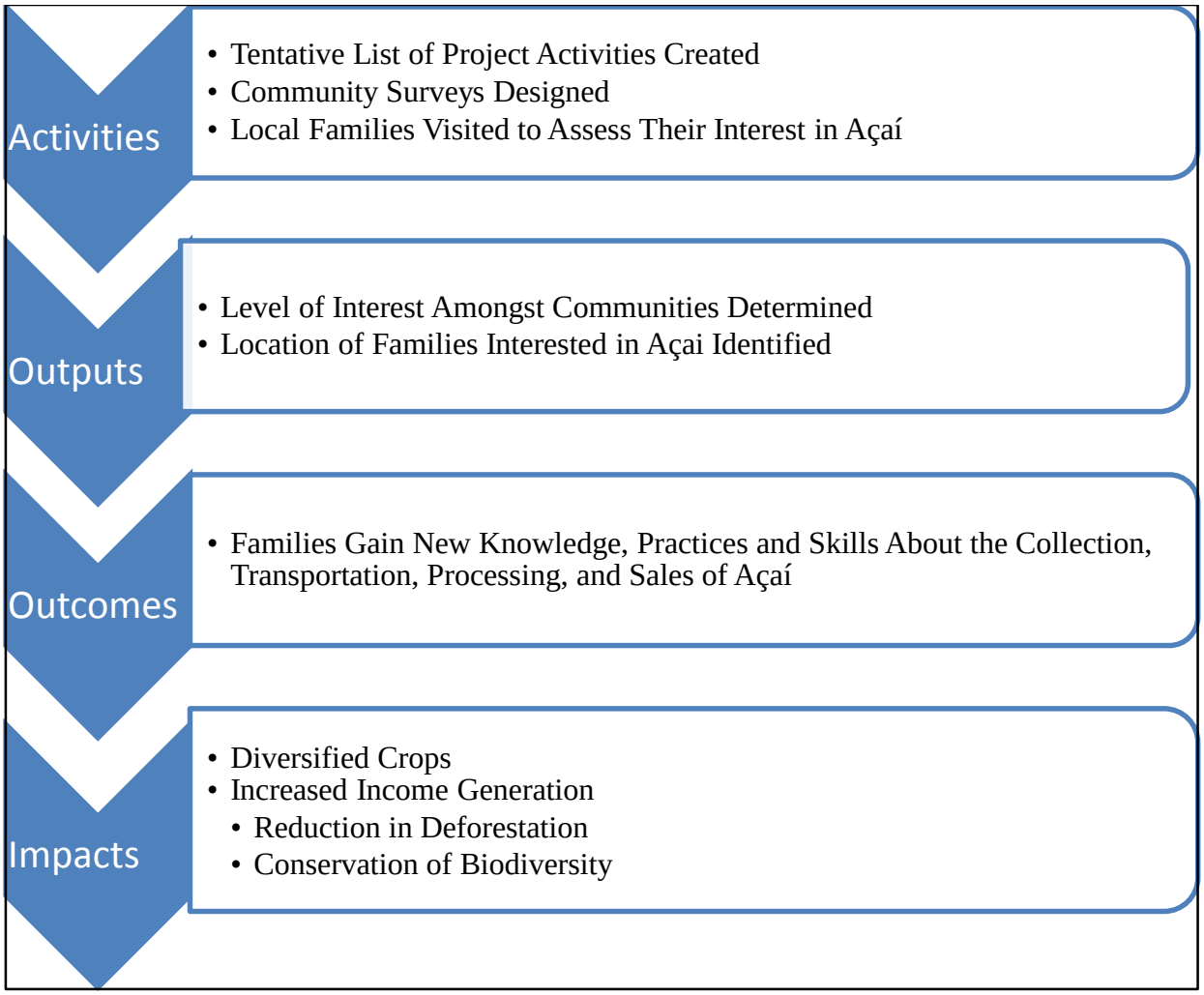


Figure 12: Activities, Outputs, Outcomes and Impacts of Açaí

The collection, processing, and sales of açaí will help the Envira Amazonia Project achieve the climate, community and biodiversity objectives. Thus by diversifying the landowners and local communities' incomes, there will be less pressure on forest resources and shall help preserve the Project Zone's biodiversity.

Create Structure for Collection, Processing and Sales of Medicinal Plants
JR Agropecuária e Empreendimentos EIRELI would also like to create a management and sales structure that would enable the local communities to collect and dry medicinal plants.

Duarte Jose do Couto Neto ("Duarte") will eventually apply to the Government for approval to sell a specific quantity of medicinal plants. Collecting and selling medicinal plants will provide alternative economic opportunities for both local communities and for JR Agropecuária e Empreendimentos EIRELI. For example, there is a factory called Dr. Roots in Rio Branco, that sells medicinal roots and there is also a cosmetic factory in Tarauacá which sells to national markets. In the past, Duarte was working with a French company about medicinal plants.

According to the local families, some of the most important medicinal plants found in the region include:

- Amburana
- Andiroba
- Balso
- Copaiba
- Espra ai
- Jatoba
- Mastruz
- Quina-Quina

The following Theory of Change model is for the collection, processing and sales of medicinal plants from the Envira Amazonia Project.

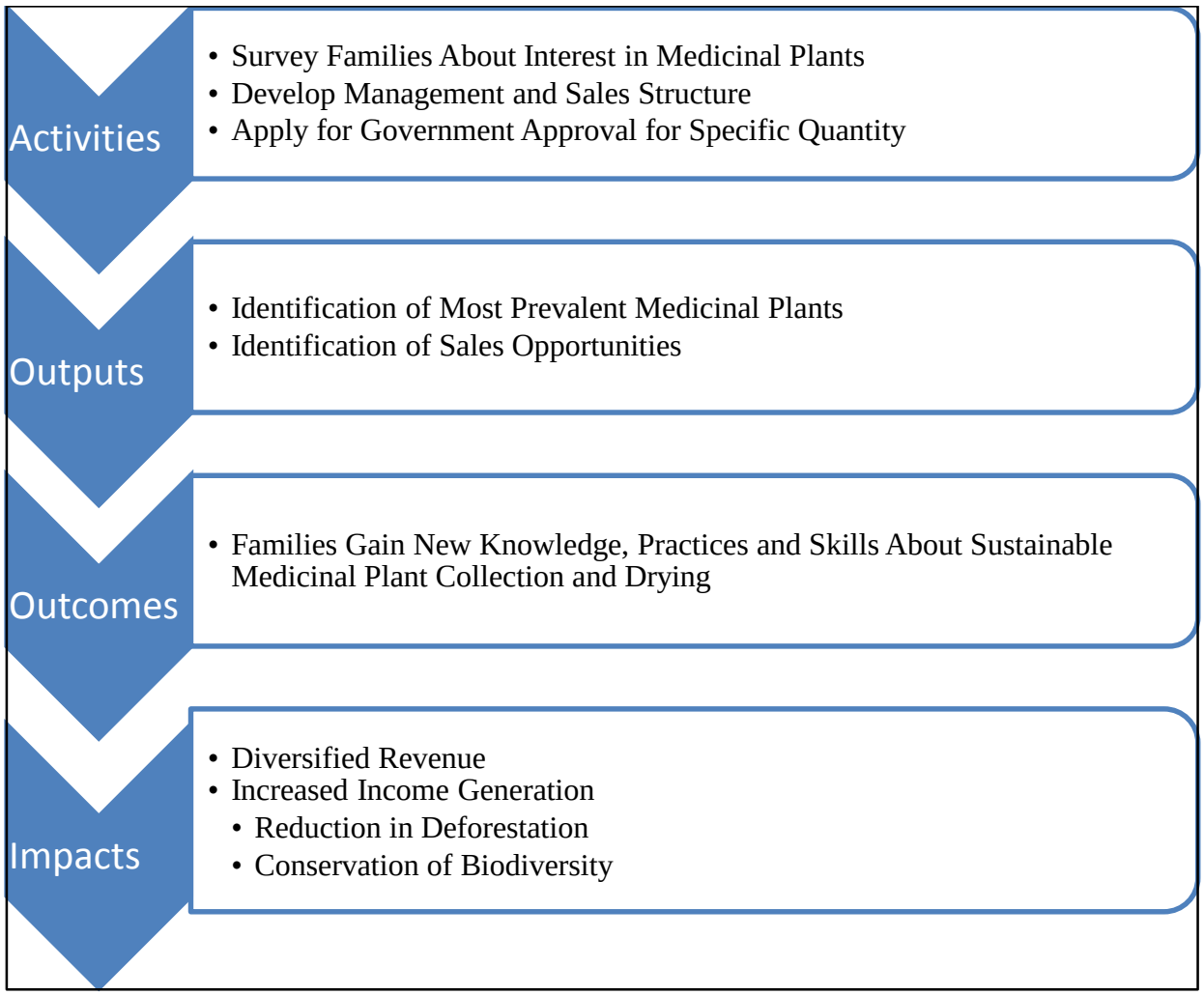


Figure 13: Activities, Outputs, Outcomes and Impacts of Medicinal Plants

Collecting, drying and selling medicinal plants will enable the Project Proponents to achieve the climate, community and biodiversity objectives. By diversifying and increasing community and JR Agropecuária e Empreendimentos EIRELI revenue, there will be less deforestation pressure on the tropical forests while simultaneously reducing GHG emissions.

Reestablish Rubber Tree Collection

JR Agropecuária e Empreendimentos EIRELI will reestablish a rubber trees project. The region is very rich in rubber, but the local families do not know how to sell the rubber because of the crash in rubber prices. Although rubber prices have recovered, the local families do not have the management and sales structure. JR Agropecuária e Empreendimentos EIRELI will also reforest approximately 1,000 hectares of deforested land with rubber trees.

Essentially, rubber throughout the Project Area will be collected and transferred to Feijó. The rubber will then be primarily sold to São Paulo for use in the soles of shoes.

The following Theory of Change model is for the reestablishment of rubber trees throughout the Envira Amazonia Project:

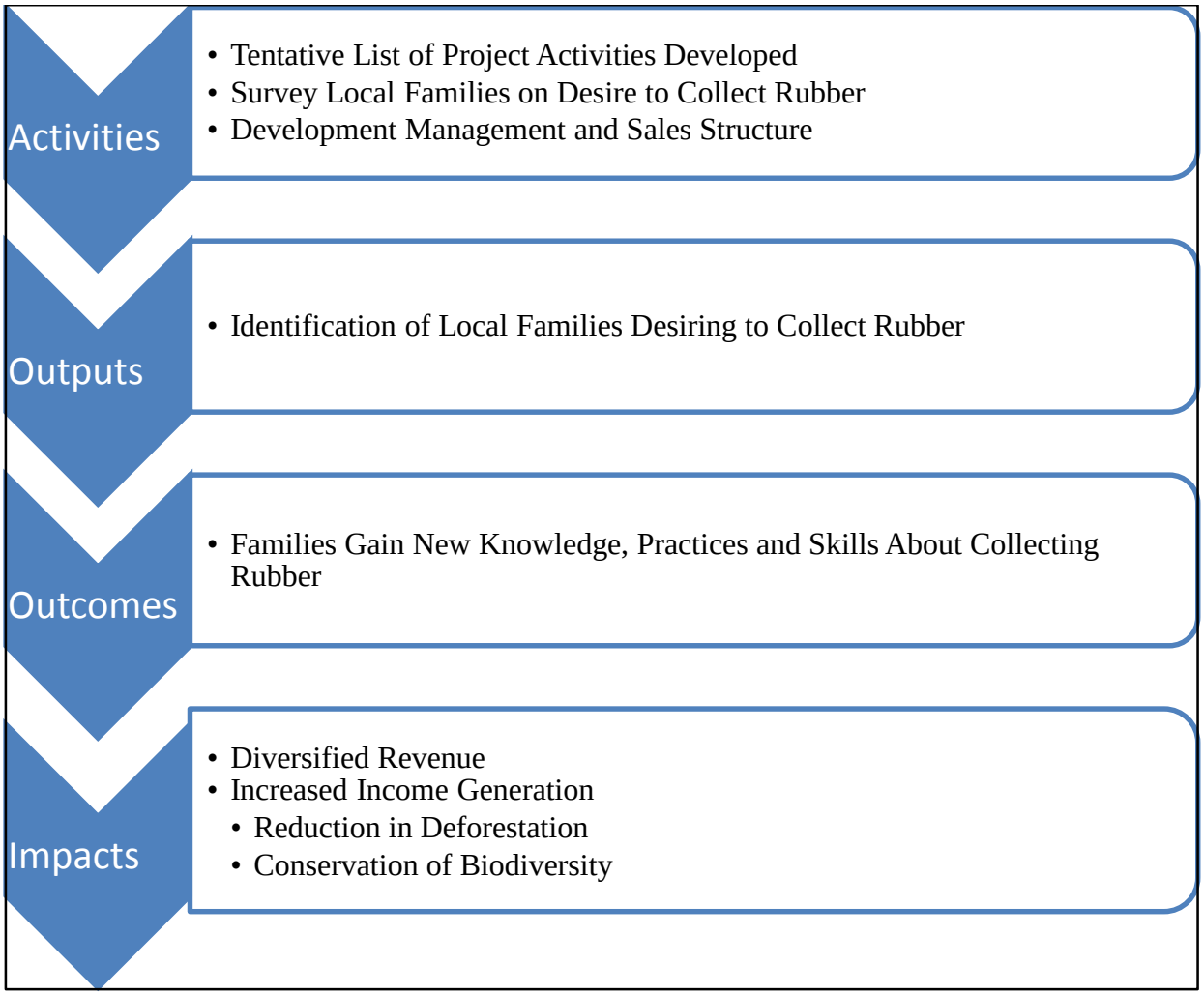


Figure 14: Activities, Outputs, Outcomes and Impacts of Rubber Trees

Collecting rubber, reforesting deforested areas with rubber trees, and selling rubber will enable the Project Proponents to achieve the climate, community and biodiversity objectives. By diversifying and increasing community and JR Agropecuária e Empreendimentos EIRELI revenue, there will be less deforestation pressure on the tropical forests while simultaneously reducing GHG emissions.

Offer Agriculture Extension Courses
Based off feedback from the local families, JR Agropecuária e Empreendimentos EIRELI will offer several agricultural extension courses. Such agricultural extension courses shall include:

- Alternatives to the use of fire in land preparation
- Improved pasture management, including rotational cattle pastures and vaccinations
- Extraction and processing of medicinal plants for commercial purposes
- Production of açaí
- Raising chickens, including how to diagnosis and cure diseases that appear in them

The following Theory of Change model is for offering agricultural extension courses:

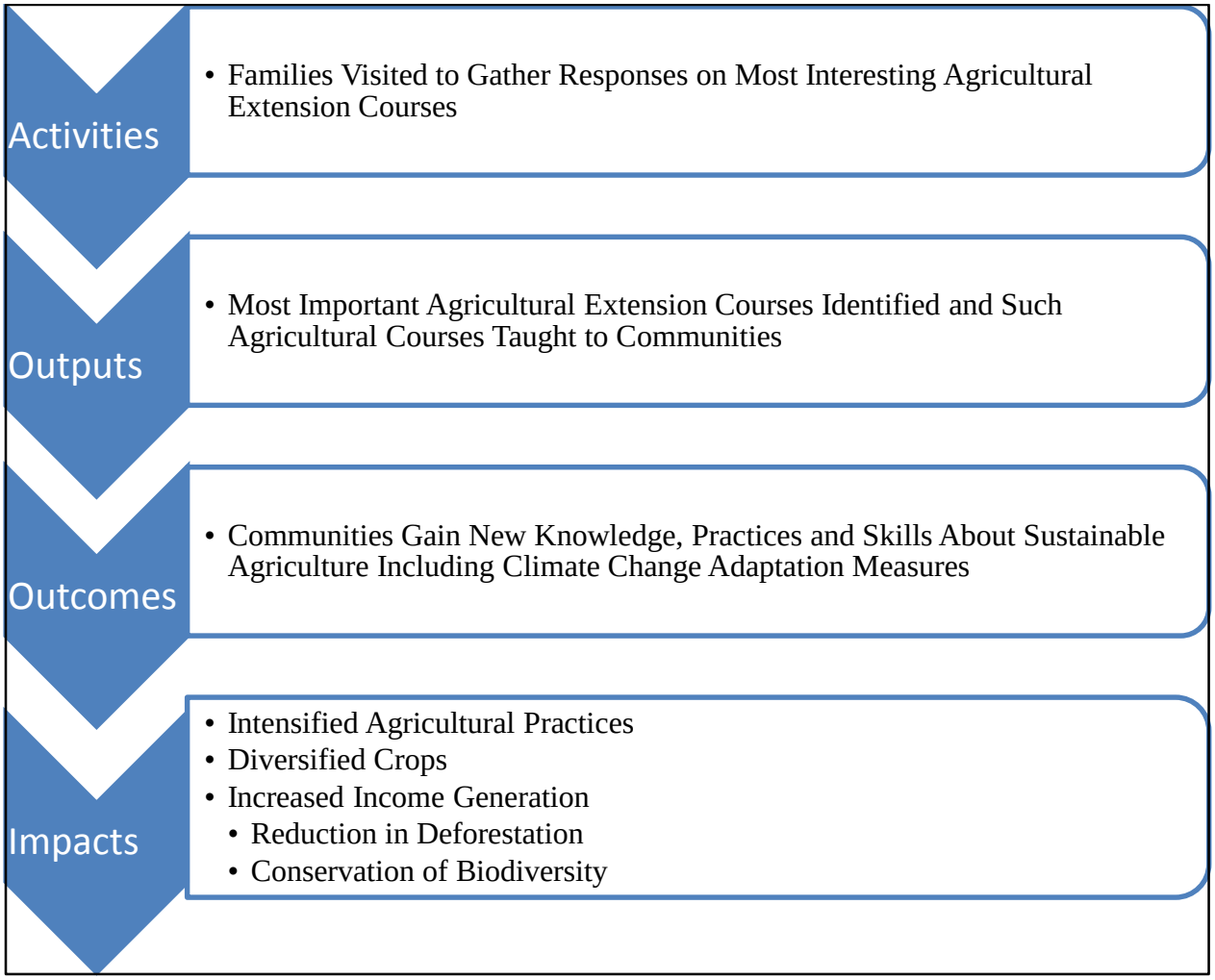


Figure 15: Activities, Outputs, Outcomes and Impacts of Agricultural Survey

Agricultural extension trainings will assist the Project Proponents achieve both the climate and community objectives of the Envira Amazonia Project. These activities will result in both net GHG emission reductions by reducing the communities' dependence on forest resources through intensifying agriculture and livestock, while also providing the communities with alternative incomes.

Help Communities Obtain Land Tenure

Community members that have been living on the land and who made the land productive (e.g., by growing agriculture or raising animals) for ten years have the right to be titled to land. JR Agropecuária e Empreendimentos EIRELI will voluntarily recognize whatever area is currently deforested and under productive use by each family and up to the recommended size that a family in the municipality of Feijó needs for a sustainable livelihood according to State and Federal laws. All communities, whether they join the Envira Amazonia Project or not, will be titled the land they have put under productive use.

The following Theory of Change model is for helping communities obtain land tenure throughout the Envira Amazonia Project:

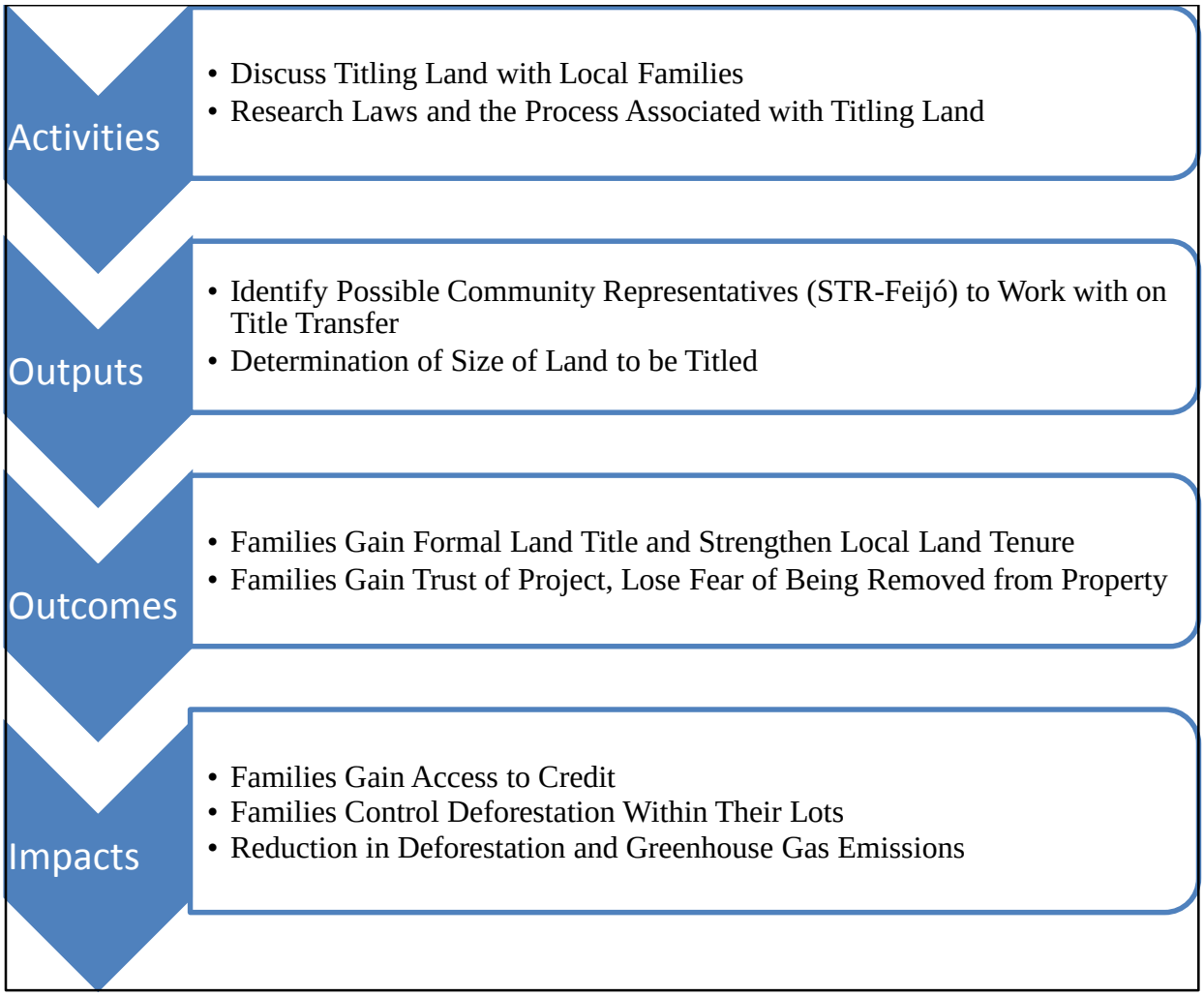


Figure 16: Activities, Outputs, Outcomes and Impacts of Land Tenure

Helping families obtain land tenure will assist the Project Proponents with facilitating the community's sustainable economic opportunities. This formal recognition of the community's land tenure and the ability of families to access credit (i.e., due to their property collateral) will reduce GHG emissions as families will have greater responsibility and ownership over their land.

Establish a Headquarters

In the past, JR Agropecuária e Empreendimentos EIRELI had a headquarters established along the Envira River and the headquarters was called the "Casarao Antigo do Seringal Canada." In the future, this headquarters will be reactivated and an official headquarters will be established inside the Project Area along the Jurupari River. In the short term, Cazuza's house will be temporarily used as the informal headquarters of the Envira Amazonia Project.

The future headquarters will provide: a place for visitors to sleep and eat; a place for community meetings and teaching courses; provide storage for project items; and supply education materials such as the onsite Project Documents.

The following Theory of Change model is for establishing a headquarters:

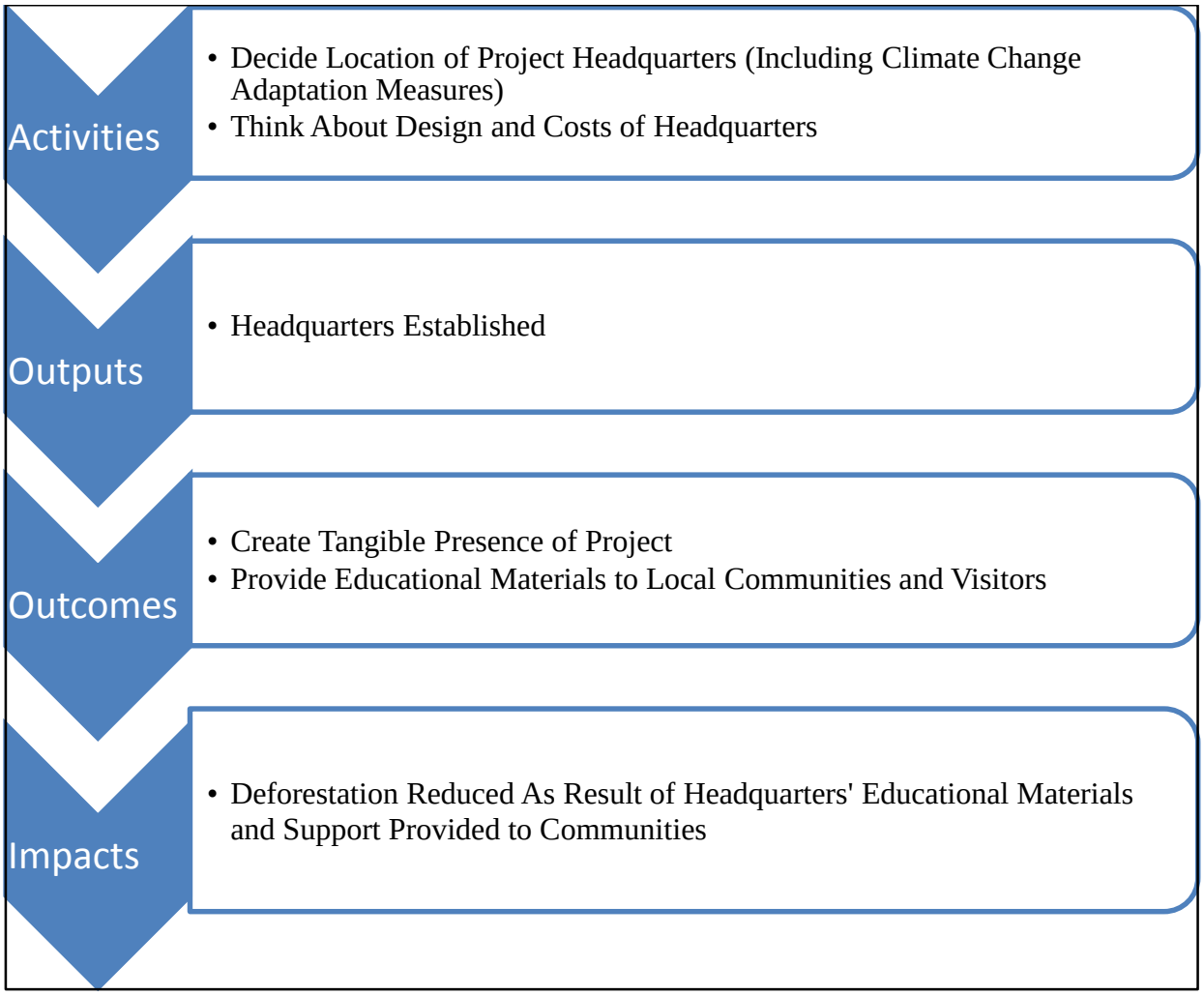


Figure 17: Activities, Outputs, Outcomes and Impacts of Establishing Headquarters

Building a headquarters will contribute to the community objective because the office will serve as a centralized headquarters and will facilitate JR Agropecuária e Empreendimentos EIRELI's social projects and programs.

Improve and Build Health Center and Dental Clinic
JR Agropecuária e Empreendimentos EIRELI plans to improve the health center along the Envira River and to build a health center in the Project Area along the Jurupari River. These health centers will provide local families with preventive and curative medicine, including dental. JR Agropecuária e Empreendimentos EIRELI will also facilitate the increased frequency of visits from the doctor in Feijó via the boat being purchased.

JR Agropecuária e Empreendimentos EIRELI would like to donate dental hygiene kits with toothbrush and toothpaste and would also like to distribute medicine including malaria pills.

The following Theory of Change model is for improving and building the health centers:

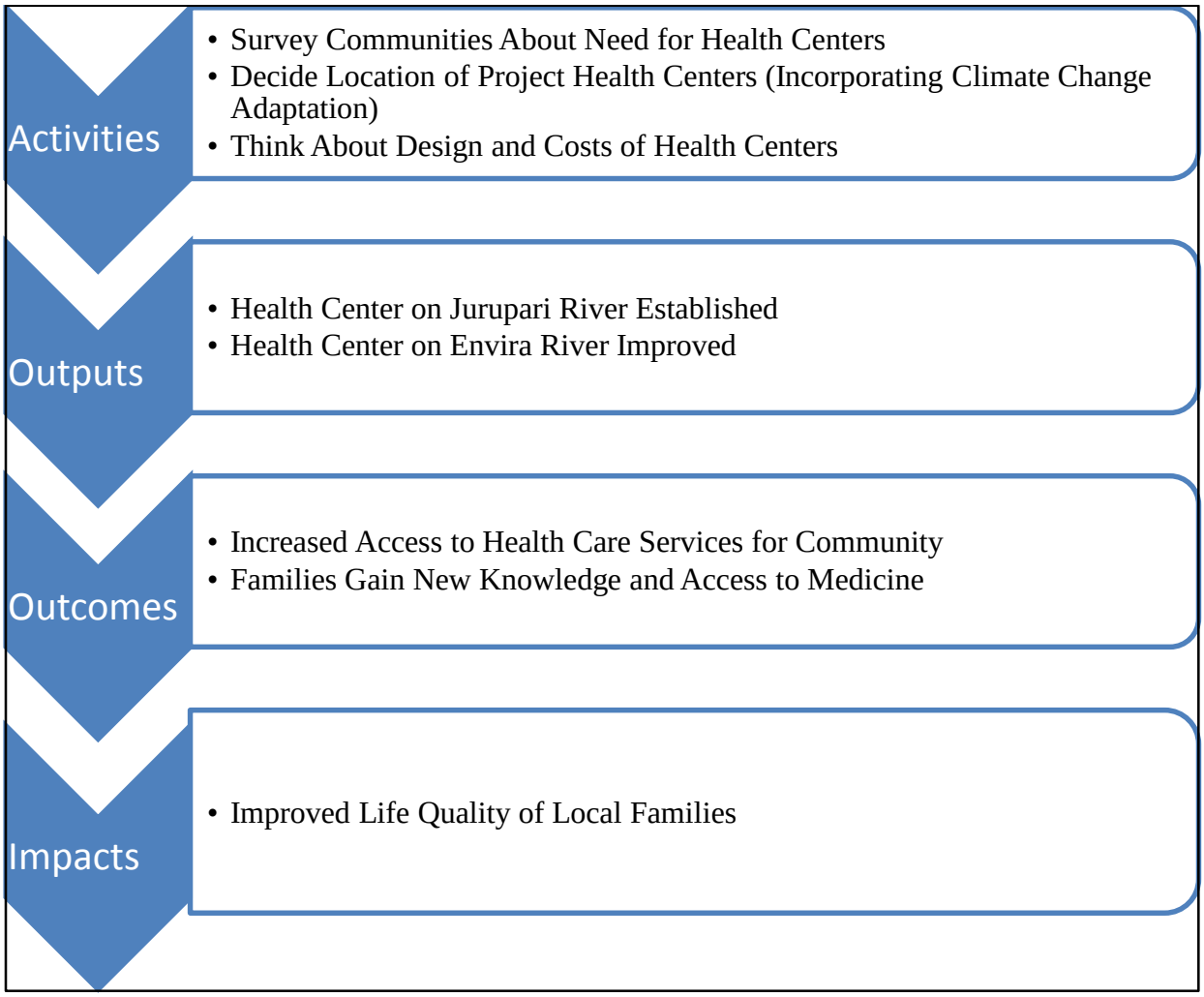


Figure 18: Activities, Outputs, Outcomes and Impacts of Building Health Centers

The health center and dental clinic is also relevant to the community objective because this is another main social project that JR Agropecuária e Empreendimentos EIRELI would like to facilitate. The health centers will ultimately improve life quality and increase life expectancies, which will result in healthier, more productive community members.

Develop Community Monitoring Plan and Monitor Community Impacts
The community monitoring plan will essentially help the Project Proponents better understand if the social projects and programs for the community were able to generate sustainable economic opportunities and overall positive outputs, outcomes and impacts.

The community monitoring plans include the Basic Necessity Survey (BNS) and the Participatory Rural Assessment / Household Survey (PRA).

The following Theory of Change model is for developing a community impact monitoring plan and monitoring community impacts.

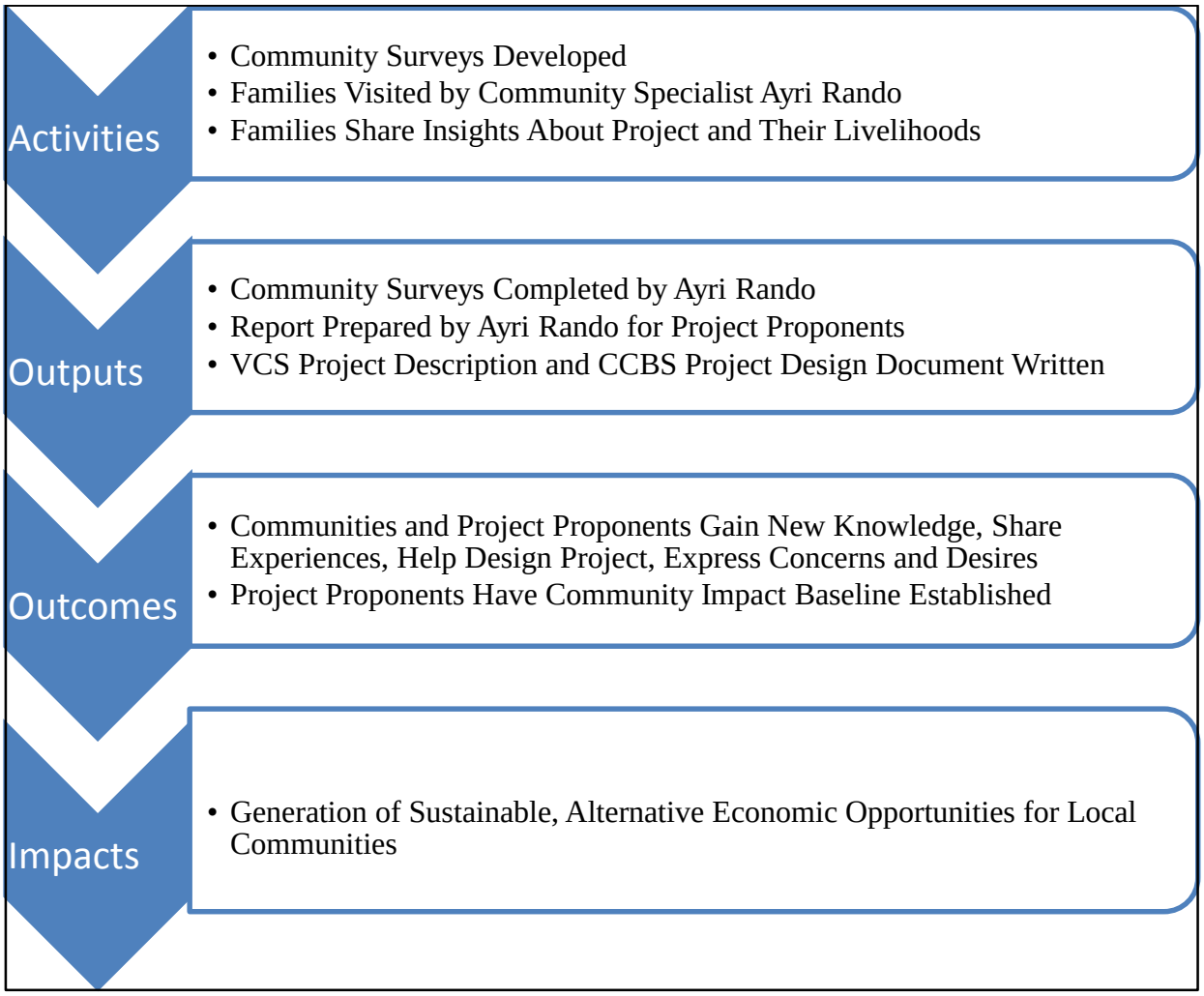


Figure 19: Activities, Outputs, Outcomes and Impacts of Community Impact Monitoring

Developing a community monitoring plan and ongoing monitoring of community impacts will assist the Project Proponents with achieving the community objective.

Major Biodiversity Objective
To preserve the Project's rich biodiversity, the Project Proponents will generate sustainable economic opportunities for the local community and implement local social projects with the goal of addressing the underlying causes of deforestation and reducing the release of GHGs. In addition, the Project Proponents will rapidly assess biodiversity on the Project and develop a biodiversity monitoring plan.

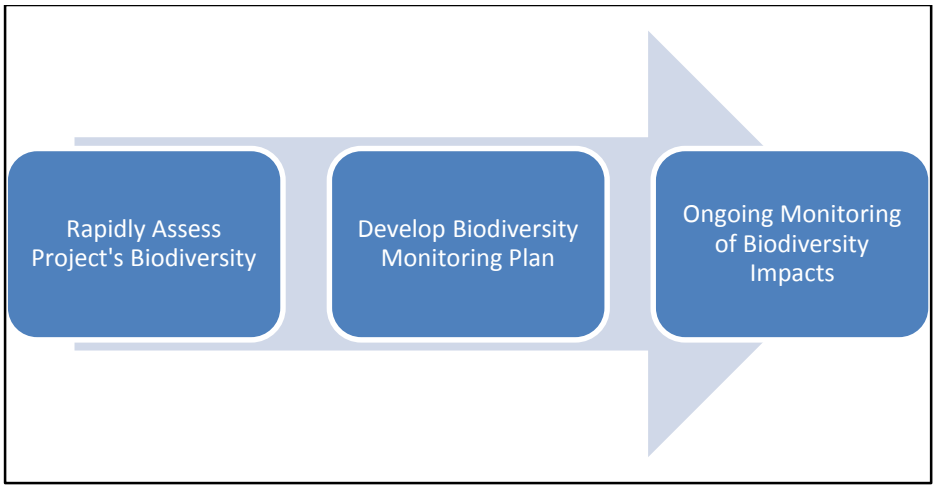


Figure 20: Biodiversity Project Activities

Rapidly Assess Biodiversity on Project
A rapid assessment of the Project Zone's biodiversity was conducted from March to August 2014. This included background research on the region's biodiversity and a review of the Integrated Biodiversity Assessment Tool (IBAT), along with an assessment of vulnerable tree species and endemic bird species throughout the Project Area.

This rapid assessment of biodiversity will contribute to the objective of preserving the Project's rich biodiversity by providing an understanding of what flora and fauna exist within the Project.

Furthermore, in addition to helping local communities and reducing tropical deforestation, many voluntary carbon market donors appreciate seeing pictures of rare and threatened species.

The following Theory of Change model is for the rapid assessment of biodiversity at the Envira Amazonia Project:

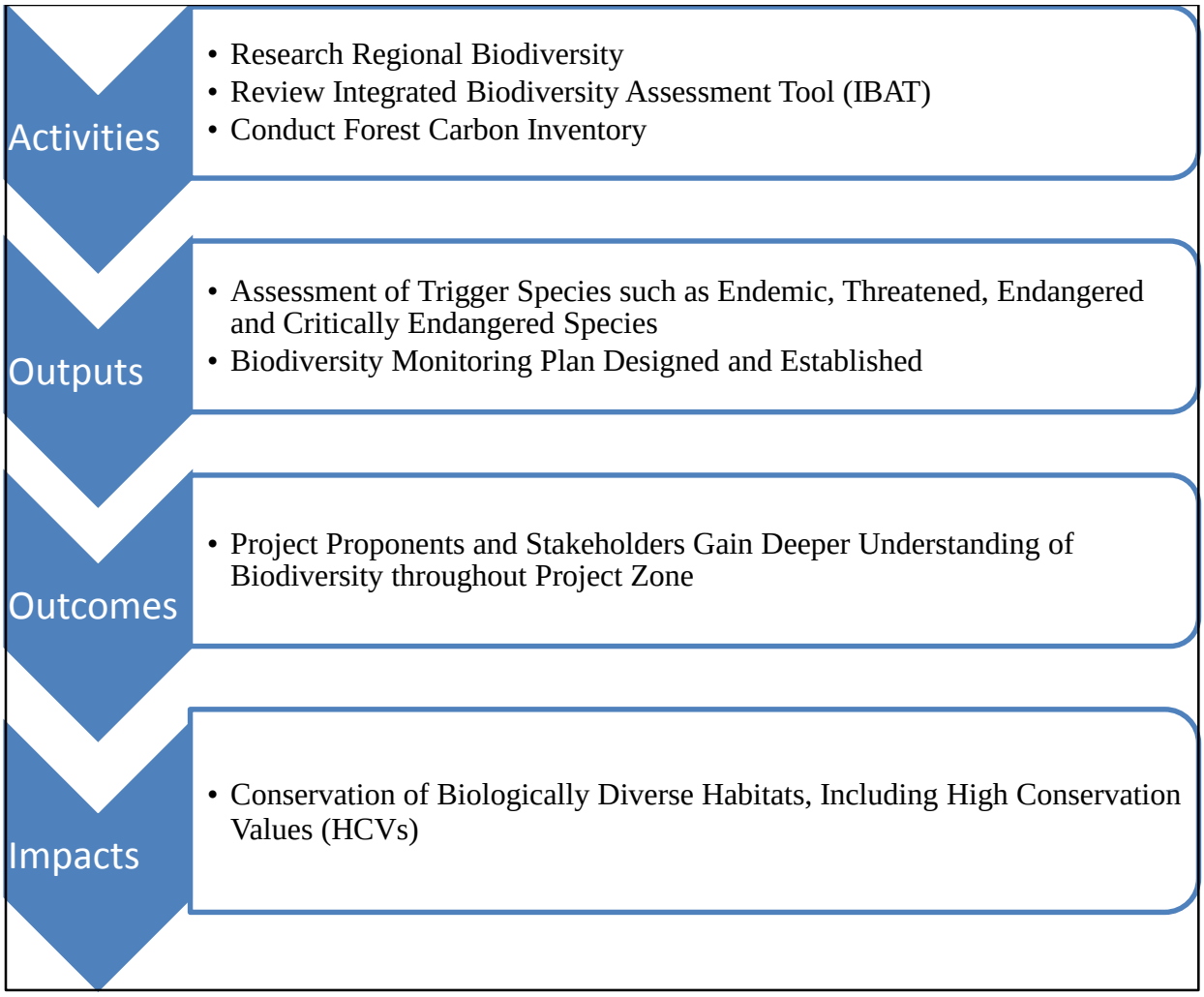


Figure 21: Activities, Outputs, Outcomes and Impacts of Rapid Biodiversity Assessment

A rapid biodiversity assessment will help achieve the climate, community and biodiversity objectives by providing an alternative economic opportunity for a couple local community members to assist with the future biodiversity monitoring plan. In addition, the generation of carbon finance from the reduction of deforestation will be enhanced through the understanding and preservation of the Project's biodiversity.

Develop Biodiversity Monitoring Plan and Monitor Biodiversity Impacts
The biodiversity monitoring plan will essentially help the Project Proponents better understand if the climate and community objectives are aligned with preserving the Project's rich biodiversity.

The following Theory of Change model is for monitoring biodiversity impacts throughout the Project Zone of the Envira Amazonia Project:

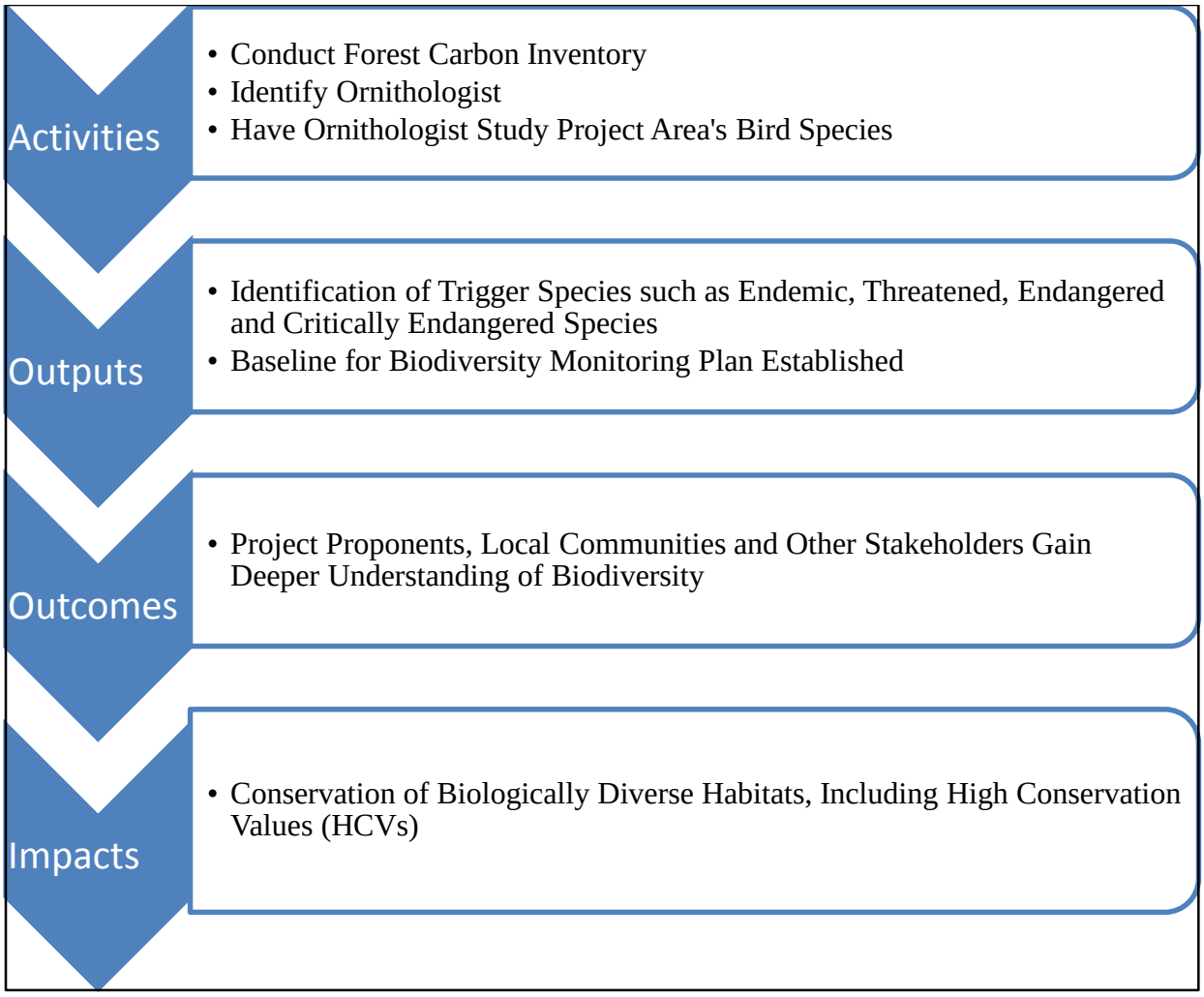


Figure 22: Activities, Outputs, Outcomes and Impacts of Monitoring Biodiversity

Designing and implementing the Project's biodiversity monitoring plan will help achieve the climate, community and biodiversity objectives by providing an alternative economic opportunity for a couple local community members to assist with the biodiversity monitoring plan. In addition, the generation of carbon finance from the reduction of deforestation will be enhanced through monitoring and preserving the Project's biodiversity.

Project Start Date, Lifetime, and GHG Accounting Period

The following section shall outline the Envira Amazonia Project's key dates, implementation schedule, and milestones.

Project Start Date, Lifetime, and GHG Accounting Period

The Envira Amazonia Project's Start Date is August 2, 2012 based off the signing date of the Tri-Party Agreement between the three Project Proponents. The Project Lifetime is 60 years. The Project's GHG Accounting Period is 10 years. The biodiversity and community benefits assessment period shall be done on an annual or biennial basis, while the Basic Necessity Survey (BNS) and Participatory Rural Assessment (PRA) shall be conducted every 4 years.

Implementation Schedule
The approximate implementation schedule for the Envira Amazonia Project is as follows:

Pre- and Post-Validation: Years 1 and 2 (2014-2015)
- Signing and Authentication of Tri-Party Agreement between Project Proponents
- Stakeholder Consultations and Community Visits
- Forest Carbon Inventory
- Land-use and Deforestation Modeling
- Project Design Documents Written
- Hire Project Manager
- Initiate Patrols of Deforestation
- Biodiversity and Community Impact Monitoring Plans Developed
- Project Validated to CCBS and VCS Standards
- Carbon Finance Generated, Pending Verification to the CCBS and VCS Standards
- Establish Initial Headquarters

Post-Validation: Years 3 to 5 (2016-2018)
- Renovate Headquarters and Create New Headquarters
- Help Communities Obtain Land Tenure
- Create Structure for Açaí, Medicinal Plants, and Rubber Trees
- Offer Agricultural Extension Courses
- Improve Health Center and Dental Clinic

Post-Validation: Years 6 to 10 (2019-2023)
- Reassessment of Land-use and Deforestation Modeling Baseline

Ongoing Activities
- Monitoring of Climate, Community and Biodiversity Impacts
    - Basic Necessities Survey to take place every 4 years
    - Participatory Rural Appraisal to take place every 4 years
    - Illegal Logging Assessment to take place every 4 years
    - Deforestation Monitoring, Periodic Review of Satellite Imagery
    - Biodiversity Monitoring every 5 years
- Engaging Stakeholders and Community Consultations

Risk Management and Long-Term Viability

The following are the potential natural, anthropogenic, and project risks along with the mitigation measures identified by the Project Proponents. Overall, the risks associated with the Envira Amazonia Project are considered low and justify a low Verified Carbon Standard buffer reserve established for any verified emission reductions (i.e., carbon offsets or carbon credits).

Natural and Human-Induced Risks
The following are some potential natural and human-induced risks that could impact forest conservation projects and particularly the Envira Amazonia Project.

Natural Risks
The following are several natural risks identified by the Project Proponents which could impact the Envira Amazonia Project:

- Seedling, sapling and tree survival
- Drought and flooding
- Severe weather
- Forest fire
- Disease, invasive species, and pest infestations
- Risks related to ability to adapt to climate change and climate variability

Due to the fact that the Project is primarily a forest conservation project, there is limited risk of seedling, sapling and tree survival because reforestation is not the major climate objective. While there will be some reforestation activities, the carbon sequestration of these activities will not be counted towards the generation of verified emission reductions (VERs).

With respect to drought and flooding, the Envira-Jurupari-Purus River basin is a wetland ecosystem where the native habitat thrives under periodically flooded conditions. Being a tropical climate, the Project is not prone to snowstorms and there are no volcanoes in the general vicinity. Furthermore, the State of Acre historically has not experienced hurricanes, monsoons, or tornadoes with only minimal effects from Chilean earthquakes.[11]

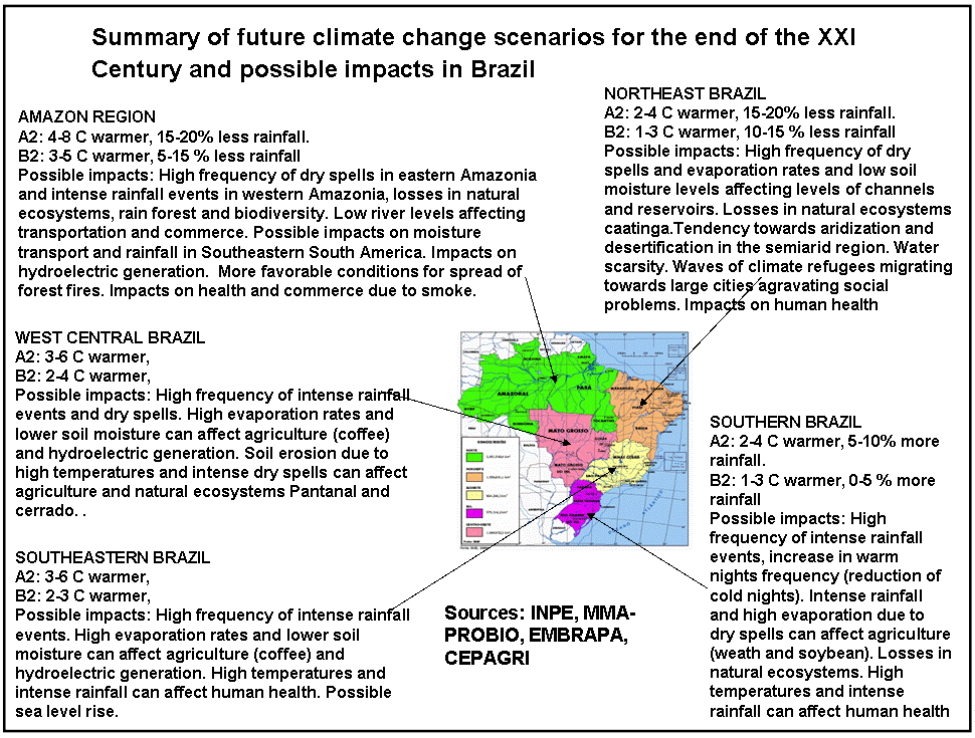
Another risk to the Project is a forest fire. It is also important to note that the State of Acre has some of the highest precipitation levels in the world with annual rainfall ranges from 1,600 – 2,750 millimeters (i.e., approximately 63 – 108 inches).[12] For more information with respect to fire, please see the VCS Non-Permanence Risk Assessment.

With regard to disease, invasive species and insect infestation, Brazil's Department of the Environment has approved a permanent technical committee known as the National Biodiversity Commission (CONABIO) which carefully monitors these developments.[13] The Project Proponents are aware that the Global Invasive Species Database, which is managed by the Invasive Species Specialist Group of the IUCN's Species Survival Commission, has identified 62 natural forest species which are either native to Brazil and act as an invasive species elsewhere or are native species elsewhere and are considered invasive species within Brazil.[14] Furthermore, three species native to Brazil (i.e., and which are considered invasive species elsewhere) are on the Global Invasive Species Database's 100 of the World's Worst Invasive Alien Species List.[15] The Project Proponents will carefully monitor any invasive species known to exist in Acre and will not extract any known species from the Project that are considered

[11] Center for Weather Prediction and Climate Studies, "Home," Available: http://www1.cptec.inpe.br/
National Observatory, "Seismic Data," mhttp://www.on.br/conteudo/modelo.php?endereco=servicos/servicos.html
[12] State Government of Acre Portal, "Geographic Data,"
[13] National Biodiversity Commission, "Technical Committee," Available:
http://www.mma.gov.br/sitio/index.php?ido=conteudo.monta&idEstrutura=15&idConteudo=7474&idMenu=368
[14] Global Invasive Species Database, "Alien Species," Available: http://www.issg.org/database/species/search.asp?sts=sss&st=sss&fr=1&sn=&rn=brazil&hci=1&ei=-1&lang=EN&Image1.x=30&Image1.y=10
[15] Global Invasive Species Database, "100 of the World's Worst Invasive Alien Species List," Available:
http://www.issg.org/database/species/search.asp?st=100ss&fr=1&str=&lang=EN

native species but which are invasive species elsewhere. For more information on the risk of invasive species, please see the VCS Non-Permanence Risk Assessment.

Regarding risks related to climate change and climate variability, the Project Proponents studied the CREAS Project (Regional Climate Change Scenarios for South America). According to the CREAS Project, the following scenarios and impacts are possible for the Amazon Region and particularly, the State of Acre where the Envira Amazonia Project is located:



[16]

As forecasted by the CREAS Project, "intense rainfall events in western Amazonia, losses in natural ecosystems, rain forest and biodiversity" are the primary risks. The anticipated climate change of "intense rainfall events" will have an impact on the well-being of families in the Project Zone and surrounding regions.

To mitigate these risks, the Project Proponents will incorporate adaptation activities. This includes: building the community health clinic (to mitigate potential increase in mosquito-borne illnesses); ensuring agricultural extension courses incorporate climate change adaptation techniques; assisting communities with access to markets for their products to overcome increased difficulty in transportation networks (e.g., flooded highways and low river levels); and locating facilities such as the headquarters and health centers further away from river banks to minimize risk of flooding.

Reforestation activities within degraded areas will also help to minimize the risks of soil runoff.

[16] Jose A. Marengo, "Regional Climate Change Scenarios for South America - The CREAS," Available: projecthttp://unstats.un.org/unsd/climate_change/docs/papers/Session3_CCPapers_Marengo_1.pdf.

Human-Induced Risks
The following are some potential human-induced risks that could impact forest conservation projects and particularly the Project:

- Illegal logging
- Illegal hunting of endangered fauna
- Illegal collection of endangered flora
- Human-induced fires
- Continued community willingness to participate in the Project

The Project Proponents will regularly monitor the climate, community and biodiversity objectives of the Project and thus, will be able to identify early on if there are illegal logging or hunting activities taking place. The alternative economic activities such as collection of medicinal plants and rubber will reduce the need to use fire, and the agricultural extension courses will teach local families how to practice agriculture without using fire. Regarding the community's continued willingness to participate in the Project, the Project was designed and will be implemented in close consultation with the local families to ensure they are receiving both short-term and long-term benefits.

Project Risks
A few of the potential project risks identified by the Project Proponents include:

- A fixed plot of land per family is given, but an increasing family population results in less land per capita
- As incomes increase, the use of illicit drugs, alcoholism and violence might increase
- "An influx of relatively large cash sums in areas with weak governance or where local organizations lack appropriate systems runs the risks of mismanagement, corruption, and 'elite capture."[17]
- "Increased land speculation or in-migration, thus creating conditions for increased competition and social conflict within and between communities."[18]
- Restriction of cattle, results in lower wages, less assets and lower food security; similarly, crops could be less profitable than cattle
- Organizations that provide agricultural extension courses might not be effective at providing agricultural extension to communities
- If many communities throughout the Project Area start producing the same crop, the price might fall due to supply-demand mismatch; similarly, the price of carbon could fall
- Project Proponents build health and dental clinics throughout Project Zone, but no staff nor medicine available
- JR Agropecuária e Empreendimentos EIRELI decides to move forward with a planned deforestation project instead of maintaining the forest conservation project

[17] Richards, M. 2011. Social and Biodiversity Impact Assessment (SBIA) Manual for REDD+ Projects: Part 2 – Social Impact Assessment Toolbox. Climate, Community & Biodiversity Alliance and Forest Trends with Rainforest Alliance and Fauna & Flora International. Washington, DC. Page 6.
[18] Richards, M. 2011. Social and Biodiversity Impact Assessment (SBIA) Manual for REDD+ Projects: Part 2 – Social Impact Assessment Toolbox. Climate, Community & Biodiversity Alliance and Forest Trends with Rainforest Alliance and Fauna & Flora International. Washington, DC. Page 6.

To address these aforementioned risks, the Project Proponents developed the following mitigation plans and shall utilize adaptive management to address future issues.

As previously discussed, community members that have been living on the land and who made the land productive (e.g., by growing agriculture or raising animals) for ten years, have the right to be titled. JR Agropecuária e Empreendimentos EIRELI will voluntarily recognize whatever area is currently deforested and under productive use by each family. All communities, whether they join the Envira Amazonia Project or not, will be titled the land they have put under productive use. If necessary, this process will be facilitated by an independent group such as FTR-Feijó. Thus, this titling of land to local communities should prevent conflicts over local landownership because communities will receive at least the full amount of area recommended by INCRA. Improved agricultural techniques will be taught in addition to granting land tenure. Furthermore, job creation should allow for less dependency on the land.

The design of the Project's health center will educate the communities about the social problems surrounding illicit drugs, alcoholism and family violence. If worse comes to worse, there are federal and civil police who will take care of illicit drug use and violence.

To minimize corruption and 'elite capture,' the Project Proponents shall treat everyone fairly and equally. For example, everyone was given an equal opportunity to choose agricultural classes and all benefits (e.g., access to health center and dental clinic) will be offered to everyone. The Basic Necessities Survey will also monitor the distribution of assets, inequality and poverty.

Agricultural training courses will be offered to surrounding communities as one method to counteract potential in-migration. Some of the Project's benefits (for example, access to health center) will be offered to surrounding communities. Ultimately, the Envira Amazonia Project is privately-owned land and in-migration will not be allowed. The deforestation monitoring plan will ensure the rapid identification and resolution of in-migration.

Carbon finance will ideally supplement the reduction in any income that may result from fewer cattle. Agricultural trainings will also help diversify crops and increase food security. One course of interest among the local families is pasture management which would allow for cattle using less land. Protein can also be supplemented via chicken, fish and pigs. Ultimately, the goal is to not increase the overall number of cattle expanding into primary forest.

There are numerous leading institutions such as EMBRAPA, the Center for Technical Production, and S.O.S. Amazonia that are experts at providing agricultural extension trainings and researching cutting-edge sustainable agriculture and pasture management. Similarly, Carbon Securities and CarbonCo have overseen the agricultural extension courses successfully offered at their other REDD+ projects in Acre. Thus, the risk of their efforts failing is minimal.

The overall crop production among communities is relatively small and should not create a downward pressure on prices of a given crop throughout the Project Zone. The same is true with the future collection of açaí, rubber and medicinal plants. Diversity of crop production should act as an insurance mechanism against the price drop of a given crop. If carbon prices fall, the

Project Proponents will seek alternative sources of funding to continue the Project and compliment the then-reduced funding from carbon finance.

Regarding the health centers, JR Agropecuária e Empreendimentos EIRELI will establish the physical infrastructure of a health and dental center, while the government is responsible for staffing the facilities.

There is a legally-enforceable Tri-Party Agreement valid in both the United States and Brazil that will mitigate the risk of JR Agropecuária e Empreendimentos EIRELI deciding to move forward with a planned deforestation project (i.e., the establishment of a large-scale cattle ranch) instead of respecting the forest conservation project.

For a more extensive identification of risks and mitigation strategies (i.e., measures to address these climate, community and biodiversity risks), please see the VCS Non-Permanence Risk Assessment.

Enhance Benefits Beyond Project Lifetime

There are a variety of measures, both in place and planned, to ensure the Envira Amazonia Project's climate, community and biodiversity benefits are maintained and enhanced beyond the Project Lifetime. This includes:

- The Tri-Party Agreement's Longevity
- Social Projects
- Education and Outreach
- Legalization of Community Land Tenure

Tri-Party Agreement's Longevity

The Tri-Party Agreement between CarbonCo, Carbon Securities JR Agropecuária e Empreendimentos EIRELI stipulates a minimum 60 year Project Lifetime, followed by two renewable terms of 25 years each. Within these contractual time periods, the initial Project Crediting Period will be for 10 years which started on August 2, 2012 and ends on August 2, 2022. While the Envira Amazonia Project's Project Lifetime is 60 years, the Project Proponents are committed to maintaining forest cover within the Envira Amazonia Project beyond both the Project Crediting Period and the initial Project Lifetime.

Both the Tri-Party Agreement and the Project Documents will be filed at the Brazilian Registry Office to ensure the Envira Amazonia Project remains with the property even if the property is sold. Furthermore, the Project and its PDDs (both VCS and CCBS) will be registered with the State of Acre's Climate Change Institute (IMC).

Social Projects

The social projects – such as the collection, processing and sale of both medicinal plants and açaí, along with the establishment of health centers - are designed to provide long-lasting climate, community and biodiversity benefits beyond the Project Lifetime.

Education and Outreach
There are a variety of education and outreach activities which will both maintain and enhance the climate, community and biodiversity benefits beyond the Project Lifetime. In addition, it is the Project Proponents' hope that such benefits will not only extend temporally (i.e., beyond the Project Lifetime), but also in a spatial manner (i.e., beyond Project Zone, across State of Acre, across the country of Brazil and internationally). Such education and outreach activities include:

- Potential Visitation by School Groups
- Local Contractors (further knowledge on how to develop elements of REDD+ projects)
- Landowner spreading the word beyond the Project to other landowners and companies
- Informing the State of Acre how REDD+ projects on privately-owned lands can work alongside the State of Acre's state-level work

Furthermore, the Project will aim to educate children living in the Project Area to ensure the long-term vision of the Project.

Legalization of Community Land Tenure
The legalization of the community land tenure will continue in perpetuity.

Financial Mechanisms Adopted
CarbonCo is well aware of the financial mechanisms required for successful project implementation and it is important to note that CarbonCo financed the Purus Project, which was the first-ever REDD+ project in Acre, Brazil to achieve dual VCS-CCBS validation and verification. In addition, CarbonCo also financed the Russas and Valparaiso Projects, which are two additional REDD+ projects in Acre.

The primary source of financing for the Project will come from Carbonfund.org's existing unrestricted funding, potential in-kind donations and grants, along with the eventual sale of verified carbon units (VCUs).

A detailed pro forma for the Project's initial 30 year period has also been developed. Furthermore, Carbonfund.org's Internal Revenue Service (IRS) Form 990 – which demonstrates the organization's financial health - is publicly available.

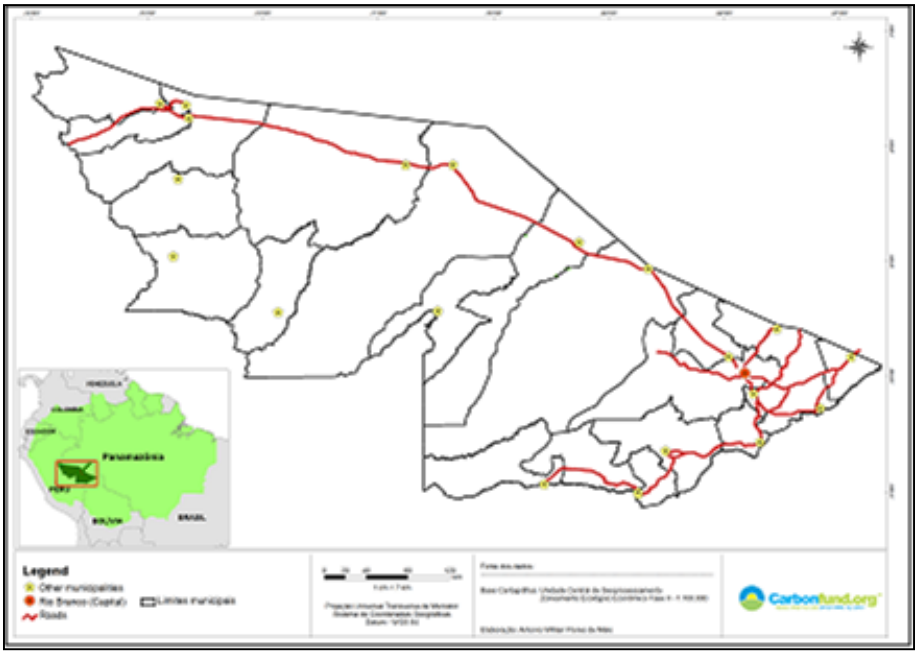
G2. Without-Project Land Use Scenario and Additionality

The following section shall describe the Envira Amazonia Project's "without-project land use scenario" with respect to the Project Zone's expected land use changes. The additionality of the "with-project land use scenario" will also be assessed for the Project's climate, community and biodiversity benefits.

Most Likely Land-Use Scenario
There are two most-likely scenarios within the Project Zone in the "without-project land use scenario." One of these scenarios is the land-use of the local communities and the other scenario is the land-use of JR Agropecuária e Empreendimentos EIRELI.

The goal and most-likely land-use scenario of JR Agropecuária e Empreendimentos EIRELI, without a forest conservation project, is to establish a large cattle ranch on 20% of the property and to do a forest management project on the remaining 80% of the property.

Throughout the State of Acre, private land-use practices - particularly properties located along the highways BR-364 and BR-317- are predominantly medium-to-large cattle ranches. Highway BR-364 runs Northwest through Rio Branco along Acre's Northern border with the State of Amazonas, while Highway BR-317 runs through Rio Branco and heads Southwest.



Map 8: Major Highways in Acre State
(Credit: Professor Antonio Flores and Data from State of Acre's Climate Change Institute)

Land Use along Highways BR-364 (Photo Credit: Normando Sales and Ilderlei Cordeiro)

For more information on the land-use scenario of JR Agropecuária e Empreendimentos EIRELI in the "without-project scenario," please see the VCS Project Description and its use of the VCS VM0007 Methodology.

Current land-use practices among families living throughout the Project Zone include subsistence agriculture and small-scale cattle ranches. In the "without-project scenario," a large-scale cattle ranch would be established by JR Agropecuária e Empreendimentos EIRELI and the subsistence agriculture and small-scale cattle ranching by local families would likely shift to adjacent areas. In addition, the local population would likely increase because of continuing in-migration and this would further increase the pressure on the forests. Migration would also occur by people moving into the area by buying the parcels from the squatters and aggregating these smaller parcels into lager properties for agriculture and larger-scale cattle-ranching.

Pictures of Land Use in Outside Project Zone along Envira River (Photo Credit: Ayri Rando)

The main subsistence crop throughout the Project Zone is manioc (i.e., otherwise known as yuca or cassava), rice, and corn. Additional subsistence crops and fruit trees which are planted throughout the Project Zone include, but are not limited to the following: bananas, beans, coconuts, oranges, papayas, pineapples, and sugarcane.

Pictures of Land Use in Envira Amazonia Project Area along Jurupari River (Photo Credit: Ayri Rando)

Additionality of Project Benefits
The Brazil Forest Code allows for landowners in the Legal Amazon to clear-cut up to 20% of their property. This area eligible for clear-cutting is known as the non-legal reserve. Thus, JR Agropecuária e Empreendimentos EIRELI are not legally obligated to maintain their entire property as a forest conservation project and if not for the forest carbon project, would have clear-cut nearly 40,000 hectares. The clear-cutting of nearly 40,000 hectares would have resulted in deforestation and the subsequent release of millions of tonnes of carbon dioxide emissions. Such deforestation would result in a significant reduction in forest cover and habitat availability for the Project Area's wildlife, including numerous endemic bird species, and the vulnerable tree species (i.e., red cedar and mahogany) would have been harvested.

The various social projects and programs – such as offering agricultural courses, reestablishing rubber tree collection, and developing the structure for açaí and medicinal plants – would not have occurred alongside the establishment of a large cattle ranch by JR Agropecuária e Empreendimentos EIRELI. The aforementioned Theory of Change models connect the Project's activities to the outputs, outcomes, and ultimate project impacts.

The Envira Amazonia Project shall generate net positive climate, community and biodiversity benefits through the generation of verified emission reductions (VERs).

For more information on the additionality of the Envira Amazonia Project, please see the VCS Project Description. Ultimately, there are significant upfront costs, along with technological, institutional and capacity barriers to designing, financing and implementing a REDD+ project.

G3. Stakeholder Engagement

The Project Proponents are committed to stakeholder engagement and thus, "Communities and Other Stakeholders are involved in the project through full and effective participation, including access to information, consultation, participation in decision-making and implementation, and Free, Prior and Informed Consent."[19] Timely and adequate information is available to Communities and Other Stakeholders in both English and Portuguese, along with being available in a Summary Document. Furthermore, the Project has an established feedback and Grievance Redress procedure, and best worker safety practices are utilized.

Access to Information

Accessibility of Full Project Documentation
The Envira Amazonia Project's full project documentation will be made available to Communities and Other Stakeholders throughout the Project Lifetime. For example, the Climate, Community and Biodiversity Standard's Project Design Document (CCBS PDD) is available online in both English and Portuguese. A Summary Document, in both English and Portuguese, is also available online. The Summary Documents are distributed to local families and additional copies of the full CCBS PDD are available at the Project's headquarters. In addition, the Project Documents are emailed the numerous Other Stakeholders, while the Public Comment Period – which includes links to the full documents – is announced via radio

[19] CCBA, "CCB Standards, 3rd Edition," Available: https://s3.amazonaws.com/CCBA/Third_Edition/CCB_Standards_Third_Edition_December_2013.pdf

throughout the State of Acre and emailed to hundreds of Other Stakeholders. Future project documents – including the VCS Monitoring Reports and CCBS Project Implementation Reports – shall also be made available.

Information on Costs, Risks and Benefits
CarbonCo hired the independent community specialist Ayri Rando to visit in-person with local families throughout the Project Zone and with local families outside the Project Zone along the Envira River to share information on the costs, risks and benefits of the Envira Amazonia Project. These meetings included both individual meetings and also community-wide meetings.

The Project Proponents had an initial, tentative list of project benefits and the list was further refined through the feedback provided by the local families. Ayri Rando also provided information on the risks and costs – primarily the opportunity cost of reducing deforestation – to the communities and asked the communities about their own concerns such as what would prevent them from participating in the project, what concerns them about the project, and how the project can mitigate their concerns.

Community Explanation of Validation Process
Ayri Rando, the independent community specialist, personally met with a total of 41 families from May 20th to June 11th, 2014. Part of Ayri Rando's initial discussion with the families included an explanation of the validation process such as describing the Public Comment Period (i.e., which shall occur in October or November 2014) and giving the families an early notice about the visit of an auditor in December 2014. Furthermore, Mazinho and Kidney da Cunha Aires will visit the Project Zone in November 2014 to inform the families about the Public Comment Period, solicit comments, and to deliver the project documents. Kidney is the local project manager at the Purus Project, assists with the biodiversity monitoring plan at the Russas and Valparaiso Projects, and will provide periodic assistance at the Envira Amazonia Project.

The Project Proponents have frequently discussed the validation and verification process to Other Stakeholders, such as the Climate Change Institute.

Consultation

Communities Influence on Project Design
The Project Proponents recognize the central importance of the local families to the success of the Envira Amazonia Project and have incorporated their feedback into the project design. These consultations, in addition to being documented, respected local customs, values, institutions, and High Conservation Values. Furthermore, Ayri Rando consulted with different age groups, with both men and women, and regardless of socio-economic status.

As previously mentioned, the independent community specialist Ayri Rando met with a total of 41 families from May 20th to June 11th, 2014. Ayri Rando explained the project's preliminary activities and goals and Ayri received substantial feedback from the communities. The Project was modified including a reconfiguration of the project implementation schedule and specific activities were added to the project design such as specific agricultural courses.

As an example of respecting local customs and values, Ayri Rando met at the families' houses and asked how (e.g., individual, community meetings, or via radio) and when (e.g., weekends, evenings, etc.) the families would like be consulted in the future.

Ayri Rando also asked if there were community decision-making traditions and asked about local institutions. This said, there are no traditions of community decision-making and the only local institution identified was Sindicato de Trabalhadores Rurais (STR, translated into Rural Workers Union)-Feijó which shall be consulted by the Project Proponents.

After a lengthy discussion about the Project, Ayri Rando asked the communities if they would like to join the Project and if so, how (i.e., verbal agreement or via signing an "ata") they would like to demonstrate their willingness to join the Project.

Furthermore as a forest conservation project, the Envira Amazonia Project shall respect High Conservation Values (HCVs) such as the region's forests and water.

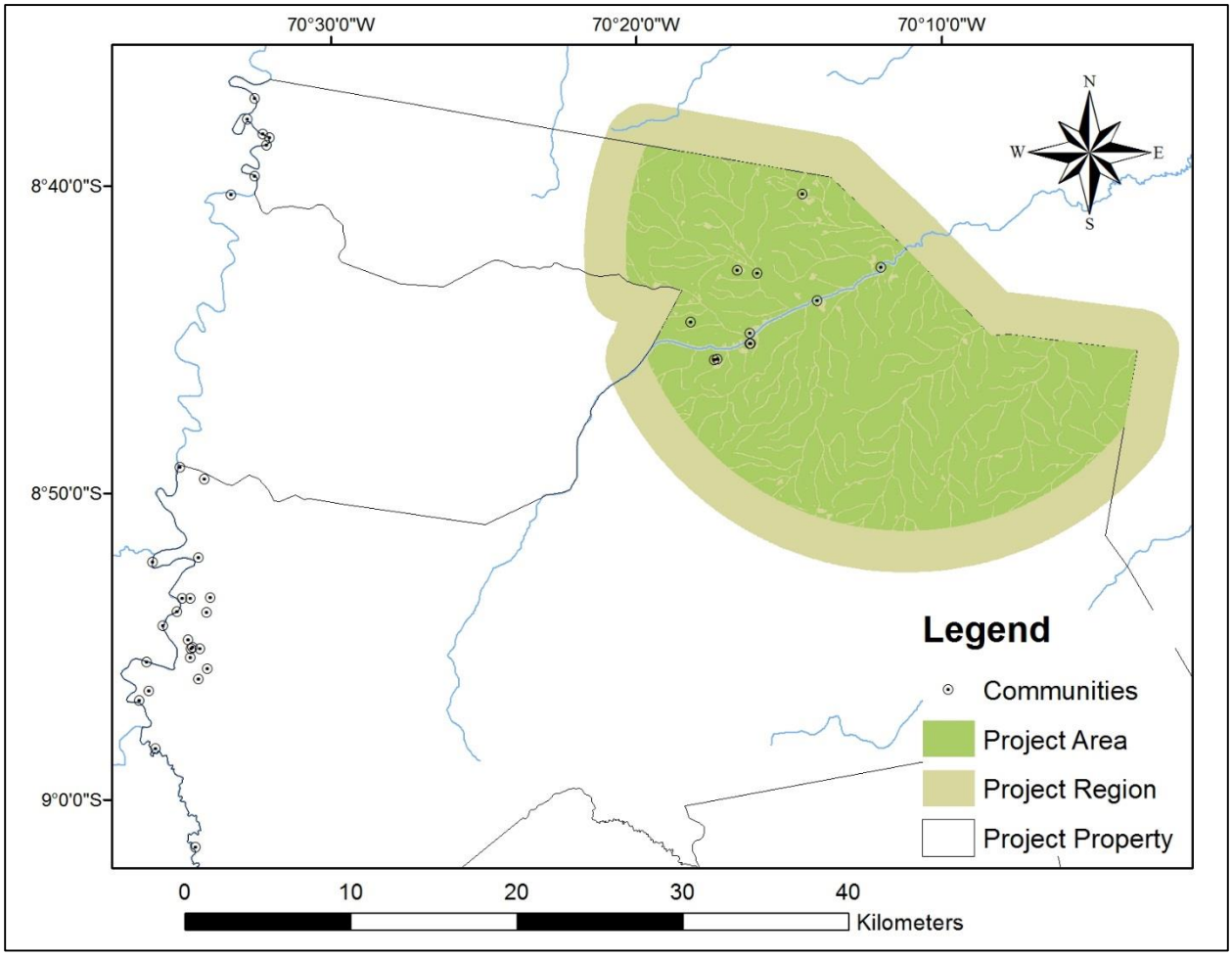
Meetings between Ayri Rando and Communities Outside Project Zone along Envira River (Photo Credit: Ayri Rando)


F G H I J K L M N

Meetings between Ayri Rando and Communities in Project Zone along Jurupari River (Photo Credit: Ayri Rando)

Consultations Directly with Communities

Ayri Rando, the independent community specialist, directly met with a total of 41 families from May 20th to June 11th, 2014. The following map is the location of all 41 families.



Map 9: Location of Community Consultations (Credit: TerraCarbon and Ayri Rando)

The Project Proponents have also regularly met with Other Stakeholders – such as S.O.S. Amazonia, the Climate Change Institute, and the Vice-Governor of Acre – to discuss the Envira Amazonia Project.

Participation in Decision-Making and Implementation

Measures to Enable Effective Participation

The measures needed to enable effective participation began with the identification and contracting of Ayri Rando, who specializes in community consultations for REDD+ projects in the State of Acre, Brazil. Thus, Ayri Rando speaks Portuguese, is familiar with riverine communities throughout Acre, is familiar with REDD+ and community engagement including cultural and gender sensitivities, and previously assisted CarbonCo at the Purus Project.

The next measure to enable effective participation is to directly meet with local families and Ayri Rando spent nearly a month visiting families for the Envira Amazonia Project.

An additional measure to enable effective participation is to incorporate the community's feedback in order to design the project activities so that the activities directly benefit the local families.

Further, the Project Proponents will continue to engage the local families and will monitor community impacts to ensure effective participation is maintained.

Anti-Discrimination

Measures to Ensure No Discrimination
Carbonfund.org Foundation, the parent company of CarbonCo, has an employee handbook that prohibits any form of discrimination or sexual harassment based on age, sex, race, religion, or sexual orientation by its employees. All Project Proponents and contractors are required to abide by labor laws including the prohibition of any form of discrimination. Furthermore, no accusations or convictions of discrimination or sexual harassment have been made against any of the Project Proponents or their contractors.

Feedback and Grievance Redress Procedure

Demonstrate Formalized, Clear Grievance Redress Procedure
In case any disputes arise, the Project Proponents have formalized a clear process for handling unresolved conflicts and grievances throughout the Project's planning and implementation phases.

Essentially, if conflicts or grievances are unable to be resolved by the Project Proponents (particularly JR Agropecuária e Empreendimentos EIRELI), the State of Acre's Climate Change Institute – acting as a third party mediator to prevent any conflict of interest - will hear, respond to, and help resolve all reasonable grievances with the Project through an impartial and accessible process.

More specifically, the State of Acre's Climate Change Institute has established an Ombudsman who will be the specific person to receive and refer any grievances about the Project. Any stakeholder is free to contact or visit the Climate Change Institute with any unresolved conflicts or grievances. Below is the physical address, phone numbers, fax numbers and email address:

Instituto de Mudanças Climáticas e Regulação de Serviços Ambientais
(Climate Change Institute)
Address: Rua Floriano Peixoto, nº 460, Primeiro Andar, Centro, Acre, Brazil
Telephone: +55 (68) 3223-1933 / +55 (68) 3223 9962 / +55 (68) 3223 1903
Fax: +55 (68) 3223 9962
Email Address: gabinete.imc@ac.gov.br

The Climate Change Institute's process for hearing, responding to, and resolving reasonable grievances is as follows:

- Receiving: Any person may visit or contact the Climate Change Institute. Any person who makes contact with the Ombudsman over the internet will receive a notification of receipt by email.
- Verification and Acceptance: The Ombudsman will decide whether a complaint is considered reasonable and whether the complaint should be accepted by the Climate Change Institute.
- Referral to Internal Areas: When deciding to accept a demand, the Ombudsman records the compliant and informs the person raising the complaint of the protocol number and the deadline for a response. If the demand is accepted, the demand will be internally referred to the appropriate specialist. If the demand is rejected, the Ombudsman will inform the person of the reason for the rejection.
- Monitoring: The Ombudsman will monitor the protocol and will monitor the internal areas responsible for collecting the answers to the compliant.
- Resolution: When the settlement is decided, the Ombudsman will make contact with the person who raised the complaint and the Ombudsman will close the protocol. All complaints received by the Ombudsman are usually answered within five working days and the person can call to know the progress of their protocol.

Each month the Ombudsman shall prepare a report and forward it to Board and President of the Climate Change Institute. In this report, the Ombudsman will: summarize actions taken to address complaints; quantify complaints and provide graphics to compare number of complaints against previous months; report amount of open and closed protocols; and provide relevant suggestions for process improvements and final considerations of the Ombudsman.

Furthermore, all conflicts or grievances will be addressed within a reasonable timeframe, the resolutions will be documented, and this process has been publicized to all stakeholders and especially to the local communities.

Worker Relations

Orientation and Training for Project's Workers

The Project Proponents will continuously offer orientation and training for the Project's workers. In addition, the Project Proponents will seek to locally hire in order to increase local participation, increase knowledge transfer, and facilitate cultural exchange. The Project will also aim to build capacity amongst women and marginalized people in the community.

As an example of orientation and training, TerraCarbon, CarbonCo and Carbon Securities provided a refresher, on-the-ground training for TECMAN to undertake the forest carbon inventory in May 2014. Classroom training and on-the-ground training was originally provided to TECMAN in August 2011 and a refresher, online training was conducted in January 2013.

Forest Carbon Inventory Training in May 2014 (Photo Credit: Brian McFarland)

Additional trainings and orientation to the Envira Amazonia Project were provided to Willian Flores and Ayri Rando. Ayri Rando then provided extensive orientation to communities throughout the Project Zone and to Other Stakeholders along the Envira River.

In the future, there will be trainings associated with hiring an ornithologist and offering agricultural extension courses, along with trainings for the collection, transportation, processing and sales of açaí, rubber and medicinal plants.

Equal Opportunity

Communities throughout the Project Zone will be given an equal opportunity to fill all work positions. Available positions will be announced on the radio and will be communicated directly to families via the local project manager. Such positions will also include orientation and training from the Project Proponents. Positions will be fulfilled based off merit and will be made available to both women and marginalized people.

Laws and Regulations Covering Worker's Rights

The Project shall meet, or exceed, all applicable laws and regulations covering worker rights in Brazil and the Project Proponents will inform all workers about their rights.

The following is a list of Brazil's relevant laws and regulations covering worker's rights:

- The Brazilian Constitution, Chapter II-Social Rights, Articles 7- 11 which addressed:
    - Minimum wage

- Normal working hours
- Guidance on vacation and weekly leave
- Guidance on maternity and paternity leave
- Recognition of collective bargaining
- Prohibition of discrimination[20]

In addition to the Constitution, there are two additional decrees related to Brazilian labor laws.

- Consolidação das Leis do Trabalho (CLT): DECRETO-LEI N.º 5.452, DE 1º DE MAIO DE 1943 (Consolidate of Working Laws).[21] This decree gives more clarification on:
  - Hourly, daily, weekly and monthly work hours
  - Employment of minors and women
  - Establishes a minimum wage
  - Worker safety and safe working environments
  - Defines penalties for non-compliance by employers
  - Establishes a judicial work-related process for addressing all worker related issues

- Estatui normas reguladoras do trabalho rural: LEI Nº 5.889, DE 8 DE JUNHO DE 1973 (Establishes Regular Norms for Rural Workers).[22] This is a complimentary law to the aforementioned 1943 decree because prior to 1973, rural workers did not have the same rights as urban workers. In 1973, this law was established to specify the equality between urban and rural workers, along with compensation for overtime.

Compliance with Law
Agreements between the Project Proponents as well as Agreements between CarbonCo and its contractors stipulate firms to abide by labor laws (for example, wages above Brazil's federal minimum wage) and an assurance that all Brazilian employment taxes and insurance are paid.

In addition, CarbonCo has an employee handbook to ensure proper guidelines are followed by its employees and contractors. JR Agropecuária e Empreendimentos EIRELI has an explanatory letter on labor rights that will be presented to all of their employees to ensure workers are informed about their rights.

CarbonCo undergoes a financial audit by an independent accountant to ensure all taxes, including employment, social and corporate, are paid. Furthermore, JR Agropecuária e Empreendimentos EIRELI provided a "Receita Federal" which certify that all taxes (including employee and business) and insurance (including social) are paid.

[20] Massachusetts Institute of Technology, "Brazilian Constitution," Available: http://web.mit.edu/12.000/www/m2006/teams/willr3/const.htm
[21] Presidency of the Republic, "DECRETO-LEI N.º 5.452, DE 1º DE MAIO DE 1943, Available: http://www.planalto.gov.br/ccivil_03/decreto-lei/Del5452.htm
[22] Presidency of the Republic. "LEI Nº 5.889, DE 8 DE JUNHO DE 1973," Available: http://www.planalto.gov.br/ccivil_03/leis/L5889.htm

The Project Proponents will forever continue to work with the well-being of the local families in mind. The local families will be offered meaningful employment, have the ability to directly shape the Project, and are given the freedom to express any and all grievances.

Risks to Worker Safety

The Envira Amazonia Project Proponents comprehensively assessed the situations and particular occupations that could pose risks to worker safety. The Project Proponents will inform workers of such risks, explain how to minimize such risks, and the Project Proponents will use best work practices.

The main potential risks to workers identified by the Project Proponents include:

- Drowning
- Heat Exhaustion and Dehydration
- Getting lost in Remote Forest
- Venomous Snake Bites
- Tropical Diseases

Drowning

It is important to note, that all boats travel relatively slow on the Envira, Jurupari and Purus Rivers, many participants know how to swim, and life preservers are always onboard in case a boat does happen to capsize.

Heat Exhaustion and Dehydration

Workers and Project Proponents are familiar with tropical rainforests (for example, high levels of humidity and tropical temperatures) and prepare for each trip with sufficient food and water.

Getting Lost

Global positioning systems (GPS) are used during trips into the deep forest to minimize the risk of getting lost. Local guides from the community and the landowner's familiarity with the area also helps to minimize the chances of getting lost.

Venomous Snake Bites

The most substantial risk to workers, particularly TECMAN's employees during the forest carbon inventory, was the potential encounter with venomous snake bites. Snake bites are relatively common in South America[23] and specifically within the State of Acre.[24] The snake species of greatest concern are the fer-de-lance (*Bothrops atrox*) and the South American bushmaster (*Lachesis muta*).[25] There are also many poisonous spiders and scorpions in tropical rainforests. To mitigate such risk, all TECMAN's employees were equipped with and required to wear protective snake chaps.

[23] J.-P. Chippaux. "Reviews/Analyses," Available: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2305789/pdf/bullwho00388-0084.pdf

[24] Pierini SV et al., "High incidence of bites and stings by snakes and other animals among rubber tappers and Amazonian Indians of the Juruá Valley, Acre State, Brazil,"

[25] Fabiano Waldez and Richard C. Vogt, "Ecological and epidemiological aspects of snakebites in riverside communities of the lower Juruá River, Amazonas, Brazil," Available: http://piagacu.org.br/?attachment_id=416

TECMAN's Employees with Snake Chaps (Photo Credit: Brian McFarland)

Worker safety is of the highest importance. For TECMAN's forest carbon inventory work, there was a discussion of safety procedures and TECMAN has a safety manual entitled, *Procedimentos de Segurança em Campo* (Field Safety Procedures, in English).

Tropical Diseases
There are many tropical diseases in Acre, Brazil such as malaria, yellow fever and chagas disease. The Project Proponents are encouraged to get yellow fever vaccinations, malaria pills are available, and mosquito nets are frequently used.

G4. Management Capacity

The Project Proponents, along with their partners, have "adequate human and financial resources for effective implementation" of the Envira Amazonia Project.

Project's Governance Structures, Roles and Responsibilities
The three primary Project Proponents responsible for the Project's design and implementation are JR Agropecuária e Empreendimentos EIRELI, CarbonCo, and Freitas International Group (doing business as Carbon Securities).

The following shall provide the overall governance structure, along with specific roles and responsibilities.

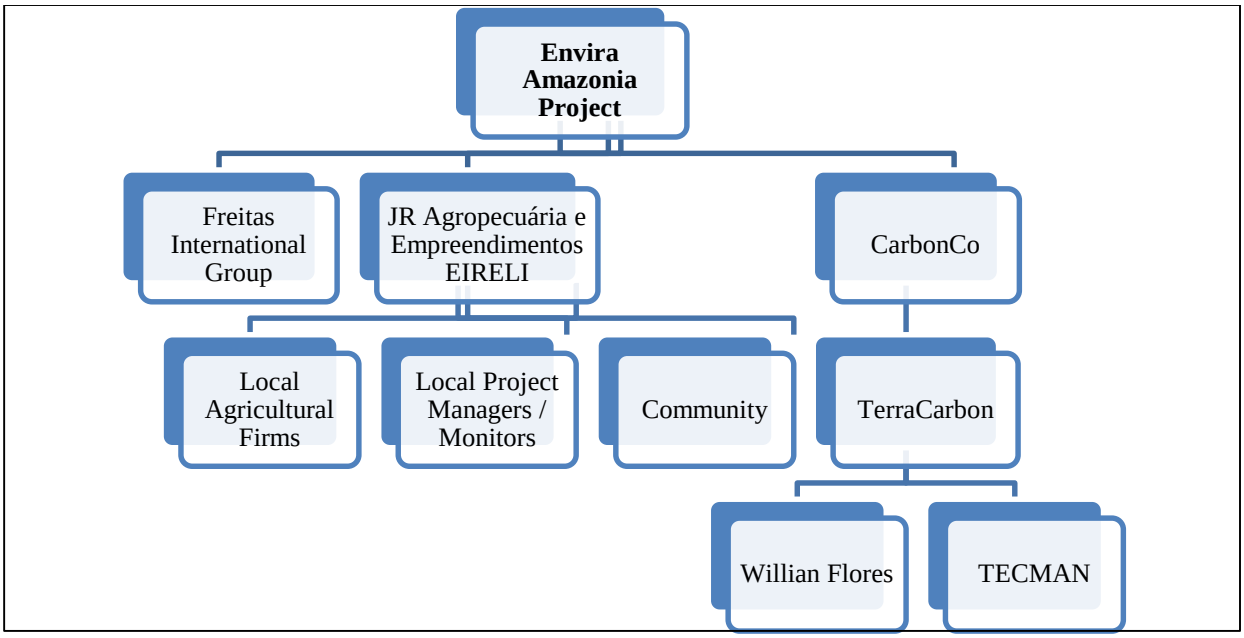


Figure 23: Governance Structure / Organizational Chart of the Project

CarbonCo LLC

CarbonCo, LLC ("CarbonCo"), the wholly-owned subsidiary of Carbonfund.org Foundation, is a limited liability company based in Bethesda, Maryland.

CarbonCo develops carbon reduction projects by working with private landowners on the documentation and programs needed to ensure large tracts of land are protected from deforestation, attain international certification, and create value for all Project Proponents.

CarbonCo is managing the project development portion of Carbonfund.org's work but is not in the business of climate change education and outreach, small scale carbon offset retail sales, nor corporate sustainability programs. CarbonCo instead is focusing on a number of project opportunities and the advisory services necessary to help these conservation projects reach certification. This experience includes financing and developing the Purus Project, which was the first-ever REDD+ project in the State of Acre to achieve dual VCS-CCBS validation and verification, along with the VCS-CCBS validated Russas and Valparaiso Projects. To learn more, visit: www.CarbonCoLLC.com.

More specifically, CarbonCo's contractual obligations and specific responsibilities include:

- Performing due diligence to determine the feasibility of the Project
- Selecting an international certification standard and appropriate REDD methodology
- Acquiring satellite images and/or remote sensing
- Determining an appropriate deforestation rate, reference region and leakage belt
- Measuring the Project's carbon stock via a forest carbon inventory
- Developing the VCS Project Description and CCBS Project Design Document
- Posting the CCBS Project Design Document for a 30-day Public Comment Period
- Contracting an independent and approved auditor to validate and verify the Project
- Addressing all Corrective Action Requests raised by the audit team

- Registering the verified emission reductions (VERs) on a VCS-approved registry
- Providing advice on the marketing, sale and transfer of VERs

Furthermore, CarbonCo's entire financial portfolio is audited by an independent, certified public accountant and CarbonCo shall also keep all documents and records (i.e., including contracts) in a secure manner for at least two years (i.e., seven years for the CCBS PDD) after the end of the Project Crediting Period. This includes publicly displaying the completed VCS Project Description, as well as keeping hard copies of documents in easily accessible file cabinets and electronic copies in the cloud and on a backed-up share drive.

Contact: Brian McFarland - BMcFarland@CarbonCoLLC.com or (240) 595-6883
Contact: Eric Carlson – ECarlson@CarbonCoLLC.com or (240) 247-0630

Freitas International Group, LLC and Carbon Securities
Freitas International Group, LLC is a Florida limited liability company, doing business as Carbon Securities, with a main office located in Miami, Florida and associates in the Brazilian cities of Goiânia, Brasília, Rio Branco, Belém, and São Paulo.

Carbon Securities works with CarbonCo, LLC to identify and develop high quality carbon reduction projects in the Amazon Basin. This experience includes the Purus Project, which was the first-ever REDD+ project in the State of Acre to achieve dual VCS-CCBS validation and verification, along with the VCS-CCBS validated Russas and Valparaiso Projects. To learn more about Carbon Securities, please see the validated CCBS PDD and visit: http://www.carbonsecurities.org.

More specifically, Carbon Securities' contractual obligations and specific responsibilities include:

- Promoting, encouraging and facilitating the participation and cooperation of Landowner
- Facilitating due diligence on the Project
- Serving as a liaison and translator for the Landowner and CarbonCo
- Assisting CarbonCo which includes establishing meetings with Landowner and relevant stakeholders, arranging site visits, providing information and documentation such as previous studies, photographs, and satellite images related to the Project

Contact: Pedro Freitas - PedroFreitas@CarbonSecurities.org or (305) 209-0909 or +55 (62) 9999-2113
Contact: Marco Aurélio Freitas - MarcoFreitas@CarbonSecurities.org or +55 (62) 9969-2022
Contact: Elizabeth Guimarães - ElizabethGuimarães@CarbonSecurities.org or +55 (62) 3642-6837

JR Agropecuária e Empreendimentos EIRELI
JR Agropecuária e Empreendimentos EIRELI (which translates into JR Agriculture-Livestock and Ventures) was formed on July 13, 2009 and is the company that owns the Envira Amazonia Project. JR Agropecuária e Empreendimentos EIRELI was established by Duarte Jose do Couto Neto ("Duarte") and his wife Francisca das Graças Prado Couto ("Graças").

The company is currently established, active, and headquartered at the following address:

JR Agropecuária e Empreendimentos EIRELI
Cadastro Nacional da Pessoa Jurídica (CNPJ) Number: 11.313.775/0001-33
Travessa Alagoas, Number 49, Altos, Bairro Centro
Rio Branco, Acre, Brazil, CEP (Zip Code) 69900-412

Rege Ever C. Vasques and his brother Fredis C. Vasques, along with Jose Elves Araruna Sousa and Almir Santana Ribeiro are assisting Duarte and Graças with the design and implementation of the Envira Amazonia Project.

Contractual obligations and specific responsibilities for JR Agropecuária e Empreendimentos EIRELI include:

- Providing all evidence of ownership of the Property such as deeds, titles and maps which clearly define the Property's boundaries and registered with government authorities
- Eliminating the drivers and causes of deforestation
- Acknowledging and agreeing to not execute any activity that otherwise might interfere with the implementation during the term of the Project and with the VER generation and certification at the Property, including, but not limited to (i) clearing the forest for livestock; (ii) clearing the forest for agriculture; (iii) expanding old roads or constructing new roads; (iv) expansion into new forests on Property for community use or infrastructure facilities (i.e., bridges, housing, electricity, etc.); (v) expanding logging operations; and (vi) deforestation for new mining or mineral extraction.
- Taking all actions necessary to avoid any risks associated with the Project, notably the spread of invasive species, forest fires and pests
- Demonstrating legal ownership of any and all pre-existing carbon credit rights
- Paying any and all pending liens, taxes, fines and/or any other debts against the Property
- Cooperating with CarbonCo and Carbon Securities in any manner and whenever required in order to obtain the VERs which includes interviews aiming to gather additional information on the Project, verifying information written in the project documents, granting access to the Project site, attending meetings with the authorities and community to explain the Project
- Elaborating a community impact monitoring plan
- Meeting with community to inform and explain the proposed Project along with providing a means for the community to express, and be available to address, reasonable grievances
- Incorporating community comments into the development of the Project and resolve any reasonable grievances with the Project
- Landowner acknowledges and agrees that all conservation/preservation measures to be taken in connection with the Project will be carried out by Landowner voluntarily
- Making the project documentation publicly available at the Landowner's office and at the Property

Contact: Duarte and Graças – GracaPCouto@gmail.com or +55 (68) 9232-7475
Contact: Rege Ever C. Vasques – RegeEver@hotmail.com or +55 (68) 9201-1060

Contact: Jose Elves Araruna Sousa – ElvesAraruna@gmail.com or +55 (68) 8402-8151
Contact: Almir Santana Ribeiro - AmazonCarbonBrazil@gmail.com or +55 (68) 3223-2080

TerraCarbon LLC
CarbonCo does not directly employ staff with the technical skills to perform and execute some of the requisite activities and hired TerraCarbon. TerraCarbon LLC is an advisory firm specialized in the forestry and land-use sector of the carbon markets. TerraCarbon provides a range of technical, transaction, and strategic services to clients that implement market oriented programs or projects to restore and protect the world's forests.

TerraCarbon was formed in 2006 by Scott Settelmyer, the former CFO of the Chicago Climate Exchange, and Bernhard Schlamadinger, world-renown expert in forest carbon and bioenergy, to provide specialized expertise to participants in the forest and land-use sector of the carbon market. Since its founding, TerraCarbon has advised clients from around the world on projects ranging from reforestation to avoided deforestation to peatland restoration. TerraCarbon, with clients including forestry companies, forest project developers, carbon funds, international multi-lateral agencies, and non-profit organizations, has a mission to provide practical advice rooted in experience to help clients implement forest and land-based carbon activities that mitigate climate change. To learn more, visit: http://terracarbon.com/

Specific to the Project, TerraCarbon has extensive experience including:

- Part of the core technical team convened by Avoided Deforestation Partners to develop VCS methodologies for REDD projects, including drafting text and revisions to incorporate peer review and validation comments.
- Technical development of a REDD project in Peru for a local and an international NGO, including deforestation modeling and preparation of technical elements for VCS and CCB Project Design Documents.
- Ongoing feasibility analysis for a potential IFM and REDD project in Chile that will be developed under the VCS. Scope of work includes eligibility analysis, methodological analysis, development of emission reduction estimates, and preparation of a plan and budget for technical development.
- Providing technical inputs on the development of a REDD pilot project in Guyana with Conservation International for the IADB and Government of Guyana. The project involved estimating forest carbon stocks across the entire country, based on literature and existing inventory data, covering all forest types and ecosystems.
- Designed and implemented forest carbon inventories for a range of domestic and international forest carbon projects to determine baseline and with project carbon stocks. This has consisted of developing sampling strategies, training personnel, and collecting and analyzing statistical data from the inventories.
- Extensive staff experience in modeling carbon stock dynamics in forests.
- Provided technical project development services, particularly with respect to the forest carbon inventory and deforestation baseline modeling, for CarbonCo's Russas, Valparaiso and Purus Projects in Acre, Brazil.

TECMAN LTDA
CarbonCo, with the guidance of TerraCarbon, hired TECMAN LTDA ("TECMAN") to perform the Project's forest carbon inventory. TECMAN is a Rio Branco-based environmental consulting and forest management firm founded in 2000 to meet a growing demand for forestry and environmental projects in the state of Acre, Brazil. Acquired by Fabio Thaines and Igor Agapejev de Andrade in 2007, TECMAN's recent accomplishments include over 50,000 hectares of sustainable forestry management work including within the Antimary State Forest of Acre, Brazil. TECMAN also successfully completed the forest carbon inventories for the Russas, Valparaiso and Purus Projects. To learn more, visit: http://tecman.eng.br/.

Contact: Fabio Thaines - FabioThaines@tecman.eng.br or +55 (68) 3227-5273
Contact: Igor Agapejev de Andrade - IgorAgapejev@tecman.eng.br or +55 (68) 3227-5273

Antonio Willian Flores de Melo
CarbonCo, with the guidance of TerraCarbon, hired Professor Antonio Willian Flores de Melo ("Professor Willian Flores") to assist with data acquisition and to review the Project's regional deforestation and land-use modeling. Willian Flores is a Professor at the Federal University of Acre (UFAC) within UFAC's Center for Biological Science and Nature. Professor Willian Flores received a degree in Agronomy from the Federal University of Acre and a Masters' of Science from the University of Sao Paulo in Ecological Studies and Agronomy. Professor Willian Flores is currently working towards a PhD and assisted CarbonCo and TerraCarbon with the deforestation baseline modelling of the Purus Project and reviewed the baseline for the Russas and Valparaiso Projects.

Contact: Antonio Willian Flores de Melo - willianflores@gmail.com or +55 (68) 3901-2611

Local Community
The local community in the Project Area consists of approximately ten families and approximately 60-70 people. Ayri Rando consulted and interviewed the following individuals living within the Project Area:

- José Magalhães da Silva ("Zé do Nel")
- João Nazário Rodrigues
- Ademar Felipe de Sousa
- José Ferreira de Sousa (José "Mundico")
- Raimundo Maurício do Nascimento ("Novo")
- José Sousa do Nascimento ("Zé Mangu")
- Antônio Francisco Lopes da Silva
- Raimundo Cunha da Silva ("Carlisto")
- Jorginaldo da Silva Pedrosa ("Naldo")
- Francisco Cirlândio Dimas de Sousa

Key Technical Skills
The key technical skills required to successfully implement the Project, include:

- Stakeholder identification and community engagement
- Biodiversity assessment and monitoring

- Carbon stock measurement and monitoring
- Regional deforestation and land-use modelling
- Project management
- Local knowledge and fluency in Portuguese

The Project's management team and advisors have both the expertise and prior experience with financing, designing, and implementing forest carbon projects.

Brian McFarland, Director of Carbon Projects and Origination
Brian McFarland, who earned a dual graduate degree in Business Administration and Global Environmental Policy from American University, is the Director of Carbon Projects and Origination for Carbonfund.org and CarbonCo.

Brian's graduate thesis was entitled, *Origins, Development and Potential of the International REDD Market*. Brian has also published 17 articles and a book entitled, *REDD+ and Business Sustainability: A Guide to Reversing Deforestation for Forward Thinking Companies* by Dō Sustainability.

Brian is currently responsible for project origination at CarbonCo and project portfolio management at Carbonfund.org. More specific to the Project, this includes writing Project Design Documents, structuring project implementation activities (i.e., advising on social projects, designing both community and biodiversity monitoring plans, etc.), coordinating site visit logistics, contracting validation and verification services, and managing both local and technical contractors. Brian's previous experience with REDD+ projects in the State of Acre includes spearheading the Purus Project, which became the first-ever REDD+ project in the State of Acre to achieve dual VCS-CCBS validation and verification, along with the Russas and Valparaiso Projects.

While finishing his Psychology and International Development undergraduate degree from Clark University, Brian conducted authentic environmental fieldwork in Mexico, Costa Rica, Kenya and Brazil. Such fieldwork included addressing human-wildlife conflicts, working on sustainable community development projects and biodiversity monitoring. During graduate school, Brian also volunteered for the Smithsonian Institution, the United Nations Global Compact, and the U.S. Department of State.

Brian is a certified Project Management Professional from the Project Management Institute, certified Greenhouse Gas Inventory Quantifier from CSA Standards, member of the Metropolitan Washington Council of Governments' Air and Climate Public Advisory Committee and was a member of the Climate, Community and Biodiversity Standard Revisions Committee.

Pedro Freitas, Founder and President
Pedro Freitas is the Founder and President of Freitas International Group, LLC and has more than seven years of experience in the environmental field. Pedro, while studying a graduate program in Sustainability and Environmental Management at Harvard University, has chosen to dedicate his time to the protection of tropical forests.

Pedro, who did his undergraduate degree in international business at the Catholic University of Goiás, is an American citizen born and raised in Brazil with fluency in both Portuguese and English. From 2002 to 2004, Pedro also worked with a variety of private companies on teak and eucalyptus reforestation projects in Goiás, Brazil. Pedro also personally assisted in a variety of manners with the Envira Amazonia, Russas, Valparaiso and Purus Projects.

Elizabeth Guimarães, Project Coordinator
Elizabeth Guimarães is an environmental consultant and project coordinator for Carbon Securities. Elizabeth received a Bachelor of Law from the Universidade Salgado de Oliveira, (i.e., Goiânia, Goiás campus) in 2010. Elizabeth's primary responsibility is to work directly with private landowners to explain the Tri-Party Agreement and to facilitate their signing of the Tri-Party Agreement in order to develop REDD+ projects on their property.

Duarte Jose do Couto Neto and Francisca das Graças Prado Couto
Duarte José do Couto Neto ("Duarte") was born on March 3, 1950 in the city of São Paulo and was raised in the city of Pirajuí in São Paulo State where his parents Umberto Couto and Tereza Capistrano do Couto were large ranchers and farmers in the northwest portion of São Paulo State.

Duarte graduated in Economics and studied until the third year of Medicine when his parents acquired rubber plantations in the cities of Rio Branco and Sena Madureira in the State of Acre. In 1975, Duarte married Francisca das Graças Prado Couto with whom they had 3 children and 4 grandchildren.

Duarte Jose do Couto Neto ("Duarte") and his wife Francisca das Graças Prado Couto acquired extensive land holdings in the early 1980s and managed the lands for rubber extraction. At the height of their rubber extraction business, Duarte and Graças had acquired approximately 840,000 hectares and employed nearly 1,500 workers. After seeing a boom in the 1980s, the rubber industry declined steadily in the 1990s leading Duarte and Graças to sell some of their landholdings and seek out other business partnerships to expand revenues. Together with their children, Duarte and Francisca now have approximately 400,000 hectares of land in the counties of Feijo and Tarauacá. Today, Duarte has approximately 4,000 head of cattle along with wood management projects.

The company JR Agropecuária e Empreendimentos EIRELI was established by Duarte and Graças on July 13, 2009. Their plan, as previously discussed, was to log commercially valuable tree species on 20% of the property prior to converting the land to a large-scale cattle ranch.

Rege Ever Carvalho Vasques
Rege Ever Carvalho Vasques is a professional lawyer accredited to both the OAB/AC (Order of Lawyers of Brazil for State of Acre) and to the OAB/MT (Order of Lawyers of Brazil for State of Mato Grosso). Rege has been practicing law since February 2006 and works for the firm Vasques Assessoria Jurídica, which translates as Vasques Legal Advice.

Rege graduated from the Faculty of Mato Grosso do Sul in 2005, became a resident of Acre in 2007, and is currently active in agricultural and environmental causes in the administrative and judicial spheres.

Jose Elves Araruna de Sousa
Jose Elves Araruna de Sousa was born in Brasília on March 16, 1965 and at the age of 20, Jose moved to town of Porto in the State of Rondônia. During this time, Jose served as a public official in the State Court. In addition, Jose also worked in the communications field for two local radio stations.

In 1990, Jose went to work in the city of Rio Branco, in the production of a majority political campaign, exercised the functions of a host broadcaster, produced radio and television programs as well as acting as a sound coordinatior, where he managed to succeed in electing the then-Governor Edmundo Pinto de Almeida Neto. Jose settled in Rio Branco, and later worked in the production of events and concerts, owned nightclubs, and coordinator modulated radios.

Jose then decided to attend law school and today, Jose practices civil law and labor law. Jose is currently attending a post-graduate tax law program and owns his own law office in Rio Branco.

Almir Santana Ribeiro
Almir Santana Ribeiro was born and raised in Xapuri, Acre. Almir is the current owner of the real estate firm called Amazon Imóveis and Almir also owns the firm Amazon Carbon Brazil.

Amazon Imóveis and Amazon Carbon Brazil both work with stakeholders to fund the preservation and conservation of tropical forests which are increasingly under deforestation threat from social, environmental and economic pressures.

More specifically, Almir assists with the preparation and organization of technical and legal documentation necessary for the development and registration of REDD+ projects.

David Shoch, Vice President, Forestry and Technical Services
David advises TerraCarbon's clients on technical and methodological issues related to forest carbon offset projects. David is a forester and has over ten years of experience in forest biomass carbon measurement and monitoring, and forest growth and yield modeling. He has contributed authorship on seminal publications including the Verified Carbon Standard (formerly known as the Voluntary Carbon Standard) and the Intergovernmental Panel on Climate Change (IPCC) Supplementary Methods and Good Practice Guidance for Land-use, Land-use Change and Forestry (LULUCF) Activities. David is currently a member of the core team convened by Avoided Deforestation Partners to develop VCS methodologies for REDD projects.

Prior to his position at TerraCarbon, David served with The Nature Conservancy's Climate Science Team and with Winrock International. He has been a member of the Society of American Foresters since 1997.

James Eaton, Senior Manager, Forestry and Technical Services
Jamie provides technical support to TerraCarbon's clients that are assessing or developing forest or land-based carbon projects. This includes providing technical project development services to CarbonCo for the Envira Amazonia, Purus, Russas and Valparaiso Projects.

Jamie is an expert in forest and soil carbon measurement and monitoring, and has been involved in terrestrial carbon research across the globe, including Poland, Ireland, Mexico, Ecuador, and throughout North America. His publications have appeared in Forest Ecology and Management, Proceedings of the National Academy of Sciences and Climatic Change.

Prior to joining TerraCarbon, Jamie was a science policy analyst for the Terrestrial Carbon Group, where he was involved in researching and advising on the technical aspects of carbon accounting on REDD and Agriculture, Forestry and Other Land Use (AFOLU) project types. From 2006 to 2008, he led a large-scale soil carbon inventory project in the Republic of Ireland, which produced results that were used in Ireland's reporting to the United Nations Framework Convention on Climate Change (UNFCCC). Jamie holds a MS in Environmental Science from the University of Virginia and a BA in Biology from Saint Louis University.

Rebecca Dickson, Senior Manager, Remote Sensing & Spatial Modeling
Rebecca Dickson is the senior manager of remote sensing and spatial modeling at TerraCarbon. She advises TerraCarbon's clients on technical issues related to the feasibility, design, and monitoring of forest carbon projects. She is an expert in geographic information systems (GIS) and remote sensing analysis with extensive experience in land-cover classification, change analysis, and spatial modeling. Rebecca is currently a member of the CCB Standards Committee.

Prior to joining TerraCarbon, Rebecca was an assistant research professor and a postdoctoral research associate at Wake Forest University, where her research focused on land-use and land-cover change in southeastern Peru and included fusing ground data plots with remote sensed imagery analysis to develop estimates of carbon stocks across the landscape. Rebecca directed research on land-cover classification and analysis of secondary forest cover in the southern Yucatán while at the Graduate School of Geography at Clark University. She has also worked as an independent consultant for Beartooth Capital. Rebecca holds a PhD and Master of Arts in Geography from Clark University and is a former NASA Earth System Science Fellow.

Financial Health of Implementing Organization
Carbonfund.org provided financial resources to its wholly-owned subsidiary CarbonCo to implement several REDD+ projects in Acre, Brazil including the Envira Amazonia Project. CarbonCo successfully financed the Russas, Valparaiso and Purus Projects and is thus, well-aware of the financial resources required for the REDD+ projects in Acre, Brazil.

Carbonfund.org's independently audited Internal Revenue Service (IRS) Form 990s are publicly available and document Carbonfund.org's financial health. To learn more, please see GuideStar: http://www2.guidestar.org/organizations/20-0231609/carbonfund-org.aspx.

Carbonfund.org and CarbonCo are both independently audited by a certified public accountant and neither organization nor its representatives have been suspected of, charged with, or found guilty of corruption, bribery, embezzlement, fraud, favoritism, cronyism, nepotism, or collusion.

Furthermore, contractual agreements outlining the financial arrangement between the Project Proponents, along with a detailed pro forma, were provided to Environmental Services, Inc., the independent validation firm.

G5. Legal Status and Property Rights

The Envira Amazonia Project is in full compliance with all international, national and local laws and the Project Proponents have received the necessary approval from all appropriate authorities, including Free, Prior and Informed Consent (FPIC) from local communities. It is also important to note, the project activities do not lead to involuntary removal or relocation of local families, but rather shall grant official land tenure to local families.

Respect for Rights to Lands, Territories and Resources, and Free, Prior and Informed

Statutory and Customary Rights to Lands

With respect to the Project Zone, there are families settled onto what were originally privately-owned lands and these families have cleared the land primarily for subsistence agriculture, cattle ranching, and housing. According to Brazilian law, there are three applicable laws which relate to this customary and legal property rights situation:

- Brazilian Federal Constitution,[26] passed on October 5th, 1988
- Brazilian Civil Code,[27] which is the Federal Law 10406, passed on January 10th, 2002
- Brazilian Civil Procedure Code,[28] which is the Federal Law 5869, passed on January 11th, 1973

In Brazil, the law requires that the acquisition of land is made by a title (i.e., a contract) and by registration. Thus if you want to buy an area of land, you need to have a title (i.e., a contract with the landowner) and then you need to register your title at the public service of land registration (i.e., called the "Cartório de Imóveis"). As stated in Article 1245 of the Civil Code, if you only have the title (i.e., the contract) and do not register it, then by the law you are not the owner of the land. However, if you have the unregistered contract and you are in possession of the land, the law refers to you as "good-faith possessor."

It is important to note that Brazilian regulation treats small lands differently than larger ones as there is the "special usucaption" and the "regular usucaption." The law requires a smaller period of time for usucaption of rural lands on fifty hectares or less, than it requires for usucaption of rural lands above fifty hectares. The Federal Constitution establishes the "special usucaption"

[26] Presidency of the Republic, "CONSTITUIÇÃO DA REPÚBLICA FEDERATIVA DO BRASIL DE 1988," Available: http://www.planalto.gov.br/ccivil_03/Constituicao/Constituicao.htm
[27] Presidency of the Republic, "LEI Nº 10.406, DE 10 DE JANEIRO DE 2002.," Available: http://www.planalto.gov.br/ccivil_03/Leis/2002/L10406.htm
[28] Presidency of the Republic, "LEI Nº 5.869, DE 11 DE JANEIRO DE 1973.," Available: http://www.planalto.gov.br/ccivil_03/Leis/L5869.htm

stating in Article 191 that, "the one that, not being owner of agricultural or urban property, possesses as itself, per five years uninterrupted, without opposition, land area in rural area, not more than fifty hectares, making it productive by his work or by his family's work, and living in there, will acquire its ownership." The Civil Code, in Article 1239, repeats what the Constitution states about usucaption of rural lands not above fifty hectares.

For the usucaption of lands above fifty hectares, or even for those who possess less than fifty hectares but do not fulfill the other requirements of the "special usucaption," the applicable usucaption is the "regular usucaption," which is applicable to every kind of land (i.e., rural or urban lands and no matter their size).

The "regular usucaption" is established by the Civil Code, Article 1238. Essentially, it requires different periods of time, depending on what the possessor does on the land. The beginning of Article 1238 states: "The one that, per fifteen years without interruption or opposition, possesses as itself a land will acquire its ownership, independently of title and good-faith; and may require to a judge to declare it by sentence, which will serve as title to register the ownership at the public service of land registration." However, Article 1238 also states that "the period of time required in this Article will be reduced to ten years if the possessor has established his habitual house or have made the land productive." Furthermore, Article 1242 states that "acquires the Landownership the one that, without contestation, with title and good-faith, possesses the land per ten years."

With respect to the families living on the Envira Amazonia Project, nobody in the community has title or good-faith possession, because none of them bought the land from the landowner. Thus, Article 1242 is not applicable.

The one who possesses land of not more than fifty hectares, lives there for five years, makes the land productive (e.g., by growing agriculture or raising animals) and who do not own any other land (rural or urban) has the right to be titled. The one who possesses a land, not more than fifty hectares but does not fill the requirements for the "special usucaption," along with the one who possesses land above fifty hectares, they also have the right to be titled if the possession is at least fifteen years. In this same case, if the possessor is living on the land or makes the land productive (e.g., by growing agriculture or raising animals), the required period of possession is reduced to ten years. The right to be titled is stated in the law, but it is only possible after a judge declares this right in a sentence after a procedure. As previously mentioned, to acquire a property in Brazil you have to have both title and registration. Thus even if you have possession for twenty years, you do not have ownership of the land yet. In this case, you will still have to ask a judge to declare your right in court, so you will have the title (i.e., sentence = title, in this case). After that, you will have to take the sentence of the judge and register in the public service of land registration. Then you are the official owner of the land by usucaption.

Families that have been living on the land and who made the land productive (e.g., by growing agriculture or raising animals) for ten years, have the right to be titled. To resolve this ongoing conflict or dispute, JR Agropecuária e Empreendimentos EIRELI will voluntarily recognize whatever area is currently deforested and under productive use by each family. All families - whether they voluntarily join the Envira Amazonia Project or not - will be titled the land they

have put under productive use. If necessary, this process will be facilitated by an independent group such as STR-Feijó.

Free, Prior and Informed Consent

JR Agropecuária e Empreendimentos EIRELI voluntarily signed a Tri-Party Agreement with Carbon Securities and CarbonCo to develop the Envira Amazonia Project on its privately-owned property. The company has been actively engaged throughout the entire process, numerous Skype calls and in-person meetings have been held, and the company is advised by several knowledgeable lawyers.

The Project Proponents also ensured the local families were able to give Free, Prior and Informed Consent to participate in the Envira Amazonia Project by hiring the independent community specialist Ayri Rando.

Free

The local families are free to voluntarily join and leave the Envira Amazonia Project. There was no coercion, intimidation, manipulation, threat or bribery. In contrast, the local families shall receive the project benefits – such as access to the future health center and granting of land tenure – whether or not they decide to join the Project. The Project's ongoing assessment by an independent auditor shall demonstrate the families' ability to freely join or leave the Project.

Prior

Ayri Rando consulted local communities throughout the Project Zone and outside the Project Zone from May 20th to June 11th, 2014 on all aspects on the Envira Amazonia Project. This consultation with the communities took place approximately three months before project activities were decided upon, approximately four months before project documents were finalized, five months before the official CCBS Public Comment Period, and six months before the visitation of independent auditors.

Informed

Ayri Rando has extensive experience with REDD+ and Ayri informed the community during his May 20th to June 11th visit about all aspects of the Envira Amazonia Project including: describing what is REDD+ and the role of the Project Proponents; the proposed Project activities; tentative Project implementation schedule; duration of the Project; how to best engage women; costs, benefit sharing, and risks of participation in the Project; the Project's grievance procedure; the role of independent auditors in validation and verification; and the official Public Comment Period.

Consent

Ayri Rando obtained permission to discuss the Project with local families and later asked whether or not the local families would like to join the Project. If the local family decided to initially join the Project, Ayri Rando then asked if they would prefer to verbally agree to the Project or if they would prefer to sign an "ata." If the local family decided to not join the Project, they were asked how the Project could be altered in order for them to more likely join the Project in the future.

No Involuntary Removal or Relocation
The Envira Amazonia Project will not involve any involuntary removal or relocation. In contrast, the Project shall grant official land title to formalize and strengthen local land tenure.

Illegal Activities that Could Affect Project's Benefits
The following are the illegal activities that could affect the Project's climate, community and biodiversity benefits throughout the Project Zone.

- Commercial hunting, fishing, or collecting endangered flora and fauna
- Illegal logging
- Cultivation, transportation or distribution of illegal drugs
- Corruption, bribery, embezzlement, fraud, favoritism, cronyism, nepotism, or collusion

While conducting deforestation monitoring, along with community and biodiversity impact monitoring, the Project Proponents will also keep their eyes open for illegal activities.

Ultimately, illegal activities of any kind – whether it be wildlife trafficking, corruption, or bribery – will not be allowed in the Envira Amazonia Project and the appropriate authorities will be contacted.

Ongoing or Unresolved Conflicts Over Land Rights
There are no ongoing or unresolved conflicts over land rights throughout the Project Zone of the Envira Amazonia Project. Furthermore, there are no overlapping title claims and no internal conflicts with or amongst the local communities. As previously mentioned, the JR Agropecuária e Empreendimentos EIRELI shall grant official land title to the local communities to formalize and strengthen local land tenure.

Legal Status

List of International, National and Local Laws
The following is a list of all the international, national and state-level laws and regulations identified by the Project Proponents which are relevant to the Project.

Brazil is a party to numerous international conventions and treaties such as the:

- Convention on Biological Diversity
- United Nations Framework Convention on Climate Change
- Convention on International Trade in Endangered Species of Wild Fauna and Flora
- International Tropical Timber Organization (i.e., Brazil is a Producing Member)
- Ramsar Convention on Wetlands
- Universal Declaration of Human Rights
- United Nations Declaration on the Rights of Indigenous Peoples
- Convention on the Elimination of All Forms of Discrimination Against Women
- International Labor Organization Convention

There was also a Memorandum of Understanding (MOU) signed on March 3, 2010 between Brazil and the United States of America on "cooperation regarding climate change." Such an MOU specifically includes:

> New areas of cooperation would be added, including, but not limited to, the following areas: reducing emissions from deforestation and forest degradation (REDD+); and low-carbon development (…) To exchange experiences on strategies and domestic policies, including carbon markets, to address climate change.[29]

Furthermore, there was an international MOU between California (United States), Chiapas (Mexico) and Acre (Brazil) signed on November 16, 2010. A few key aspects of this MOU relating to the Project include:

> Recognizing further the importance of focusing on issues of common interest between the Parties, such as reducing greenhouse gas emissions in the forest sector by preserving standing forests and sequestering additional carbon through the restoration and reforestation of degraded lands and forest, and through improved forest management practices;
>
> Recognizing further that the Governors' Climate and Forests (GCF) Task Force is a unique subnational collaboration between 14 states and provinces from the United States, Brazil, Indonesia, Nigeria, and Mexico that seeks to integrate Reducing Emissions from Deforestation and Forest Degradation (REDD) and other forest carbon activities into emerging greenhouse gas (GHG) compliance regimes in the United States and elsewhere. As such, the GCF represents an important foundation for identifying enhanced partnerships.
>
> ARTICLE 2 The Parties will coordinate efforts and promote collaboration for environmental management, scientific and technical investigation, and capacity building, through cooperative efforts focused particularly on:
>
> a. Reducing greenhouse gas emissions from deforestation and land degradation - otherwise known as "REDD" - and sequestration of additional carbon through the restoration and reforestation of degraded lands and forests, and through improved forest management practices.
>
> b. Developing recommendations together to ensure that forest-sector emissions reductions and sequestrations, from activities undertaken at the sub-national level,

[29] The Government of Brazil and the Government of the United States of America, "Memorandum of Understanding Between the Government of the Federative Republic of Brazil and the Government of the United States of America on Cooperation Regarding Climate Change," http://www.brazilcouncil.org/sites/default/files/MOUonCooperationRegardingClimateChange-Mar032010.pdf

> will be real, additional, quantifiable, permanent, verifiable and enforceable, and capable of being recognized in compliance mechanisms of each party's state.[30]

The State of Acre is also an active member in the Governors' Climate and Forest Task Force (GCF) and hosted the annual GCF meeting in August 2014.[31]

With respect to national laws and regulatory frameworks, the Project will abide by Brazilian national laws and especially the Brazilian Constitution. This includes Chapter 6 of the Brazilian Constitution which specifically discusses environmental issues in Article 225:

> Article 225. All have the right to an ecologically balanced environment which is an asset of common use and essential to a healthy quality of life, and both the Government and the community shall have the duty to defend and preserve it for present and future generations.
>
> Paragraph 1 - In order to ensure the effectiveness of this right, it is incumbent upon the Government to:
>
> > 1. Preserve and restore the essential ecological processes and provide for the ecological treatment of species and ecosystems;
> >
> > 2. Preserve the diversity and integrity of the genetic patrimony of the country and to control entities engaged in research and manipulation of genetic material;
> >
> > 5. Control the production, sale and use of techniques, methods or substances which represent a risk to life, the quality of life and the environment;
> >
> > 6. Promote environment education in all school levels and public awareness of the need to preserve the environment;
> >
> > 7. Protect the fauna and the flora, with prohibition, in the manner prescribed by law, of all practices which represent a risk to their ecological function, cause the extinction of species or subject animals to cruelty.
>
> Paragraph 4 - The Brazilian Amazonian Forest, the Atlantic Forest, the Serra do Mar, the Pantanal Mato-Grossense and the coastal zone are part of the national patrimony, and they shall be used, as provided by law, under conditions which

[30] The State of Acre, the State of Chiapas, and the State of California, "Memorandum of Understanding on Environmental Cooperation between the State of Acre of the Federative Republic of Brazil, the State of Chiapas of the United Mexican States, and the State of California of the United States of America," http://www.gcftaskforce.org/documents/MOU_Acre_California_and_Chiapas.pdf

[31] Governors' Climate and Forest Task Force, "About GCF," http://www.gcftaskforce.org/about.php

ensure the preservation of the environment, therein included the use of mineral resources.[32]

Compliance with Law
Although the Project is privately-owned and Paragraph 1 of Article 225 specifically states "it is incumbent upon the Government," the Project Proponents will nevertheless seek to preserve the Project's ecosystems, preserve the diversity of fauna and flora, and promote environmental education. This preservation can be documented via satellite imagery, firsthand observations, and via the Project's biodiversity monitoring plan, while the local schools within the Project will incorporate environmental education.

The Brazilian Forest Code is of particular importance to the Project. This includes:

- The original Brazil Forest Code entitled, Law No. 4771, September 15, 1965.[33]
- Revision of Brazil Forest Code under Law No. 7803, July 18, 1989.[34]
- Provisional Measure entitled 2166-67, August 24, 2001.[35]
- Revision of Brazil Forest Code under Law No. 12.651 of May 25, 2012.[36]

Title of Law
Law Number 4771 of September 15, 1965, entitled "Establishing the new Forest Code."

Summary of Law
Law Number 4771 of September 15, 1965 was the original Brazil Forest Code. A few major provisions of the Forest Code were the establishment of permanent preservation areas (APP), establishment of legal reserves of 50% on properties in the Legal Amazon, and designation of Acre State (among others) as within the Legal Amazon territory.[37] Many of these provisions have been revised since 1965.

Compliance with Law
The Project, as can be documented via satellite imagery or firsthand observations, has respected the Project's permanent preservation areas and legal reserves.

Title of Law
Law Number 7803 of July 18, 1989 entitled, "Change the wording of Law No. 4771 of September 15, 1965, and repealing Laws Nos. 6535 of June 15, 1978, and 7511 of 7 July 1986."

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[32] Georgetown University, "1988 Constitution, with 1996 reforms in English," Available: http://pdba.georgetown.edu/Constitutions/Brazil/english96.html#mozTocId920049
[33] Presidency of the Republic, "Law No. 4771, September 15, 1965," Available: http://www.planalto.gov.br/ccivil_03/Leis/L4771.htm
[34] Presidency of the Republic, "Law No. 7803, July 18, 1989," Available: http://www.planalto.gov.br/ccivil_03/leis/L7803.htm
[35] Presidency of the Republic, "Provisional Measure 2166-67, August 24, 2001," Available: https://www.planalto.gov.br/ccivil_03/MPV/2166-67.htm
[36] Presidency of the Republic, Civil House Cabinet Subcommittee for Legal Affairs, "Law No. 12,651, OF 25 MAY 2012," Available: http://www.planalto.gov.br/ccivil_03/_Ato2011-2014/2012/Lei/L12651.htm
[37] Presidency of the Republic, "Law No. 4771, September 15, 1965," Available: http://www.planalto.gov.br/ccivil_03/Leis/L4771.htm

Summary of Law
Law Number 7803 was the first significant amendment to the original 1965 Forest Code. For example, the permanent preservation areas were reclassified. The Law also stipulated that "the exploitation of forests and succeeding formations, both public domain and private domain, will depend on approval from the Brazilian Institute of Environment and Renewable Natural Resources - IBAMA, and the adoption of techniques of driving, exploitation, reforestation and management compatible with the varied ecosystems that form the tree cover.[38]

Compliance with Law
The Project, both in the "without project land-use scenario" and in the "with project land-use scenario" will abide by the new guidance on permanent preserve areas such as to not clear forests on steep slopes or within one hundred meters proximity to rivers. Any such clearing that has taken place in the past, will eventually be reforested.

Title of Law
The Provisional Measure Number 2166-67 of August 24, 2001 entitled, "Changes the arts.[1, 4,] 14, 16 and 44, and adds provisions to Law [No.] 4771 of September 15, 1965, establishing the Forest Code and amending art. 10 of Law [No.] 9393 of December 19, 1996, which provides for the Property Tax Territorial Rural - ITR, and other measures."

Summary of Law
The Provisional Measure Number 2166-67 of August 24, 2001 was one of the latest revisions to the original 1965 Forest Code and to the amendments of Law Number 7803. The most relevant change to the Project was the revision of the legal reserve requirement in the Legal Amazon (i.e., including the State of Acre) from 50% to 80% which shall be conserved.[39]

Compliance with Law
As mentioned previously, the Project - as can be documented via remote sensing or firsthand observations - has respected both the Project's permanent preservation areas and the recently revised legal reserve requirement.

Title of Law
Law Number 12.651 of May 25, 2012 is the latest Brazilian Forest Code and supersedes earlier versions in 1965, 1989, and 2001.[40]

Summary of Law
The latest Brazilian Forest Code, "Provides for the protection of native vegetation; amends Laws Nos. 6938 of August 31, 1981, 9,393, of December 19, 1996, and 11,428 of December 22, 2006, repealing the Laws No. 4771, 15 September 1965 and 7754, of April 14, 1989, and Provisional

[38] Presidency of the Republic, "Law No. 7803, July 18, 1989," Available: http://www.planalto.gov.br/ccivil_03/leis/L7803.htm
[39] Presidency of the Republic, "Provisional Measure 2166-67, August 24, 2001," Available: https://www.planalto.gov.br/ccivil_03/MPV/2166-67.htm
[40] Presidency of the Republic, Civil House Cabinet Subcommittee for Legal Affairs, "Law No. 12,651, OF 25 MAY 2012," Available: http://www.planalto.gov.br/ccivil_03/_Ato2011-2014/2012/Lei/L12651.htm

Measure No. 2.166-67, of August 24, 2001, and other provisions." Key tenets of the Brazilian Forest Code include:

- Chapter 1. General Provisions
    - Article 1-A. This act lays down general rules on the protection of vegetation, Permanent Preservation Areas and Legal Reserves, forest exploitation, the supply of forest raw materials, control the origin of forest products and the prevention and control of forest fires, and provides economic and financial instruments for the achievement of its objectives.
    - II. This act reaffirms the importance of the strategic role of farming and the role of forests and other forms of native vegetation in sustainability, economic growth, improving the quality of life of the population and the country's presence in the domestic and international food and bioenergy.
    - VI. This act states the creation and mobilization of economic incentives to encourage the preservation and restoration of native vegetation and to promote the development of sustainable productive activities.
    - Article 3. For the purposes of this Act, the following definitions apply:
        - I - Amazon: the states of Acre, Pará, Amazonas, Roraima, Rondônia, Mato Grosso and Amapá and the regions north of latitude 13 ° S, the states of Goiás and Tocantins, and west of 44 ° W , State of Maranhão;
        - II - Permanent Preservation Area - APP: protected area, or not covered by native vegetation, with the environmental function of preserving water resources, landscape, geological stability, biodiversity, facilitate gene flow of fauna and flora, soil protection and ensure the well-being of human populations;
        - III - Legal Reserve area located within a rural property or ownership, demarcated according to Article 12, with the function of ensuring a sustainable economic use of natural resources of rural property, assist the conservation and rehabilitation of ecological processes and to promote the conservation of biodiversity, as well as shelter and protection of wildlife and native flora;
        - VI - alternative land use: replacement of native vegetation and succeeding formations other ground covers such as agricultural activities, industrial, power generation and transmission of energy, mining and transport, urban settlements or other forms of human occupation

- Chapter 2. Area of permanent preservation
    - Section I. Delimitation of Areas of Permanent Preservation
        - Licensing is done by a competent environmental authority.
        - The property will be registered in the Rural Environmental Registry (i.e., CAR).

- Chapter 4. Legal reserve area
    - Section I. Delimitation of the Legal Reserve Area
        - Article 12. All property must maintain native vegetation cover in rural area, as a legal reserve, without prejudice to the application of the rules on

the Permanent Preservation Areas, subject to the following minimum percentages in relation to the area of the property, except as specified in art. 68 of this Act: (Amended by Law No. 12,727, 2012).

- 80% of properties located in the Amazon
- 35% of properties located in the Cerrado
- 20% of properties located in other regions of the country

- Chapter 5. The suppression of vegetation for alternative use of soil
  - Article 26. The removal of native vegetation for conversion to alternative land uses, both public domain and private domain, depend on the registration of the property in CAR, mentioned in Article 29, and the prior authorization of the competent state agency, SISNAMA [Sistema Nacional do Meio Ambiente].[41]

Compliance with Law
The Envira Amazonia Project is in compliance with the latest Brazil Forest Code. Acre is considered part of the Legal Amazon and thus the property will maintain 80% forest cover as a legal reserve. This will be demonstrated via firsthand observations and review of satellite imagery. The "without project land-use scenario" was the licensing to practice alternative land use (e.g., cattle ranching and agriculture), which was registered in the CAR and approved by IMAC (in English: The Acre Environmental Institute) which is overseen by SISNAMA.

In addition to the Forest Code, Brazil's National Environmental Policy is also relevant to the Project.[42]

Title of Law
Law Number 6.938 of August 31, 1981 entitled, "Provides for the National Environmental Policy, its aims and mechanisms for the formulation and implementation, and other measures."

Summary of Law
Law Number 4771 of August 21, 1981 is based off Brazil's constitution and established Brazil's National Environmental Policy. Essentially, the "National Policy on the Environment is aimed at the preservation, improvement and restoration of environmental quality conducive to life, to ensure, in the country, conditions for the socio-economic development, the interests of national security and protecting the dignity of life human." Agencies were also established to carry out the National Environmental Policy.[43]

Compliance with Law
The Project has identified, consulted and shall continue to work with the relevant agencies responsible for environmental protection, particularly with respect to REDD+ projects. Furthermore, the Project will seek to conserve soil and water resources, protect rare and

[41] Presidency of the Republic, Civil House Cabinet Subcommittee for Legal Affairs, "Law No. 12,651, OF 25 MAY 2012," Available: http://www.planalto.gov.br/ccivil_03/_Ato2011-2014/2012/Lei/L12651.htm
[42] Presidency of the Republic, "Law No. 6.938, August 31, 1981," Available: http://www.planalto.gov.br/ccivil_03/leis/L6938.htm
[43] Presidency of the Republic, "Law No. 6.938, August 31, 1981," Available: http://www.planalto.gov.br/ccivil_03/leis/L6938.htm

threatened ecosystems, and promote the recovery of degraded areas and encourage environmental education.

Another important national Brazilian law that is relevant to the Project is the National Climate Change Policy (NCCP):

> On December 29, 2009, the Brazilian Parliament adopted Law 12.187. The law establishes the National Climate Change Policy (NCCP) of Brazil and sets a voluntary national greenhouse gas reduction target of between 36.1 and 38.9 percent of projected emissions by 2020. On October 26, 2010, the government published an executive summary of the sectoral mitigation plans to implement its voluntary commitment.
>
> Among other instruments, the NCCP law considers in article 9 the creation of a Brazilian Emission Reductions Market (BERM) to achieve the voluntary emission reduction target. It will be operationalized by Brazilian stock exchanges and the Securities Commission.
>
> As a signatory of the Copenhagen Accord, Brazil detailed this voluntary commitment in an official communication on NAMAs to the UNFCCC Secretariat as follows:
>
> > LULUCF: Reducing deforestation in the Amazon Region and the Cerrado (minus 668 MtCO2e/year in 2020); degraded pastures recovery (minus 83 to 104 MtCO2e/year in 2020); reduction of livestock emissions (minus 22 MtCO2e/year in 2020); zero tillage (minus 20 MtCO2e/year in 2020); biological fixing of N2 (minus 16 to 22 MtCO2e/year in 2020).[44]

Compliance with Law

A key component of Brazil's National Climate Change Policy is the voluntary reduction in greenhouse gas emissions. The Project will be in compliance with this voluntary target because the Project is a Reducing Emissions from Deforestation and Degradation (REDD+) project. Furthermore, this compliance will be demonstrated via periodic verifications of the Project.

The Project Proponents will abide by Acre's state laws and regulatory frameworks. The two most relevant laws are Acre's State Forestry Law (Bill Number 1.426 of December 27, 2001) and Bill Number 2.308 of October 22, 2010 entitled, The State System of Incentive for Environmental Services (SISA).

SISA was "created, with the aim of promoting the maintenance and expansion of supply of the following ecosystem products and services:

[44] World Bank, "State and Trends of the Carbon Market 2010," Available: http://siteresources.worldbank.org/INTCARBONFINANCE/Resources/StateAndTrend_LowRes.pdf.

I - sequestration, conservation and maintenance of carbon stock, increase in carbon stock and decrease in carbon flow;
II - conservation of natural scenic beauty;
III - socio-biodiversity conservation;
IV - conservation of waters and water services;
V - climate regulation;
VI - increase in the value placed on culture and on traditional ecosystem knowledge;
VII - soil conservation and improvement."[45]

Compliance with Law
As a tropical forest ecosystem services project, otherwise known as REDD+, the Project shall seek to conserve the forests' carbon stock, while also conserving the natural scenic beauty, biodiversity, water, and soil resources, along with working alongside the local community. Such compliance can be demonstrated via remote sensing, firsthand observations, and via the periodic independent assessments of the Project.

Acre's State Forestry Law (Bill Number 1.426 of December 27, 2001) essentially, "provides for the preservation and conservation of State forests, establishing the State System of Natural Areas, creates the State Forest Fund and other measures."[46] The Law also established the institutional responsibility for the management of State Forests, defines forests, and outlines the administrative penalties for non-compliance.

Compliance with Law
The Project is on private property and thus, this law is not relevant. Nevertheless, the Project Proponents shall contribute to the sustainable use of forest resources, preserve biodiversity, and also "promote ecotourism, recreation, forestry research and education."[47]

Approval from Appropriate Authorities
The Project has approval from JR Agropecuária e Empreendimentos EIRELI who privately own the property and the Project Proponents have received approval from the local community.

The Project Proponents are also in active communication with the State of Acre. An official, information approval letter from the Climate Change Institute for the Project Proponents to use the State's data has been received. The Project Proponents also received letters of support from Other Stakeholders.

Upon validation of the Project, the Project Proponents will officially register the Project with the State of Acre (i.e., receive an official seal and number) and will also upload the Project to the State of Acre's Climate Change Institute.

[45] State of Acre, "Unofficial Translation, State of Acre, Bill No. 2.308 of October 22, 2010," Available: http://www.gcftaskforce.org/documents/Unofficial%20English%20Translation%20of%20Acre%20State%20Law%20on%20Environmental%20Services.pdf
[46] The Governor of the State of Acre, "Acre Forestry Law, December, 27, 2001," Available: http://webserver.mp.ac.gov.br/?dl_id=800
[47] The Governor of the State of Acre, "Acre Forestry Law, December, 27, 20 01," Available: http://webserver.mp.ac.gov.br/?dl_id=800

Ability to Claim Project's Generation of Benefits
The Project Proponents have the unconditional, undisputed and unencumbered ability to claim the Project generated the climate, community and biodiversity benefits.

The Envira Amazonia Project is privately owned by JR Agropecuária e Empreendimentos EIRELI and this is demonstrated via the property's geo-referencement and "certidão." There is Tri-Party Agreement between the three Project Proponents which is legally valid in both the United States and Brazil.

With respect to private ownership of carbon rights in Brazil, a Presidential Decree on July 7, 1999 by the Brazilian Government established the Inter-ministerial Commission on Global Climate Change as the Designated National Authority for approval of projects under the UNFCCC Kyoto Protocol's Clean Development Mechanism (CDM).[48]

José D.G. Miguez, Executive Secretary of the Brazilian Interministerial Commission on Global Climate Change, presented on March 18, 2003 at the Organisation for Economic Co-operation and Development (OECD) Global Forum on Sustainable Development: Emissions Trading Concerted Action on Tradable Emissions Permits (CATEP) Country Forum. Within in presentation, Mr. Miguez specifically indicated the private sectors ability "to design, develop and implement CDM project activities" in Brazil.[49] This said, there are currently numerous private sector CDM and voluntary carbon market projects in Brazil including projects within the Agricultural, Forestry and Other Land-use (AFOLU) sector.

Tradable Benefits and Avoidance of Double-Counting
The Envira Amazonia Project is being simultaneously developed for validation and verification to the Verified Carbon Standard (VCS). The issuance of Verified Carbon Units (VCUs) onto the VCS-approved Markit Environmental Registry will ensure the avoidance of GHG emissions being double-counted.

The Project has not, nor intends, to generate any other form of GHG-related environmental credit for GHG emission reductions or removals. In addition, there will be no other form of environmental credit including biodiversity credits or species banking, nor water or nutrient certificates.[50]

Lastly as of the date this Project Design Document was completed, Brazil did not have a mandatory GHG emissions cap and specifically not among the forestry sector.

CLIMATE SECTION

The full Climate Section has been waived because the Envira Amazonia Project is simultaneously being designed, registered, and implemented according to the Verified Carbon

[48] Ministry of Science, Technology and Innovation, "Designated National Authority (Interministerial Commission on Global Climate Change)," Available: http://www.mct.gov.br/index.php/content/view/14666.html
[49] José D.G. Miguez, "CDM in Brazil," Available: www.oecd.org/dataoecd/9/6/2790262.pdf
[50] Forest Trends, "Our Initiatives," Available: http://www.forest-trends.org/#

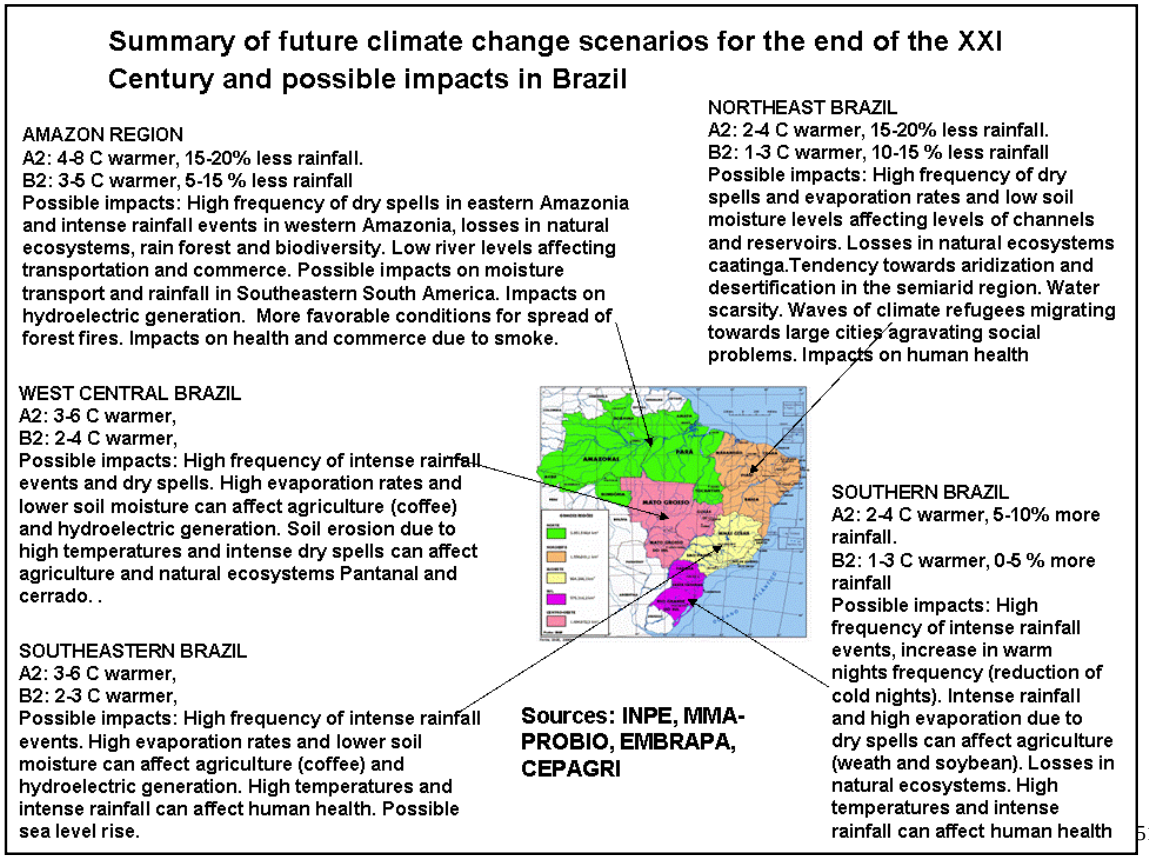
Standard which is a recognized GHG Program. Please see the VCS Project Description for the full Climate Section and please see below for the Project's climate change adaptation benefits.

GL1. Climate Change Adaptation Benefits

The Envira Amazonia Project shall incorporate climate change adaptation benefits.

Likely Regional Climate Change, Climate Variability Scenarios, and Impacts

The Project Proponents studied the CREAS Project (Regional Climate Change Scenarios for South America in English) to better understand the regional climate change and climate variability scenarios for Acre, Brazil. According to the CREAS Project, the following scenarios and impacts are possible for the Amazon Region and particularly within the State of Acre where the Envira Amazonia Project is located:



[51]

As forecasted by the CREAS Project, "intense rainfall events in western Amazonia, losses in natural ecosystems, rain forest and biodiversity" are the primary risks, along with the potential for "low river levels affecting transportation and commerce" and "more favorable conditions for spread of forest fires."

[51] Jose A. Marengo, "Regional Climate Change Scenarios for South America - The CREAS," Available: projecthttp://unstats.un.org/unsd/climate_change/docs/papers/Session3_CCPapers_Marengo_1.pdf.

These intense rainfall events in western Amazonia, in conjunction with the absence of the Project, would likely increase the rate of top soil erosion and more quickly deplete soil nutrients which in turn would likely increase the conversion of primary forests to agriculture and pasture lands by the local community.

Significant flooding throughout the Project Zone would likely result from the Project's deforestation, along with the increase in both localized rainfall as well as increased rainfall and continuing deforestation in neighboring Peru. Such flooding could impact local land-use scenarios due to: local crops destroyed which leads to communities planting more hectares to maintain historic harvest levels; fishing grounds could be disrupted due to faster moving currents and oxbow lakes could be altered; increased mosquito-borne illnesses due to greater pools of water; and game could move further into the forests to escape raising water levels.

Climate Changes' Impact on Communities and/or Biodiversity

The State of Acre and neighboring state of Rondônia are already experiencing increased rainfalls and severe flooding. In March and April 2014, the flooding of the Madeira River led Acre to declare a state of emergency due to the trade of vital resources (e.g., food, health supplies, fuel, etc.) being disrupted.[52] If State and Federal governmental scarce resources are used to repair roads, bridges, and other infrastructure due to climate change and its impacts, then there will be fewer resources available to help riverine communities.

The families throughout the Project Zone and along the Envira River are already feeling the local impact of global climate change. The following are ten excerpts from the conversations Ayri Rando had with community members:

1. "The temperature is higher, causing farmers to be unable to work more because they are directly exposed to the sun." (João Nazário Rodrigues)

2. "Previously, the Amazon winter ended in May, but lately you never know when it ends, it will be in May, June, or even in July. Another change perceived is that the weather is warmer." (Antônio Francisco Lopes da Silva)

3. "The sun is getting stronger and deforestation is one of the causes." Manoel Pereira do Nascimento)

4. Before I "could work all day and be exposed to direct sun, but now I cannot due to the fact the sun is stronger. Moreover, at the time of the Amazonian summer it is difficult to travel by river because of smoke from forest fires." (Francisco Chagas Silva de Araújo)

5. I "notice a lot of smoke at the time of the Amazonian summer, which makes breathing difficult." (Joaquim de Oliveira da Silva)

6. "The temperature is getting higher, before it was not so hot." (Antônio Geovan de Sousa Rodrigues)

[52] Travel and Tour World, "Brazil state Acre declared a state of flood calamity," Available: http://www.travelandtourworld.com/news/article/brazil-state-acre-declared-a-state-of-flood-calamity/

7. “The temperature {has} increased, it seems that the "haze" is greater.” (José Bento de Paula)

8. “The temperature is getting warmer and the river is shallower with each passing year. Furthermore, {the} Envira River fills and empties very quickly.” (Espedito da Silva Menezes)

9. “The sun is warmer due to forest destruction.” (Jeandro Castro de Araújo)

10. “Time has changed a lot, the temperature is higher and suddenly it rains and {then} it's cold, it’s changing very fast.” (Manoel Joaquim Gomes da Silva)

Adaptation Measures to Assist Communities and/or Biodiversity
The Project Proponents will incorporate adaptation activities and the following Theory of Change causal models will demonstrate how the project activities intend on achieving the Project’s predicted climate change adaptation benefits.

These climate change adaptation benefits include, but are not limited to: building the community health center to mitigate potential increases in mosquito-borne illnesses; ensuring agricultural extension courses incorporate climate change adaptation techniques; assisting local families with access to markets for their products to overcome increased difficulty in transportation networks; and locating facilities such as the headquarters and health centers further away from river banks to minimize risk of flooding.

The following Theory of Change model is for building the community health center to mitigate potential increases in mosquito-borne illnesses:

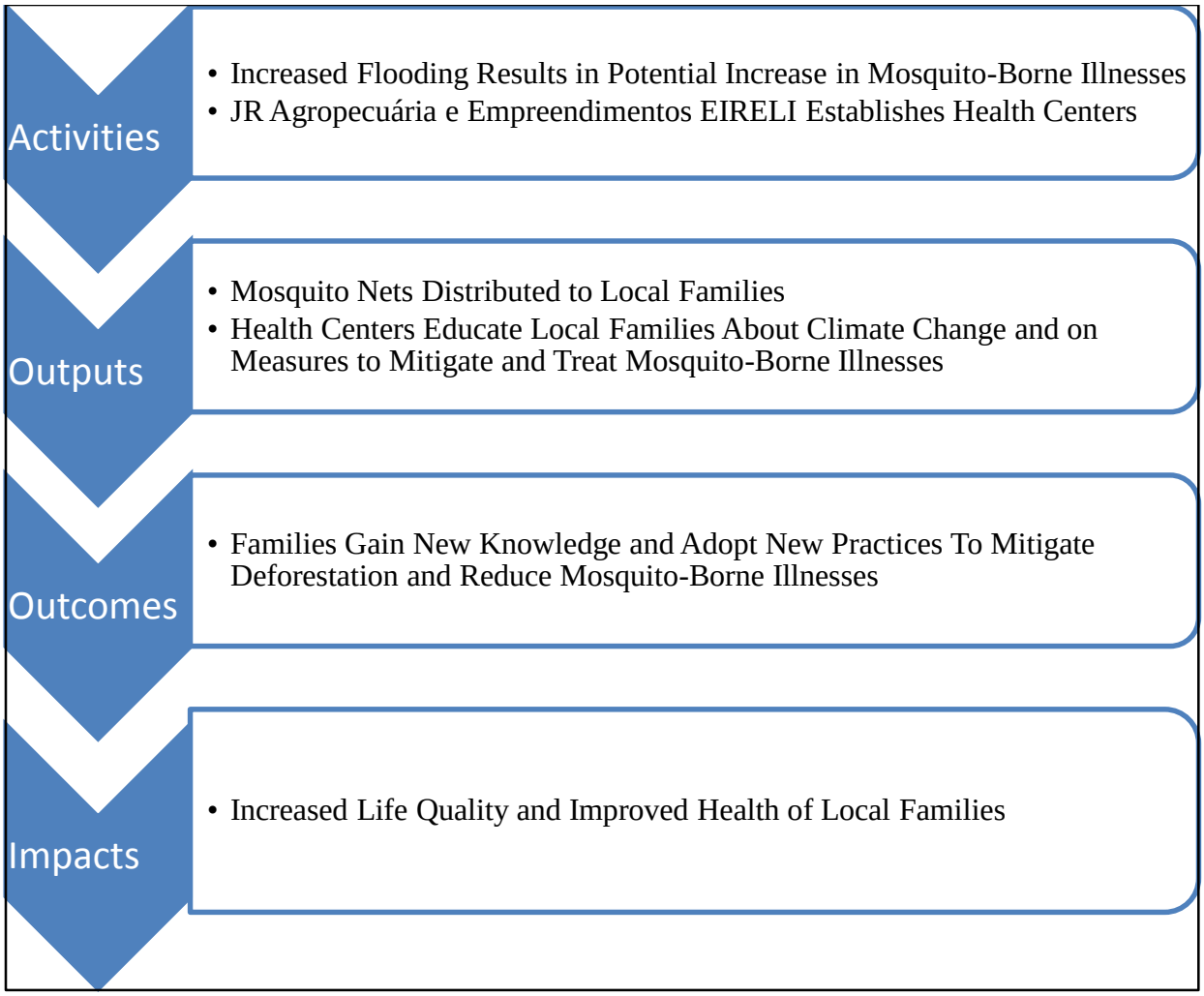


Figure 24: Activities, Outputs, Outcomes and Impacts of Mitigating Increase in Mosquito-Borne Illnesses

The following Theory of Change model is for the Project's incorporation of climate change adaptation techniques into the agricultural extension courses:

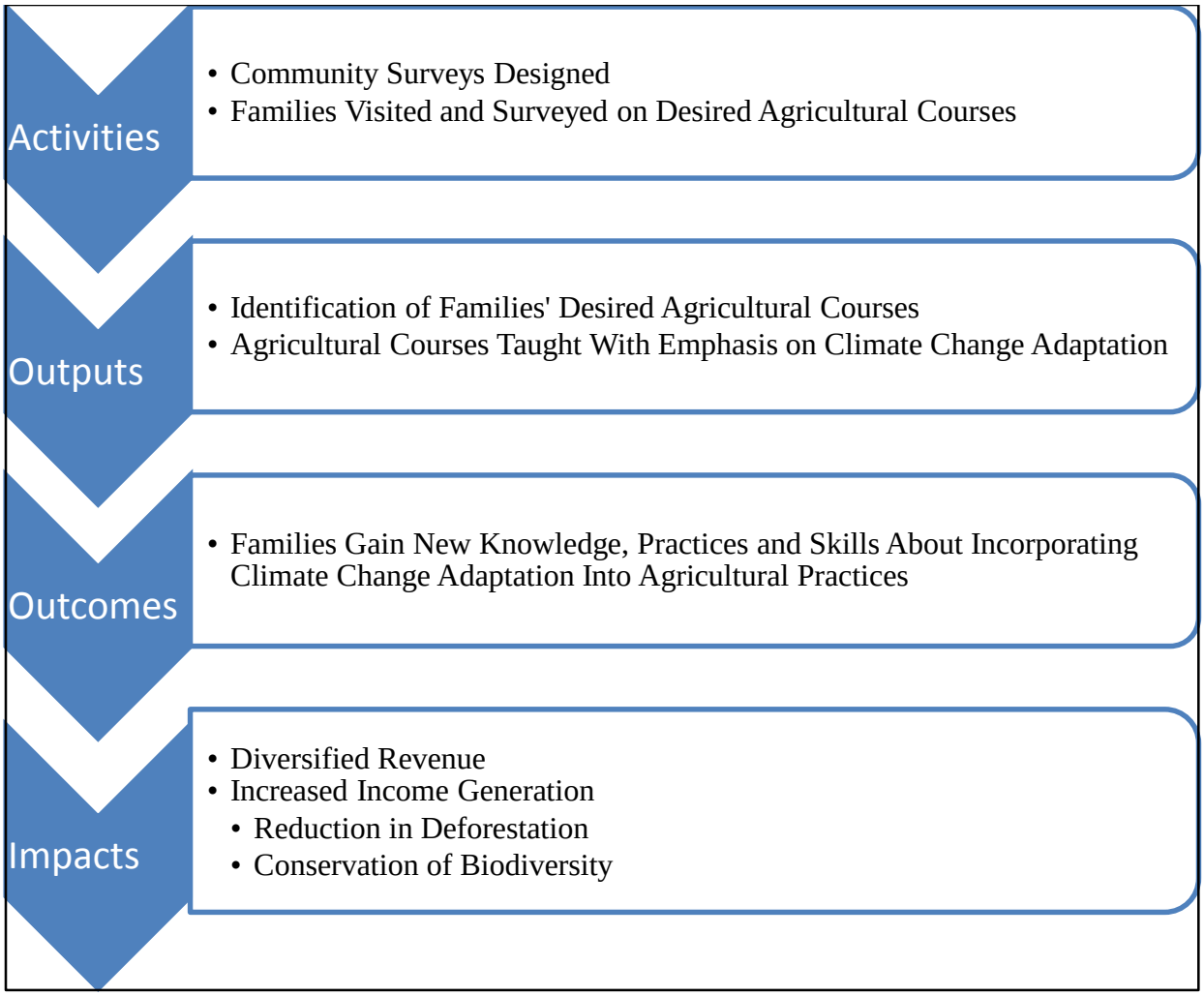


Figure 25: Activities, Outputs, Outcomes and Impacts of Climate Change Adaptation Incorporated in Agricultural Extension Courses

The following Theory of Change model is for the Project's assisting communities with access to markets for their products to overcome increased difficulty in transportation networks

Thus, localized flooding and increased rainfall will likely increase the difficulty of road transportation along highways in western Amazonia, including BR-364, which will likely increase the loss of agricultural products due to spoilage and result in less money for local families. In addition, the resulting lower river levels will increase the difficulty transportation along rivers such as the Envira and Jurupari Rivers.

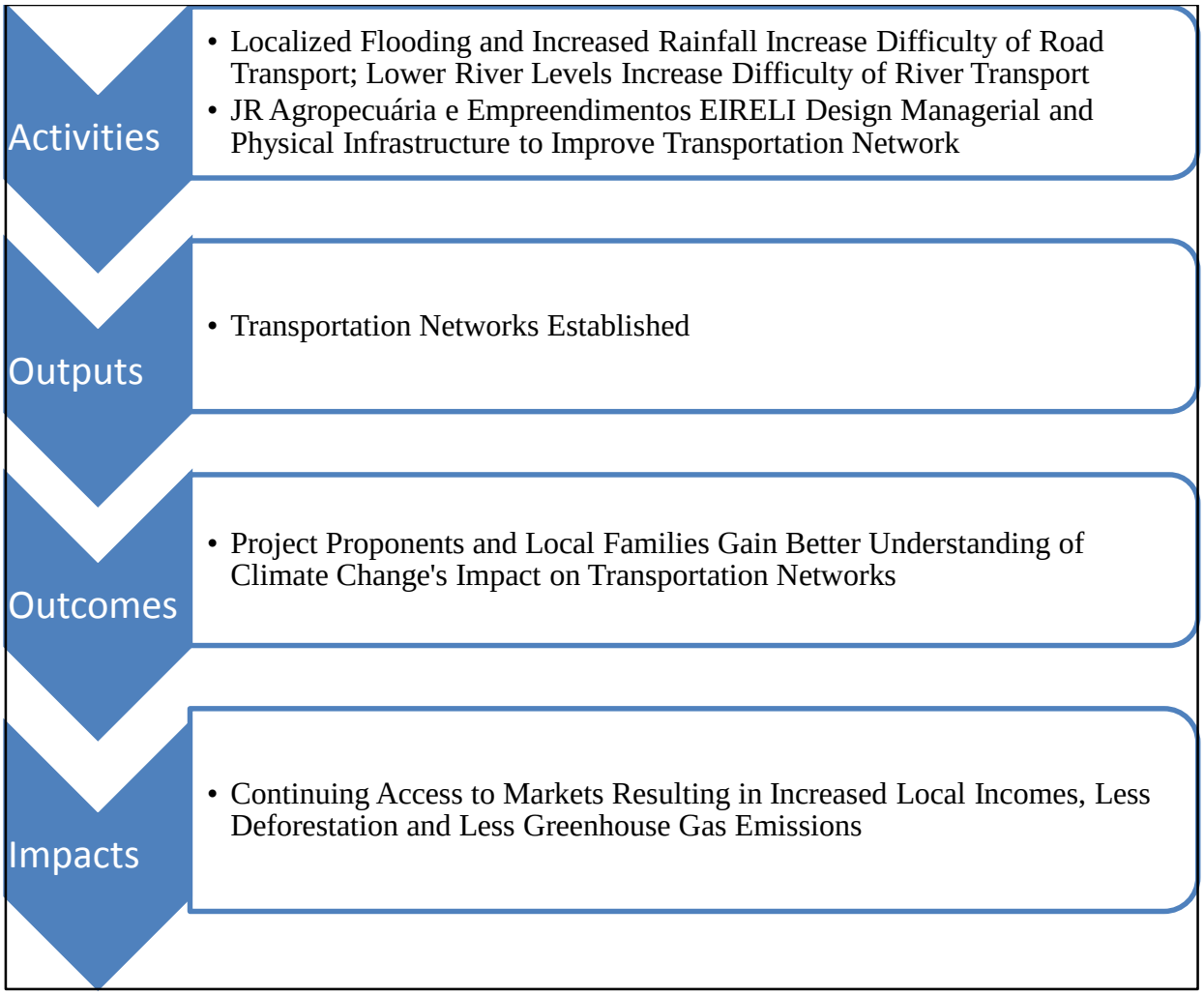


Figure 26: Activities, Outputs, Outcomes and Impacts of Improving Transportation Networks

The following Theory of Change model is for the Project's locating of facilities further away from river banks to minimize risk of flooding:

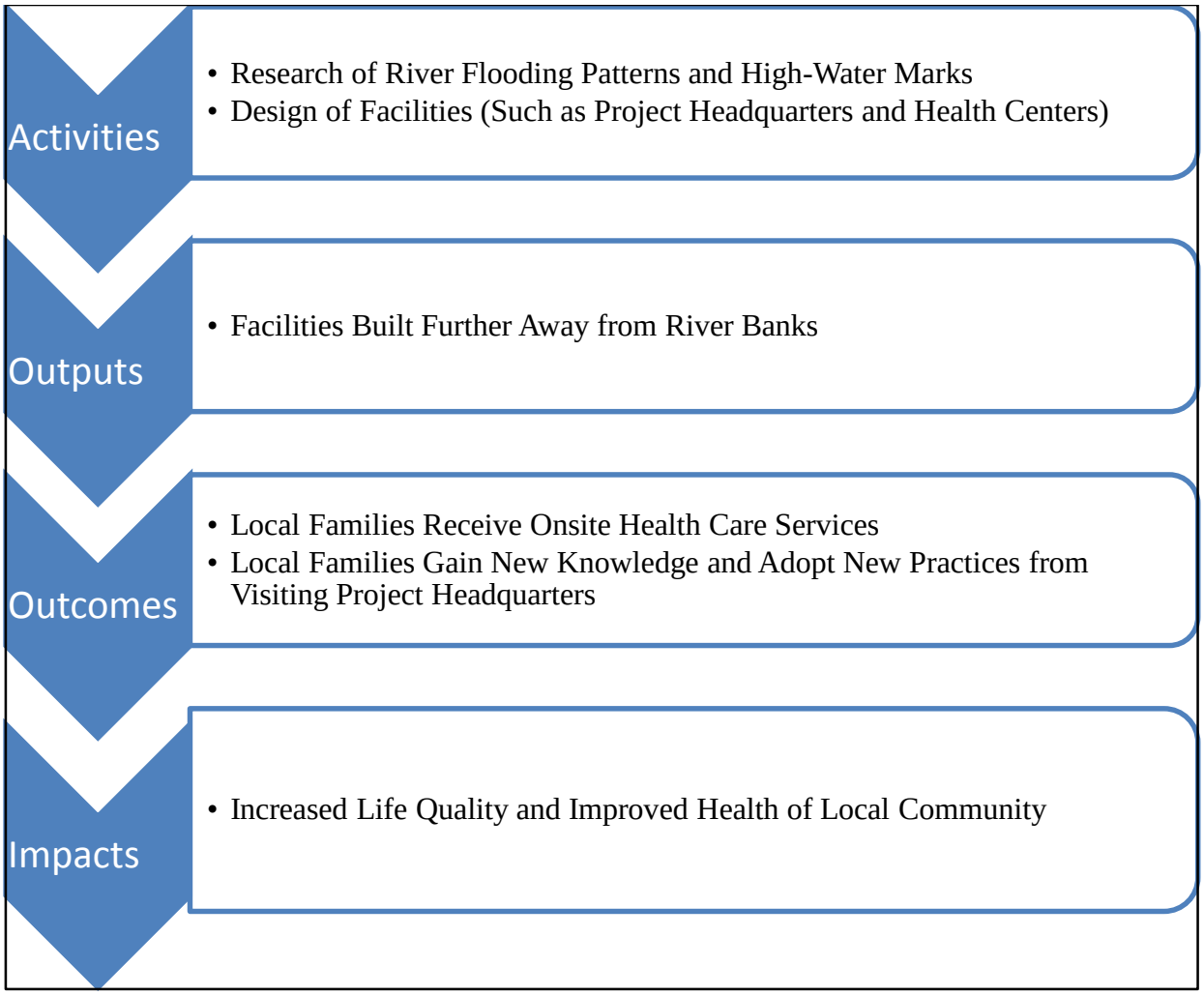


Figure 27: Activities, Outputs, Outcomes and Impacts of Establishing Facilities Far from River Banks

Indicators for Adaptation Benefits to Communities

CarbonCo, and its parent company Carbonfund.org, are both climate change organizations and will continuously monitor the latest developments in climate change science and climate change impacts.

The Project Proponents will incorporate adaptation activities into the Envira Amazonia Project and have incorporated the following indicators to demonstrate the Project activities are assisting local families to adapt to the probable impacts of climate change:

Mitigate Increase in Mosquito-Borne Illnesses

The Project Proponents shall monitor the following indicators to assess whether the Project is effectively mitigating an increase in mosquito-borne illnesses:

- Number of Health Centers Established
- Number of Mosquito Nets Distributed
- Number of Local Communities Attending Health Center

- Trend of Mosquito-Borne Illnesses in Project Zone

Climate Change Adaptation Incorporated into Agricultural Extension Courses
The Project Proponents shall monitor the following indicators to assess whether the Project effectively incorporated climate change adaptation into the agricultural extension courses and whether the lessons are being practiced by the local communities:

- Number of Families Surveyed About Desired Agricultural Extension Courses
- Number of Agricultural Extension Courses Taught
- Number of Agricultural Extensions Courses Taught Which Incorporated Climate Change Adaptation Measures
- Number of Lessons Learned (Related to Climate Change Adaptation) and Incorporated by Local Families in Project Zone

Improving with Transportation Networks
The Project Proponents shall monitor the following indicators to assess whether the Project is effectively improving transportation networks that would otherwise be hindered by climate change:

- Number of Boats Purchased by JR Agropecuária e Empreendimentos EIRELI to Assist with Transportation of Community Goods (e.g., Açaí, Rubber, and Medicinal Plants)
- Number of Shipments Via JR Agropecuária e Empreendimentos EIRELI's Road Transportation Network
- Number of Shipments Disrupted Due to Impact of Increased Flooding, Heavy Rainfalls, and Lower River Levels

Establishing Facilities Far from River Banks
The Project Proponents shall monitor the following indicators to assess whether the Project is effectively establishing facilities far from river banks:

- Number of Facilities Built Along Envira River
- Number of Facilities Built Along Jurupari River
- Number of Flooding Events and Heavy Rainfall Damaging Health Centers
- Number of Flooding Events and Heavy Rainfall Damaging Headquarters

COMMUNITY SECTION

CM1. Without-Project Community Scenario

The following section shall describe the original well-being of the Communities and the expected without Project land-use changes.

Describe Communities
The local community in the Project Area consist of approximately ten families and approximately 60-70 people. The local families living outside the Project Zone and along the

200,000 hectare property's Envira River border consist of approximately 40 families and approximately 200 people.

As of June 2014, the families living within the Project Zone, along with the Other Stakeholders on the Envira River, are relatively homogenous riverine communities and the majority of the families are former extractivists (i.e., rubber tappers). The Project Zone includes a balance of men and women, with generations of children, parents, and grandparents. All of the families within the Project Zone practice subsistence agriculture, most of the families raise cattle, and many families also raise small animals such as pigs, chickens and ducks.

Aggregated Envira Amazonia Community Survey Results

	Name	How Many People in Your Family?	Do You Grow Crops? (Yes = 1, No = 0)	Most Important Crops	Do You Sell Crops? (Yes = 1, No = 0)	Where Do You Sell Crops?	Do You Raise Cattle? (Yes = 1, No = 0)	How Many Head of Cattle Do You Have?	How Many Hectares of Pasture Do You Manage?	Do You Sell Cattle? (Yes = 1, No = 0)	Where Do You Sell Cattle?	What Do You Do to Earn Money?
1	José Magalhães da Silva	2	1	cassava, corn and banana.	1	Feijo	1	9	14	1	Feijo	Creation of chicken.
2	João Nazário Rodrigues	6	1	cassava and corn.	0	N/A	1	50	25	1	Feijo	Creation of chicken and pork, and selling acai.
3	Ademar Felipe de Sousa	11	1	cassava, maize, rice, sugar cane, banana, avocado and pineapple.	0	N/A	1	15	2	0	N/A	Creation of chicken, pork and duck.
4	José Ferreira de Sousa	6	1	cassava, maize, rice and banana.	0	N/A	1	25	12	1	Feijo	Creation of chicken and pork, and cut the seringal.
5	Raimundo Maurício do Nascimento	12	1	cassava, corn, rice and sugar cane.	0	N/A	1	6	8	0	N/A	Creation of chicken, pork and duck.
6	José Sousa do Nascimento	1	1	cassava, maize and rice.	0	N/A	1	7	12	1	In Community	Creation of chicken and pork.
7	Antônio Francisco Lopes da Silva	10	1	cassava, corn, papaya, banana, pineapple, and sugar cane.	1	Feijo	1	37	16	1	Feijo	Creation of chicken, pork and duck; production of açaí and rubber tapping.
8	Raimundo Cunha da Silva	7	1	cassava, maize, rice, banana, papaya and sugar cane.	0	N/A	1	16	9	1	In Community	Creation of chicken, pork and duck, and cut the seringal
9	Jorginaldo da Silva Pedrosa	3	1	cassava and corn.	0	N/A	1	19	8	1	Feijo	Creation of chicken and pork, and sales of acai, depending on the year.
10	Francisco Cirlândio Dimas de Sousa	5	1	cassava, corn, banana, rice, sugar cane, orange, coconut and soursop.	0	N/A	1	11	12	1	Feijo	Creation of chicken, pork and duck; production of açaí; and transportation of school children when possible on the Jurupari River due to its level.
	Totals	**63**	**10**	**N/A**	**2**	**N/A**	**10**	**195**	**118**	**8**	**N/A**	**N/A**
	Average	**6.3**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**19.5**	**11.8**	**N/A**	**N/A**	**N/A**

Figure 28: Aggregated Results of Envira Amazonia Project's Community Survey (Credit Brian McFarland and Ayri Rando)

The main subsistence crop throughout the Project Zone is manioc (i.e., otherwise known as yuca or cassava), rice and corn. Additional subsistence crops and fruit trees which are planted throughout the Project Zone include, but are not limited to the following: bananas, beans, coconuts, oranges, papayas, pineapples, and sugarcane.

Many of the families fish in the Jurupari River or in the oxbow lakes, and many also hunt within the forests of the Project Zone. Boats, and especially wooden canoes, are a very important mode of transportation for communities living throughout the Project Zone.

While no communities reported selling timber, many communities utilize charcoal or propane for cooking.

In addition to being former rubber tappers, the local communities' ethnicity is further characterized by their Brazilian nationality, a common language (Portuguese), along with shared religious beliefs (Catholic and Evangelical) and customs such as playing soccer, hunting, and agriculture.

Regarding the communities' well-being, a Basic Necessity Survey was designed by CarbonCo and administered at the Project Zone by Ayri Rando.

Project Zone's High Conservation Values for Communities

The Project Zone of the Envira Amazonia Project includes several High Conservation Values (HCVs) for communities including areas with critical ecosystem services, areas that are fundamental for the communities' livelihoods, and areas that are critical for the communities' traditional cultural identity. The Envira Amazonia Project, as a forest conservation project, shall seek to conserve the Project Zone's forests and maintain the local water quality.

Areas with Critical Ecosystem Services

The hydrological services of the Envira and Jurupari Rivers are critical ecosystem services for the local families. This includes water for drinking, bathing and washing clothes, along with providing transportation and a source of food.

Areas Fundamental for Communities' Livelihoods

The tropical forests within the Project Zone are fundamental for the communities' livelihoods and there are few, if any, readily available alternatives. These fundamental attributes include the provision of food (i.e., hunting of game), fuel, and building materials (i.e., timber to build or repair houses and paddocks), along with the collection of medicinal plants such as copaíba, jatobá and mastruz.

Areas Critical for Communities' Traditional Cultural Identity

The community does not have specific religious beliefs based around the forest or local fauna. Nevertheless, many of the community members within the Envira Amazonia Project have lived at the current location for more than eleven years on average and thus, there is a strong cultural significance relating to friends, family, place of birth, and familiarity.

Community Changes Under Without-Project Land Use Scenario

The "without-project land-use scenario" would be the clear-cut of nearly 40,000 hectares by JR Agropecuária e Empreendimentos EIRELI to establish a large-scale cattle ranch at the Project Area. In this scenario, the areas with critical ecosystem services, areas that are fundamental for the communities' livelihoods, and the areas that are critical for the communities' traditional cultural identity would be loss.

Although some members of the community could have gained employment as hired hands on the cattle ranch, the communities would be forced to relocate, the local ecosystem and biodiversity would be destroyed, and the communities would lose their traditional livelihoods.

CM2. Net Positive Community Impacts

The Envira Amazonia Project shall generate net positive community impacts throughout the Project Zone and over the Project Lifetime, while also maintaining or enhancing the Project Zone's High Conservation Values.

Methodology and Assessment of Impacts on Community Groups

The Project Proponents utilized stakeholder identification and consultation, along with a Participatory Rural Assessment (PRAs) and the Basic Necessities Survey (BNS) methodology to develop a Theory of Change model. The model was then utilized to estimate the community impacts from all the Project activities in the "with-Project land-use scenario" vis-à-vis the "without-Project land-use scenario."

Measures Needed to Mitigate Negative Impacts on Community Groups

The Project Proponents shall incorporate adaptive management and exercise the precautionary principal in order to mitigate any negative impacts on community groups that are later discovered. Currently, the measures needed to mitigate any negative well-being impacts on the local community include:

- Regular, open communication with, and feedback from, the local families
- Monitoring and measurement of Project's impact on local families via the Basic Necessity Survey and Participatory Rural Assessment

Demonstrate Net Well-Being Impacts on Community Groups

The Envira Amazonia Project has been designed and shall be implemented to produce net positive well-being impacts on all local communities vis-à-vis the "without-Project land-use" scenario.

This shall be demonstrated over time by the Basic Necessity Survey and the Participatory Rural Assessment, along with regular independent assessments of the Project against the Verified Carbon Standard and the Climate, Community and Biodiversity Standard.

Demonstrate No High Conservation Values Negatively Affected

No High Conservation Values (HCVs) shall be negatively affected as a result of the Envira Amazonia Project. This claim shall be demonstrated over time by the Basic Necessity Survey, the Participatory Rural Assessment, and by the review of satellite imagery to determine the extent of deforestation within the Project Area, along with regular independent assessments of the Project against the Verified Carbon Standard and the Climate, Community and Biodiversity Standard.

CM3. Other Stakeholder Impacts

The Envira Amazonia Project, being a forest conservation project, shall "do no harm" to Other Stakeholders. Other Stakeholders include, but are not limited to:

- Communities Living Outside the Project Zone and Along the Property's Border on the Envira River:
    - Manoel Pereira do Nacimento

    - Francisco Rodrigo de Melo
    - Francisco Mendes Pinto
    - José Ribamar de Moura
    - Antônio Floriano da Silva Filho
    - Antônio Portela Pontes
    - Antônio Lopes da Silva
    - Francisco Chagas Silva de Araújo
    - Sebastião de Araújo Albuquerque
    - Francisco Osmildo de Sousa Lima
    - Antônio de Lima de Melo
    - Ronaldo de Souza Melo
    - Joaquim de Oliveira da Silva
    - Antônio Geovan de Sousa Rodrigues
    - José Bento de Paula
    - Claudenir Ferreira de Amorim
    - Espedito da Silva Menezes
    - Maria do Carmo
    - Antônio Jones Ferro de Castro
    - José Mariano de Oliveira da Silva
    - João Elias do Nascimento de Castro
    - Raimundo Fortino da Silva
    - Francisco Elias Araújo de Castro
    - José Souza Lima
    - Francisco Mário Gomes da Silva
    - Maria José Martins de Paiva
    - Antônio Ferro de Araújo
    - José Luís Castro de Araújo
    - Luiz Francisco de Aguiar Dimas
    - Jeandro Castro de Araújo
    - Manoel Joaquim Gomes da Silva (Manoel Abreu)
- Adjacent Landowners and Other Communities
    - Seringal Riachuelo, owned by João Severiano da Silveira Filho and Eugenia Morais da Silveira
    - Seringal Santana
    - Fazenda São Jerônimo
    - Fazenda Foz do Jurupari
    - Ser. Veneza S. Braz e Boa Vista (INCRA settlement)
    - Seringal Triunfo
    - Seringal Cruzeiro
    - Seringal Sobral, owned by Benedito Oliveira Filho
    - Fazenda Porongaba and Seringal São Francisco II, both owned by Agropecuária Minas Acre LTDA
    - Seringal Santa Helena (INCRA settlement)
- The State of Acre, particularly the Climate Change Institute

Identify Potential Positive and Negative Impacts on Other Stakeholders
The potential positive impacts of the Envira Amazonia Project on Other Stakeholders include, but are not limited, to the following impacts:

- Health center on the Envira River to be eventually established which will be made available to Other Stakeholders. Agricultural extension trainings will also be offered along the Envira River.
- Increased learning curve for future REDD+ projects amongst private landowners in Acre
- Sharing of knowledge, best practices, lessons learned, and cultural exchange with Other Stakeholders including the State of Acre

The Project Proponents have identified the following potential negative impacts on Other Stakeholders as a result of the Envira Amazonia Project:

- Increased cost of land; for example, if the Envira Amazonia Project increases neighboring property values for future land purchases
- Decreased value of land; for example, if the Envira Amazonia Project prevents adjacent properties from accessing markets by constructing roads
- In-migration to areas adjacent to the Project Zone
- If communities migrate out of the Project Zone (i.e., due to forced relocation or lack of Project success) and into primary forests adjacent to the Project Zone
- If the Project Proponents are unable to eliminate deforestation and the community continues to expand into the forest, including forests outside the Project Zone
- Wealth in Project Zone creates conflict in surrounding areas due to jealousy, a rise in illicit activities, alcoholism, elite capture, etc.

Measures to Mitigate Negative Well-Being on Other Stakeholders
There are numerous measures needed and which shall be taken to mitigate the potential negative impacts on Other Stakeholders. It is important to note that the communities in and near the Envira Amazonia Project have good relationships and no major conflicts have been identified through stakeholder consultations.

Regarding the increased cost of land, the Envira Amazonia Project will have less an impact on rising costs of land than the completion of the Highway BR-364's paving. In contrast, the Envira Amazonia Project might decrease the value of surrounding properties. The Project is a forest conservation project and might prevent surrounding properties from accessing markets because the Project will not allow road construction through the property. Nevertheless, the Project Proponents will engage adjacent landowners to offer expanding forest conservation projects beyond the boundaries of the Project. Maintaining forest cover, at the expense of road construction or the establishment of additional large-scale cattle-ranches has positive climate, community and biodiversity benefits.

In-migration to areas adjacent to the Project Zone could occur. However, Acre's State System of Incentive for Environmental Services (SISA) seeks to improve rural livelihoods which should reduce in-migration into the both the Project Zone and areas adjacent to the Project Zone. Furthermore, the Project Proponents will monitor deforestation throughout the Project Zone and

will seek to minimize deforestation within the Project Zone. Similarly, there is a possibility of out-migration from the Envira Amazonia Project and into the surrounding forests. To mitigate out-migration, the Project Proponents will seek to implement a variety of social projects and programs.

With respect to increased conflict, illicit activities, alcoholism, and elite capture, the Project Proponents will closely monitor community benefits throughout the Project Zone. Children from surrounding communities will be allowed to attend school at the Project, while surrounding communities will be allowed to visit the dental and health center at the Project.

Demonstrate No Net Negative Impacts on Other Stakeholders
The Envira Amazonia Project shall not result in net negative impacts on Other Stakeholders. Such stakeholders have been identified, consulted, and will be allowed to participate in the Project. For example, Other Stakeholders along the Envira River will be able to participate in the Project activities such as receiving official land title and attending agricultural extension training courses.

CM4. Community Impact Monitoring

Community impact monitoring assesses changes in well-being resulting from the Project activities for Community Groups and Other Stakeholders.

Develop and Implement a Community Impact Monitoring Plan
The activities, outputs, outcomes and community impacts of the Project on all the families living throughout the Project Zone shall be monitored to ensure net positive benefits. The monitoring plan will consist of measuring the both qualitative and quantitative indicators derived from the Participatory Rural Assessment (PRA), along with the ongoing results of the Basic Necessity Survey (BNS). The Theory of Change methodology has also been applied to the use of the Basic Necessity Survey (BNS) and the Participatory Rural Assessment (PRA).

Basic Necessities Survey
CarbonCo hired Ayri Rando to conduct a Basic Necessities Survey (BNS) at the Envira Amazonia Project. Essentially, a focus group was created and the community was asked to identify the top assets or services which were believed to be basic necessities or things that no one in the community should have to live without. The aggregated results of the BNS among surveyed communities living inside the Envira Amazonia Project Zone are as follows:

	Asset or Service	Item	Have Now? (Yes = 1, No = 0)	Are Basic Necessities? (Yes = 1, No = 0)	How Many Have?	Community Price per Item	Total Value of Assets
1	Asset	Machete	1	1	12	R$25.00	R$300
2	Asset	Weedwacker	0	1	0	R$3,000	R$0
3	Asset	Ax	1	1	3	R$60	R$180
4	Asset	Hoe	1	1	7	R$40	R$280

5	Asset	Bulb Planting Tool	1	1	4	R$80	R$320
6	Asset	Plow Machine	0	0	0	_____	N/A
7	Asset	Plow Machine for Planting Corn	0	1	0	R$80	R$0
8	Asset	Pair of Boots	1	1	8	R$50	R$400
9	Asset	Wire Fence	0	1	0	_____	N/A
10	Asset	Flour Mill Kit (motor, ball, furnace and water tank)	0	1	0	R$2,355	R$0
11	Asset	Cookware	0	0	0	R$280	R$0
12	Asset	Motor / Pump and 1,000 Liters Water Tank	0	1	0	R$2,500	R$0
13	Asset	Water Tank (1,000 liters)	0	1	0	R$1,000	R$0
14	Asset	Solar Panels	0	1	0	R$14,000	R$0
15	Asset	Artesian Well	0	1	0	R$3,500	R$0
16	Asset	Washing Machine with Tank	0	1	0	R$1,400	R$0
17	Asset	Gas Stove with Cylinder	1	0	7	R$955	$6,685
18	Asset	Mill to Give Rations to Chickens	1	1	1	R$200	R$200
19	Asset	Sewing Machine	1	0	3	R$1,200	R$3,600
20	Service	Rural Communication via Phone	0	1	0	R$1,000	R$0
21	Asset	Mill with Motor, for Grinding Sugar Cane	0	1	0	_____	N/A
22	Asset	Full Bathroom for Every Home	0	1	0	_____	N/A
23	Service	Education until Completion of Elementary and Middle School	0	1	0	R$16,000	R$0
24	Service	Health Center	0	1	0	R$7,000	R$0
25	Service	Extension of Transportation (Approximately 40 Km)	0	1	0	_____	N/A
26	Asset	Boat and Engine with Capacity for 3,000kg	0	1	0	R$16,000	R$0
27	Asset	Fast Boat to Attend to Emergencies at the Health Center	0	1	0	R$15,000	R$0
						TOTAL	**R$11,965**

Figure 29: Basic Necessity Survey at the Project Area (Credit: Ayri Rando)

Furthermore, the Basic Necessity Survey establishes a baseline for the communities' access to basic necessities and shall serve as a measurement against which the Project will be compared.

The following Theory of Change model is for the Basic Necessities Survey (BNS):

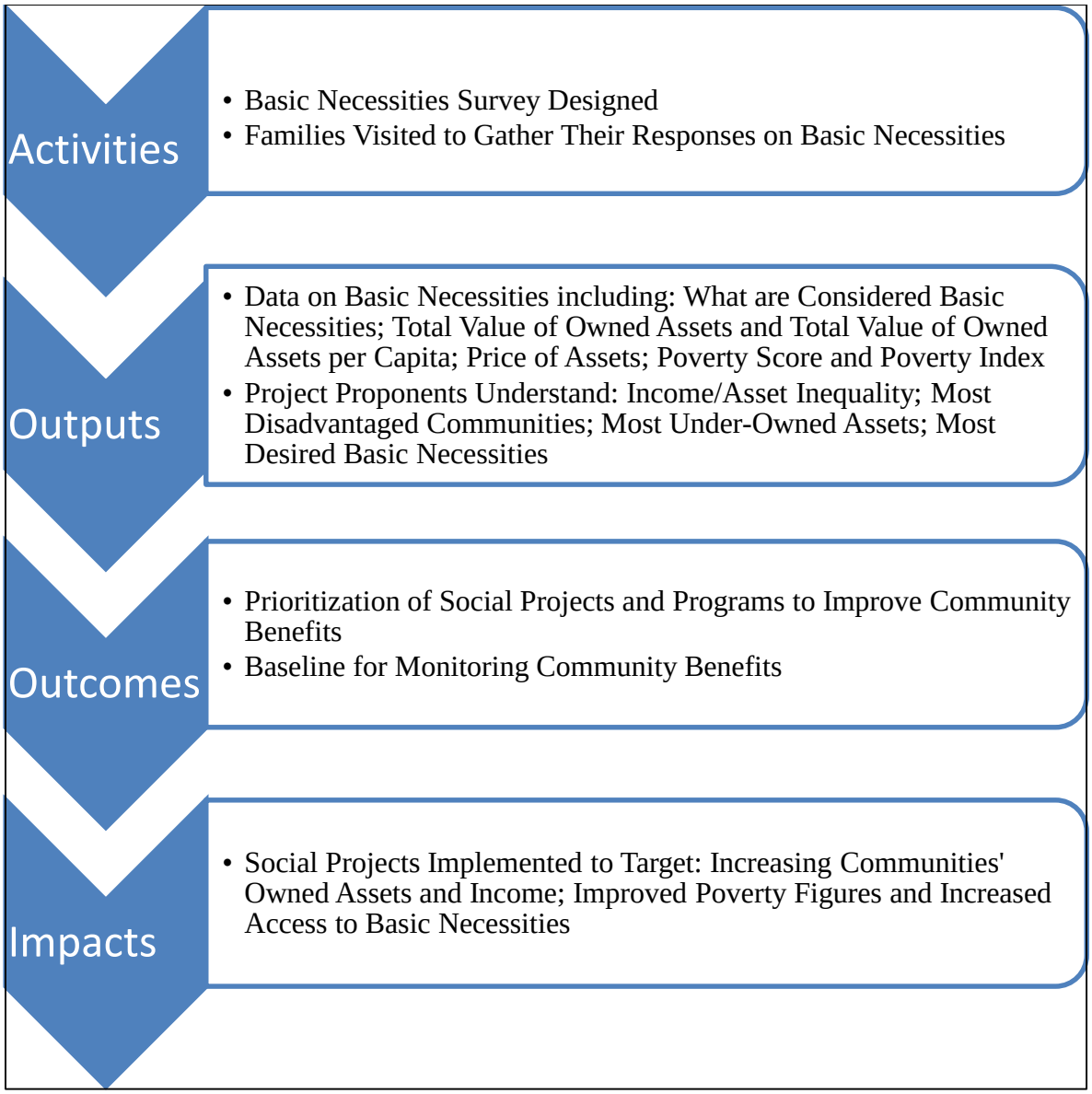


Figure 30: Activities, Outputs, Outcomes and Impacts of Basic Necessities Survey

IF, THEN Statements

If the BNS is designed and families are surveyed, then the Project Proponents will have data on basic necessities, community assets and poverty, which will enable the Project Proponents to understand: asset inequality; which communities are most disadvantaged; which are the most under-owned assets; and which are the most desired basic necessities. If this data is collected and understood by the Project Proponents, then social project and programs are prioritized for improving community benefits and a baseline for monitoring benefits is established. If social

projects and programs are prioritized, then social projects can be implement which specifically target increasing community's owned assets and income, along with to improve poverty figures and access to basic necessities.

Participatory Rural Assessment

A Participatory Rural Assessment (PRA, also known as a Participatory Rural Appraisal) with the communities throughout the Project Zone was conducted by Ayri Rando from May 20 to June 11, 2014. Ayri Rando attempted to sample each community living within the Project Area's section of the Jurupari River. A total of ten families in the Project Area and 31 families outside the Project Zone were interviewed as part of the PRA.

This PRA helps to, among many things, establish a baseline of economic activities and land-use practices that the local families practice, along with a mechanism to assess leakage.

The following Theory of Change model is for Participatory Rural Appraisals (PRAs):

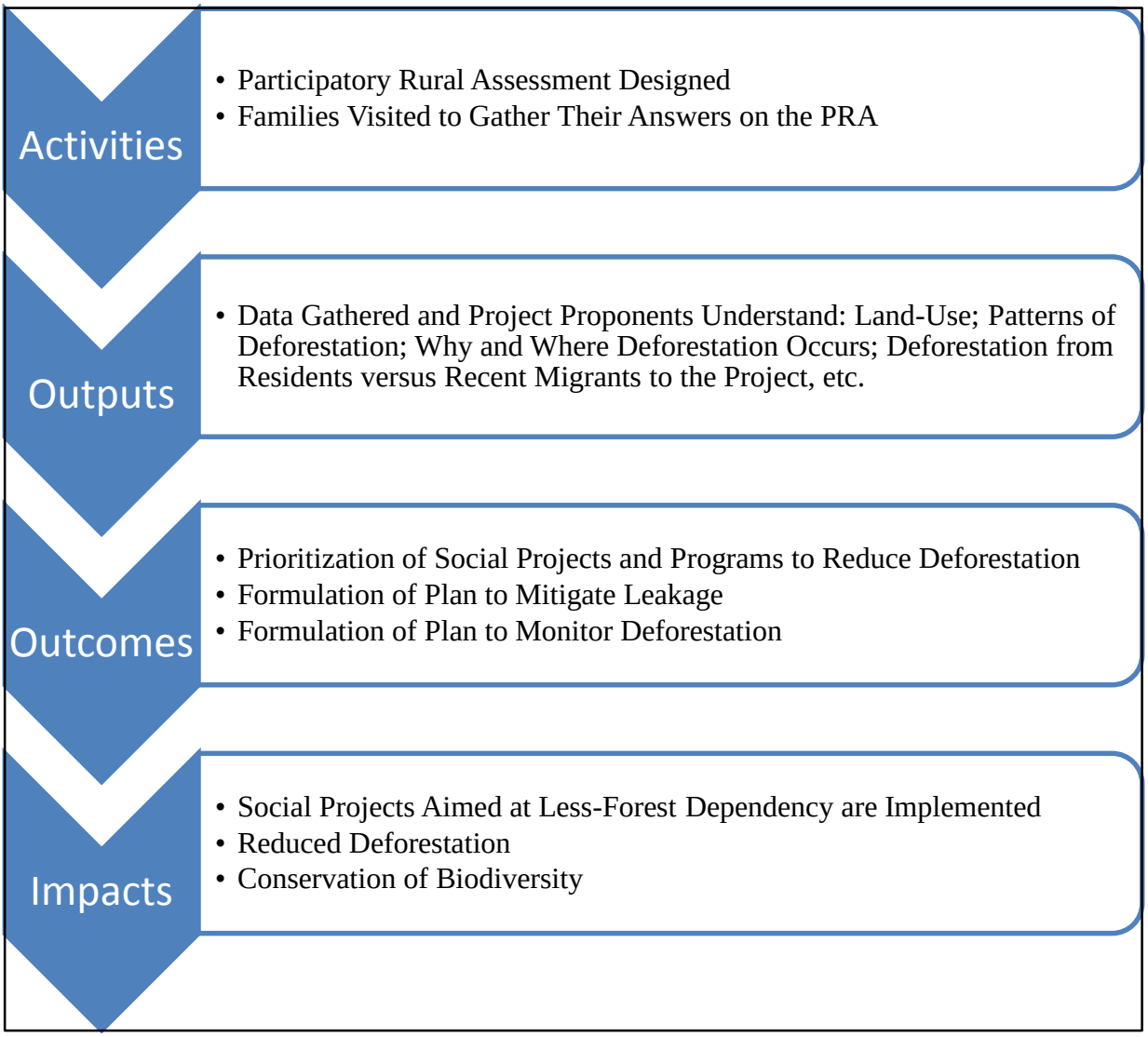


Figure 31: Activities, Outputs, Outcomes and Impacts of Participatory Rural Appraisal

IF, THEN Statements

IF PRAs are designed and local families are surveyed, then data will be gathered and the Project Proponents will understand: Land-Use; Patterns of Deforestation; Why and Where Deforestation Occurs; Deforestation from Residents versus Recent Migrants to the Project. If this data is collected and deforestation is understood by the Project Proponents, then social projects and programs aimed at reducing deforestation can be prioritized and plans for mitigating leakage and monitoring deforestation can be formulated. If social projects and programs are prioritized, then deforestation will be reduced and biodiversity will be conserved.

Ultimately, the Project Proponents shall monitor the following indicators as part of the community impact monitoring plan and shall regularly have such indicators independently audited:

Indicators of Activities

- Signed Tri-Party Agreement between Project Proponents
- Completion of Forest Carbon Inventory
- Completion of Regional Deforestation and Land-Use Modeling
- Completion of VCS Project Description and CCBS Project Design Document
- Completion of Basic Necessities Survey and Participatory Rural Assessment

Indicators of Outputs

- Validation Statement for VCS Project Description and CCBS Project Design Document
- Spreadsheet with Top Agricultural Extension Courses Identified
- Agricultural Extension Courses Conducted (Including Climate Change Adaptation)
- Structure Developed for the Collection, Processing, Transportation and Sales of Açaí, Rubber Trees, and Medicinal Plants
- Spreadsheet Compiling Data on Basic Necessities including: What are Considered Basic Necessities; Total Value of Owned Assets and Total Value of Owned Assets per Capita; Community Price of Assets; Poverty Score and Poverty Index
- Summary Statistics on: Income/Asset Inequality; Most Disadvantaged Communities; Most Under-Owned Assets; Most Desired Basic Necessities
- Qualitative Surveys and Spreadsheet Compiling Data on: Land-Use; Patterns of Deforestation and Yearly Cycle of Deforestation; Why and Where Deforestation Occurs; Deforestation from Residents vs. Recent Migrants

Indicators of Outcomes

- Value of Carbon Finance Generated
- Communities Gain New Knowledge, Practices and Skills About Sustainable Agriculture
- Communities Gain New Knowledge, Practices and Skills for Collection, Processing, Transportation and Sales of Açaí, Rubber Trees, and Medicinal Plants
- Prioritization and Implementation Plan for Social Projects and Programs to Reduce Deforestation and Improve Community Benefits
- Baseline for Monitoring Community Benefits
- Formulation of Plan to Mitigate Leakage
- Formulation of Plan to Monitor Deforestation

Indicators of Impacts

- Community Income Diversified
- Increased Income Generation
- Reduced Deforestation
- Intensified Agricultural Practices
- Diversified Crops
- Increasing Community's Owned Assets and Owned Assets per Capita
- Improved Poverty Figures and Poverty Scores
- Increased Access to Basic Necessities
- Improvement in Health and Dental Clinic

The specific variables that will be monitored and reported every four years with the BNS and PRA are as follows:

- Community's Access to Basic Necessities
- Value of Owned Assets
- Value of Owned Assets per Capita
- Poverty Score
- Poverty Index
- Inequality of Owned Assets
- Inequality of Owned Assets per Capita

Develop and Implement High Conservation Values Monitoring Plan

The Envira Amazonia Project has developed and shall implement a community impact monitoring plan that incorporates the Project's impact on the community High Conservation Values (HCVs) of areas with critical ecosystem services, areas fundamental for livelihoods, and areas critical for traditional cultural identity.

The initial Participatory Rural Assessment (PRAs) revealed the community's HCVs and subsequent PRAs will assess whether HCVs have been maintained or enhanced. Furthermore, the Envira Amazonia Project's climate monitoring plan will monitor deforestation and forest cover.

Disseminate Monitoring Plan

The Project Proponents will make the full community monitoring plan and the results of the community monitoring plan publicly available via the internet and the Project Proponents will also make summaries available to both the local families and Other Stakeholders.

GL2. Exceptional Community Benefits

The Envira Amazonia Project shall target both short-term and long-term benefits to globally poor communities located throughout the Project Zone. Such benefits will be shared equitably, including amongst the more marginalized or vulnerable households, and local governance structures will be developed to maximize the benefits.

Demonstrate Project Zone's Communities Below National Poverty Line
According to the United Nations Development Programme's International Human Development Index (HDI), Brazil is considered a high human development country.[53] However, it can be demonstrated that at least 50% of the population in the Project Zone are below the national poverty line. According to a World Bank study[54], the national poverty line per capita per month in Brazil is 180.14 (2005 PPP$) while the "nominal value of the median monthly income per capita of rural, permanent households" in the municipality of Feijó is R$28.00.[55]

Demonstrate Short- and Long-Term Net Positive Community Benefits
The Envira Amazonia Project has both short-term and long-term net positive benefits for local families throughout the Project Zone. Short-term activities which shall be implemented shortly after the Project achieves validation and verification include offering agricultural extension courses and creating the structure for açaí, medicinal plants, and rubber trees. Activities that will have long-term net positive benefits for local communities including helping the communities obtain official land title and to establish a local health center.

Indicators of the well-being impacts from these short-term and long-term activities have been incorporated into the community impact monitoring plan's Basic Necessity Survey and Participatory Rural Assessment.

Identify Risks for Community Members Participation
The most common risk that the families shared with Ayri Rando is their concern about losing their traditional livelihoods, which involves slash-and-burn agriculture, if they participate in the Project. In addition, the local families are concerned about potentially being removed since they do not have title to the land. In contrast, the Project shall grant official land title to the families to strengthen their land tenure and negate any concerns they have about potentially being removed. In addition, the Project shall offer agricultural extension training courses that will demonstrate alternatives to traditional slash-and-burn agriculture.

Identify Marginalized and/or Vulnerable Community Groups
All of the communities in the Project Zone are relatively marginalized and vulnerable due to having limited health care services, being located relatively far from Feijó, and by not having official land title. Currently, data from the Participatory Rural Assessment – particularly with respect to the number of cattle owned by each family – will serve as an approximation for which families are considered the most marginalized. In the future, the Basic Necessity Survey will be used to identify the most marginalized families and to monitor whether such families are receiving net positive impacts. Ultimately, the Project is designed and shall be implemented to generate net positive impacts for all families living throughout the Project Zone.

[53] UNDP, "Table 1: Human Development Index and its components," Available: https://data.undp.org/dataset/Table-1-Human-Development-Index-and-its-components/wxub-qc5k
[54] Martin Ravallion et al., "Dollar a Day Revisited," Available: http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2008/09/02/000158349_20080902095754/Rendered/PDF/wps4620.pdf
[55] IBGE, "Acre: Feijó," Available: http://cidades.ibge.gov.br/xtras/temas.php?lang=&codmun=120030&idtema=16&search=acre|feijo|sintese-das-informacoes-

Demonstrate Project Generates Net Positive Impacts for Women
As part of the community engagement, Ayri Rando interviewed women and allowed all community members – including women – to share their insights.

The PRA asked what activities are most important to women and what can be done to increase the participation of women. Two valuable insights were shared and which will be incorporated into the Project to help ensure the Project generates net positive impacts for women. The first insight is that the Project should allow children to attend any courses (assuming children are out of school) in order to allow women to participate in the courses. The second, related insight is that the Project should offer to compensate a few women to look after the community's children in order to allow women to participate more fully in the courses.

In the future, the PRAs shall inquire about the specific impacts the Project has had on women.

Describe Design and Implementation of Benefit Sharing Mechanism
The Project Proponents, based off their experience in Acre and based off the other REDD+ projects implemented by CarbonCo and Carbon Securities, designed an initial list of activities aimed at sharing benefits with the local community. CarbonCo then hired Ayri Rando to visit the communities to explain, among other things, the proposed list of activities and to solicit their feedback. This process was participatory and resulted in additional activities being incorporated into the Project and a restructuring of the implementation schedule.

Explain Communication of Benefits, Costs and Risks
Ayri Rando personally visited families throughout the Project Zone to communicate the Project's proposed benefits and the potential costs and risks of participation. The community also shared what benefits they would like to receive and shared their concerns of participating in the Project (i.e., losing traditional livelihoods or being forced to move). The Project Proponents received the community's feedback through Ayri Rando.

The complete project documents, including the Summary Document, will also be made available to the local community which shall further communicate the Project's benefits, costs and risks. In addition, the Project Proponents – or their representatives - will regularly visit the Project and Duarte intends on recording radio messages containing Project updates for the community.

Describe Project's Governance and Implementation Structures
During Ayri Rando's visit, the families were asked if there was a history of collective decision-making and there is no such tradition of community-wide decisions or community elders making decisions on behalf of the community.

The Project shall be collectively governed by JR Agropecuária e Empreendimentos EIRELI, Carbon Securities and CarbonCo. JR Agropecuária e Empreendimentos EIRELI is primarily responsible for the implementation of the local social projects and programs. To decentralize decision-making and to empower the local communities, JR Agropecuária e Empreendimentos EIRELI will establish sub-divisions for the açaí, rubber and medicinal plant projects throughout the Project Zone.

Demonstrate Project is Developing Local Capacity
The Participatory Rural Assessment asked the local communities whether there were any local organizations or institutions. The only local institution, which does not visit the Project Zone on a regular occasion, is STR-Feijó. The Project Proponents shall engage STR-Feijó to inform about the Envira Amazonia Project and explore whether there are opportunities for collaboration.

In addition to the engaging STR-Feijó, the Project Proponents will directly engage the local community to develop local capacity in the design, implementation and ongoing management of the Project. Such local capacity includes, but is not limited to: the participatory process of designing the Project; developing the structure to collect, process, transport and sell açaí, rubber and medicinal plants; and learning new techniques via the agricultural extension courses.

It is also important to note the Project will work to build this local capacity with all families, including women and marginalized families.

BIODIVERSITY SECTION

B1. Biodiversity Without–Project Scenario

The following will describe the Project Zone's biodiversity and describe the expected changes under the "without-Project" land-use scenario.

Biodiversity within Project Zone
The Amazon Rainforest is the largest contiguous rainforest in the world and home to an extraordinary diversity of life. The Amazon River, and its many tributaries, contain one-fifth of the world's freshwater while stretching nearly 4,000 miles (approximately 6,437 kilometers) from the Andes Mountains to the Atlantic Ocean port city of Macapá.

There are also an estimated one to two million animal species including howler monkeys, freshwater dolphins, scarlet macaws, and jaguars. With nearly 1/3rd of all known species and the largest network of freshwater, the Amazon Rainforest - and specifically Acre's remaining forests and biodiversity - is in a delicate balance.

While still providing refuge to 30,000 endemic plants and hundreds of indigenous communities and forest-dependent communities, the Amazon is facing threats from infrastructure development projects (e.g., road construction and paving, power plants, etc.), cattle ranches, slash-and-burn agriculture, and commercial agriculture (i.e., particularly sugarcane, soybeans, coffee, and oranges).[56]

Specific to Acre, the State Government of Acre notes that:

> The majority of the deforestation in Acre occurs along primary and secondary roads as well as rivers. The main deforestation driver in Acre is cattle breeding

[56] Conservation International, "Brazil," Available: http://www.conservation.org/where/south_america/brazil/pages/brazil.aspx

> (70% of deforested area in 1989 and 81% in 2004). Factors such as land speculation, lack of zoning and destination of public lands, profitability of cattle breeding and subsidized credit loans have incentivized deforestation in the Amazon. Deforestation agents were historically mid and large landowner / farmers, although in the last years small household farmers have contributed significantly with the deforested area in Acre. The conclusion of the pavement of BR 317 in 2007 and BR 364 (2011) will connect the southwest Amazon to the Peruvian harbors and will definitely increase business as usual deforestation. The threat will be more intense mainly along BR 364 from Sena Madureira to Cruzeiro do Sol {i.e., the location of the Envira Amazonia Project}.[57]

The Envira Amazonia Project is specifically facing deforestation pressures as a result of JR Agropecuária e Empreendimentos EIRELI's desire to establish a large-scale cattle ranch, along with local subsistence agriculture and cattle breeding within the Project Area. These deforestation pressures were witnessed via firsthand observations as well as using the Verified Carbon Standard's methodology to model future deforestation.

Regional studies in the Southwestern Amazon and particularly within the Envira-Jurupari-Purus River Basins in Acre have demonstrated some of the highest levels of biodiversity in the world. For example, the World Wildlife Fund (WWF) notes for the Southwestern Amazon region that:

> (…) Tree species variability reaches upwards to 300 species in a single hectare. There are a few exceptions to this high diversity, mainly where stands dominated by one or several species occur. The first are vast areas (more than 180,000 km^2) dominated by the highly competitive arborescent bamboos *Guadua sarcocarpa* and *G. weberbaueri* near Acre, Brazil extending into Peru and Bolivia (Daly and Mitchell 2000). Other monodominant stands include swamp forests of the economically important palms *Mauritia flexuosa* and *Jessenia bataua*.
>
> (…) What is distinctive about this region is the diversity of habitats created by edaphic, topographic and climatic variability. Habitat heterogeneity, along with a complex geological and climatic history has led to a high cumulative biotic richness. Endemism and overall richness is high in vascular plants, invertebrates and vertebrate animals. This is the Amazon Basin's center of diversity for palms (Henderson 1995). The rare palm *Itaya amicorum* is found on the Upper Javari River. This ecoregion has the highest number of mammals recorded for the Amazonian biogeographic realm: 257 with 11 endemics. Bird richness is also highest here with 782 species and 17 endemics. In the southern part of the Tambopata Reserve, one area that is 50 km^2 holds the record for bird species: 554. On the white sand areas in the north, plants endemic to this soil type include *Jacqueshuberia loretensis*, *Ambelania occidentalis*, *Spathelia terminalioides*, and *Hirtella revillae*.

[57] State of Acre and GCF, "Acre GCF Database," Available: http://www.gcftaskforce.org/documents/Final_db_versions/GCF%20Acre%20Database%20(November%202010).pdf, Page 2

Many widespread Amazonian mammals and reptiles find a home in this region. These include tapirs (*Tapirus terrestris*), jaguars (*Panthera onca*), the world's largest living rodents, capybaras (*Hydrochoeris hydrochaeris*), kinkajous (*Potos flavus*), and white-lipped peccaries (*Tayassu pecari*). Some of the globally threatened animals found in this region include black caimans (*Melanosuchus niger*) and spectacled caimans (*Caiman crocodilus crocodilus*), woolly monkeys (*Lagothrix lagotricha*), giant otters (*Pteronura brasiliensis*), giant anteaters (*Myrmecophaga tridactyla*), and ocelots (*Leopardus pardalis*).

Pygmy marmosets (*Cebuella pygmaea*), Goeldi marmosets (*Callimico goeldii*), pacaranas (*Dinomys branickii*), and olingos (*Bassaricyon gabbii*) are found here, but not in regions to the east (Peres 1999). Other primates present include tamarins (*Saguinus fuscicollis* and *S. imperator*), brown pale-fronted capuchins (*Cebus albifrons*), squirrel monkeys (*Saimiri sciureus*), white-faced sakis (*Pithecia irrorata*), and black spider monkeys (*Ateles paniscus*) (Ergueta S. and Sarmiento T. 1992). The rare red uakari monkeys (*Cacajao calvus*) are found in the north in swamp forests. Nocturnal two-toed sloths (*Choloepus hoffmanni*) are well distributed throughout this region along with the widespread three-toed sloths (*Bradypus variegatus*). The Amazon River is a barrier to a number of animals such as the tamarins *Saguinus nigricollis*, which occur on the north side, and *Saguinus mystax*, which occurs on the southwest side of the Amazon-Ucayali system.

In the region of Manu, 68 species of reptiles and 68 species of amphibians have been reported for the lowland areas while 113 species of amphibians and 118 species of reptiles are reported from Madre de Dios, including the rare and interesting pit-vipers (*Bothriopsis bilineata*, *Bothrops brazili*), and frogs such as *Dendrophidion* sp., *Rhadinaea occipitalis*, and *Xenopholis scalaris* (Pacheco and Vivar 1996).[58]

Evaluate Project Zone's High Conservation Values

The Project has several qualifying attributes of High Conservation Values (HCV) for biodiversity and this includes threatened species, endemic species, and threatened or rare ecosystems.

Threatened Species

The International Union for Conservation of Nature (IUCN) has identified the following 23 species in Acre as Vulnerable, Endangered, and Critically Endangered:[59]

[58] World Wildlife Fund, "Upper Amazon basin of Peru, Brazil and Bolivia - Neotropic (NT0166)," Available: http://worldwildlife.org/ecoregions/nt0166

[59] The IUCN Red List of Threatened Species. Version 2014.2. <www.iucnredlist.org>. Downloaded on 31 July 2014.

	Kingdom	Genus	Species	Common Names (English)	Red List Status	Year Assessed	Population Trend
1	ANIMALIA	Allobates	subfolionidificans	N/A	Vulnerable	2008	stable
2	PLANTAE	Amburana	acreana	N/A	Vulnerable	1998	-
3	ANIMALIA	Ateles	chamek	Black-faced Black Spider Monkey, Chamek Spider Monkey, Peruvian Black Spider Monkey	Endangered	2008	decreasing
4	PLANTAE	Bertholletia	excelsa	Brazil-nut Tree, Para Nut	Vulnerable	1998	-
5	ANIMALIA	Callimico	goeldii	Goeldi's Monkey, Callimico, Goeldi's Tamarin, Goeldi's Marmoset	Vulnerable	2008	decreasing
6	PLANTAE	Chrysophyllum	acreanum	N/A	Vulnerable	1998	-
7	PLANTAE	Couratari	guianensis	Fine-leaf Wadara	Vulnerable	1998	-
8	PLANTAE	Couratari	prancei	N/A	tically Endanger	1998	-
9	PLANTAE	Ficus	ramiflora	N/A	Endangered	1998	-
10	PLANTAE	Ficus	ursina	N/A	Endangered	1998	-
11	PLANTAE	Guarea	juglandiformis	N/A	Vulnerable	1998	-
12	ANIMALIA	Lagothrix	cana	Peruvian Woolly Monkey, Geoffroy's Woolly Monkey	Endangered	2008	decreasing
13	ANIMALIA	Lagothrix	poeppigii	Poeppig's Woolly Monkey, Red Woolly Monkey, Silvery Woolly Monkey	Vulnerable	2008	decreasing
14	ANIMALIA	Myrmecophaga	tridactyla	Giant Anteater	Vulnerable	2014	decreasing
15	PLANTAE	Pouteria	krukovii	N/A	Vulnerable	1998	-
16	ANIMALIA	Priodontes	maximus	Giant Armadillo	Vulnerable	2014	decreasing
17	PLANTAE	Rinorea	longistipulata	N/A	Vulnerable	1998	-
18	PLANTAE	Rollinia	calcarata	N/A	Endangered	1998	-
19	PLANTAE	Sarcaulus	vestitus	N/A	Vulnerable	1998	-
20	PLANTAE	Swietenia	macrophylla	Big Leaf Mahogany, Brazilian Mahogany, Honduras Mahogany, Large-leaved Mahogany	Vulnerable	1998	-
21	PLANTAE	Trichilia	elsae	N/A	Endangered	1998	-
22	PLANTAE	Trichilia	emarginata	N/A	Vulnerable	1998	-
23	PLANTAE	Trichilia	fasciculata	N/A	Vulnerable	1998	-

Figure 32: IUCN Red Listed Species in Acre (Credit: IUCN Red List)

At the Envira Amazonia Project, a total of 376 individuals were found amongst the following four vulnerable species*[60]

	Kingdom	Genus	Species	Common Names (English)	Nome Vernacular (Common Portuguese Name)	Red List Status	Number of Individuals Identified
1	PLANTAE	Amburana	acreana	N/A	Cerejeira	Vulnerable	15
2	PLANTAE	Cedrela	odorata	Spanish Cedar, Cigar-box Wood, Red Cedar	Cedro rosa	Vulnerable	39
3	PLANTAE	Rinorea	longistipulata*	N/A	Canela de Velho	Vulnerable	297
4	PLANTAE	Swietenia	macrophylla	Big Leaf Mahogany, Brazilian Mahogany, Large-leaved Mahogany	Mogno	Vulnerable	25

Figure 33: IUCN Red Listed Species Identified in Project Area (Credit: TECMAN)

[60] Rinorea longistipulata and Rinorea viridifolia are generally distinguished due to their growth form, where R. longistipulata is a larger tree and R. viridifolia is a small tree/ shrub. This growth form distinction makes identification of small R. longistipulata near impossible in the field.


Rinorea longistipulata and Swietenia macrophylla (Photo Credit: TECMAN)


Cedrela odorata and Amburana acreana (Photo Credit: TECMAN)

Endemic Species

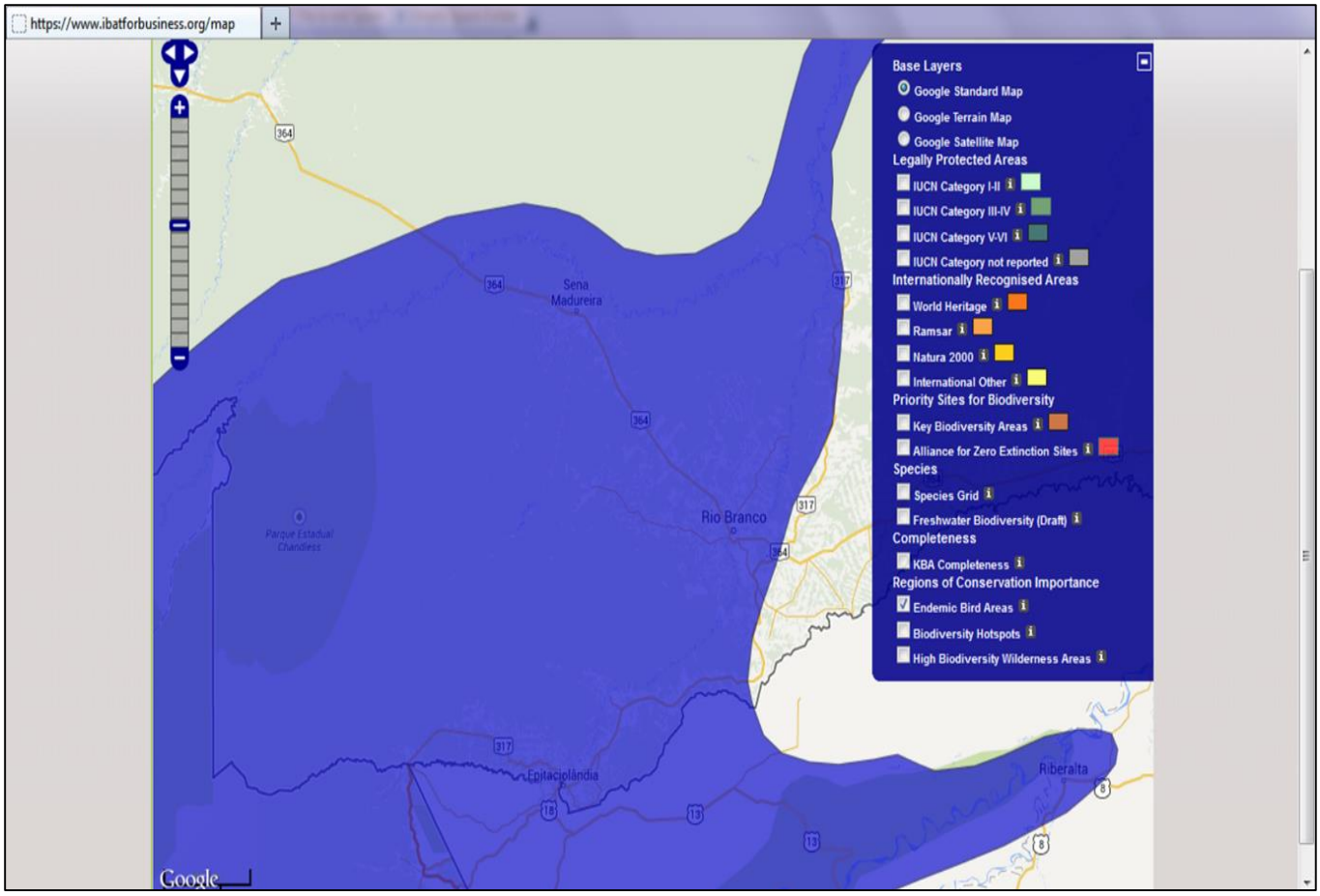
Although endemic species have not been identified yet in the Project as a qualifying High Conservation Value, it is important to note that the Southwestern Amazon (i.e., which includes

Acre, Brazil and potentially the Project) is home to many endemic species. According to WWF, there are approximately 42 endemic species in the Southwestern Amazon[61]:

	Common Name	Scientific Name	Class	Endemic
1	Eleutherodactylus skydmainos	Eleutherodactylus skydmainos	Amphibia	Yes
2	Eleutherodactylus buccinator	Eleutherodactylus buccinator	Amphibia	Yes
3	Manu Poison Frog	Epipedobates macero	Amphibia	Yes
4	Altigius alios	Altigius alios	Amphibia	Yes
5	Ruthven's Burrowing Snake	Apostolepis tenuis	Reptilia	Yes
6	Gray Wren	Thryothorus griseus	Aves	Yes
7	Peru Keelback	Helicops yacu	Reptilia	Yes
8	Peru Burrowing Snake	Apostolepis nigroterminata	Reptilia	Yes
9	Peruvian Fish-eating Rat	Neusticomys peruviensis	Mammalia	Yes
10	Stenocercus scapularis	Stenocercus scapularis	Reptilia	Yes
11	Scinax parkeri	Scinax parkeri	Amphibia	Yes
12	Neusticurus ocellatus	Neusticurus ocellatus	Reptilia	Yes
13	Neusticurus juruazensis	Neusticurus juruazensis	Reptilia	Yes
14	Scinax icterica	Scinax icterica	Amphibia	Yes
15	Black-headed Ground Snake	Atractus nigricaudus	Reptilia	Yes
16	Scarlet-hooded Barbet	Eubucco tucinkae	Aves	Yes
17	Selva Cacique	Cacicus koepckeae	Aves	Yes
18	Black-faced Cotinga	Conioptilon mcilhennyi	Aves	Yes
19	Rufous-fronted Antthrush	Formicarius rufifrons	Aves	Yes
20	Bolivian Recurvebill	Simoxenops striatus	Aves	Yes
21	Bolivian Lancehead	Bothrops sanctaecrucis	Reptilia	Yes
22	Black-backed Tody-Flycatcher	Todirostrum pulchellum	Aves	Yes
23	Leptodactylus didymus	Leptodactylus didymus	Amphibia	Yes
24	Hyla walfordi	Hyla walfordi	Amphibia	Yes
25	Micronycteris matses	Micronycteris matses	Mammalia	Yes
26	Pearson's Slender-legged Treefrog	Osteocephalus pearsoni	Amphibia	Yes
27	Para Toad	Bufo castaneoticus	Amphibia	Yes
28	Amazonian Parrotlet	Nannopsittaca dachilleae	Aves	Yes
29	Elusive Antpitta	Grallaria eludens	Aves	Yes
30	Fine-barred Piculet	Picumnus subtilis	Aves	Yes
31	Odd Anole	Anolis dissimilis	Reptilia	Yes
32	Cuzco Reserve Treefrog	Hyla allenorum	Amphibia	Yes
33	Epipedobates simulans	Epipedobates simulans	Amphibia	Yes
34	Anolis scapularis	Anolis scapularis	Reptilia	Yes
35	Long-crested Pygmy-Tyrant	Lophotriccus eulophotes	Aves	Yes
36	White-lined Antbird	Percnostola lophotes	Aves	Yes
37	Black Mabuya	Mabuya nigropalmata	Reptilia	Yes
38	Villa Tunari Caecilian	Caecilia marcusi	Amphibia	Yes
39	Henle's Snouted Treefrog	Scinax pedromedinai	Amphibia	Yes
40	Biolat Poison Frog	Dendrobates biolat	Amphibia	Yes
41	Ucayali Spiny Mouse	Scolomys ucayalensis	Mammalia	Yes
42	Goeldi's Antbird	Myrmeciza goeldii	Aves	Yes

Furthermore according to the Integrated Biodiversity Assessment Tool (IBAT), the region where the Envira Amazonia Project is located is home to numerous endemic birds:

[61] World Wildlife Fund, "Southwest Amazon moist forests: Export Species," Available: http://www.worldwildlife.org/science/wildfinder/



Map 10: Endemic Bird Areas (Credit: Integrated Biodiversity Assessment Tool)

Threatened and Rare Ecosystems

Tropical rainforests are globally considered rare and threatened ecosystems. According to The Nature Conservancy, only 2% of the world's total surface area is home to rainforests while such rainforests are home to 50% of the world's plant and animals. However, "every second, a slice of rainforest the size of a football field is mowed down. That's 86,400 football fields of rainforest per day, or over 31 million football fields of rainforest each year."[62]

Furthermore, the Project Zone is within WWF's ecoregions. As described by WWF, "ecoregions that represented the most distinctive examples of biodiversity for a given major habitat type were identified within each biogeographic realm. They were chosen based on the following parameters:

- Species richness
- Endemism
- Higher taxonomic uniqueness (e.g., unique genera or families, relict species or communities, primitive lineages)

[62] The Nature Conservancy, "Rainforests: Facts About Rainforests," Available: http://www.nature.org/ourinitiatives/urgentissues/rainforests/rainforests-facts.xml

- Extraordinary ecological or evolutionary phenomena (e.g., extraordinary adaptive radiations, intact large vertebrate assemblages, presence of migrations of large vertebrates)
- Global rarity of the major habitat type"[63]

One of these rare and threatened global ecoregions is the Southwestern Amazon moist forest and more specifically, "this Global ecoregion is made up of 4 terrestrial ecoregions: Juruá-Purus moist forests; Southwest Amazon moist forests; Purus-Madeira moist forests; and Madeira-Tapajós moist forests"[64] which encompasses the Project Zone.

The primary forests of the Envira Amazonia Project are considered tropical rainforests due to the Köppen classification of Acre as tropical[65] and the Food and Agricultural Organization of the United Nations' (FAO) designation of Acre as being within the tropical rainforest ecological zone.[66] Thus as a payment for ecosystem services forest conservation project, the Envira Amazonia Project will aim to preserve a rare and threatened tropical rainforest ecosystem within the Amazon Basin.

Describe Without-Project Land-Use Scenario Effect on Biodiversity
If planned deforestation by the JR Agropecuária e Empreendimentos EIRELI was to occur, there would be reduction in habitat availability, a fragmented landscape, and potentially more threatened species.

Habitat Availability
If planned conversion took place by JR Agropecuária e Empreendimentos EIRELI, the resulting open cattle pastures and cropland would provide a poor habitat for the region's biodiversity except for domesticated animals and wild species that exist in transitional forests and open grasslands. Thus, forest dependent species (such as endemic bird species), and especially flora, would have less available habitat.

Landscape Connectivity
If the 'without project," planned deforestation scenario occurred, there would be a negative impact on landscape connectivity between the Envira, Jurupari and Purus Rivers.

Threatened Species
There are several threatened flora species in the Project Area and there are likely several threatened fauna species in the Project Area. If the Envira Amazonia Project were converted to cattle pasture and cropland, these particular threatened species would likely disappear from the Project due to a reduction in habitat and due to commercial logging. These threatened species could move to a higher level of extinction risk according to the IUCN. In addition, species

[63] WWF, "Role of the Global Ecoregions and how they are selected," Available: http://wwf.panda.org/about_our_earth/ecoregions/about/role/
[64] WWF, "Southwestern Amazon Moist Forests," Available: http://wwf.panda.org/about_our_earth/ecoregions/swamazon_moist_forests.cfm
[65] Peel MC, Finlayson BL & McMahon TA (2007), Updated world map of the Köppen-Geiger climate classification, Hydrol. Earth Syst. Sci., 11, 1633-1644.
[66] FAO, "Ecological Zones: Brazil," Available: http://www.fao.org/forestry/country/19971/en/bra/

currently considered to be at a low level of risk could move into a threatened category if the additional deforestation pressures were placed on the surrounding landscape.

B2. Net Positive Biodiversity Impacts

The Envira Amazonia Project shall generate net positive biodiversity impacts within the Project Zone over the Project Lifetime. Furthermore, the Project shall maintain or enhance any High Conservation Values present in the Project Zone, utilize only native species, and shall not use any genetically modified organisms (GMOs).

Methodology and Assessment of Impacts on Biodiversity

The Project Proponents are using the Avoided Deforestation Partners VCS REDD Methodology, entitled, "VM0007: REDD Methodology Modules (REDD-MF), v1.3." and the VCS Monitoring Plan to estimate the changes in forest cover.

In conjunction with the VCS VM0007 methodology to monitor changes in forest cover, the Project Proponents utilized the island biogeography methodology to estimate changes in biodiversity as a result of the project. The biodiversity concept of island biogeography was originally developed by Robert MacArthur and E.O. Wilson and was extrapolated to theorize that habitat area is related to species diversity and species abundance.

Island biogeography in the Brazilian Amazon was demonstrated by the "Biological Dynamics of Forest Fragments Project (BDFFP, also known as the Minimum Critical Size of Ecosystems Project) {… which concluded that} censuses of beetles, birds, and primates in 1-, 10-, and 100-hectare reserves indicate that the number of species, and in some cases population sizes, in these groups varies with the size of the reserve."[67]

CarbonCo, in conjunction with the contracted ornithologist, will utilize an established methodology for the rapid assessment of bird species throughout the Project Zone.

Demonstrate Project's Net Impact on Biodiversity

The Envira Amazonia Project is a forest conservation project and thus, shall have a direct and net positive impact on the Project Zone's biodiversity as opposed to the "without-Project" land-use scenario that would have resulted in nearly 40,000 hectares converted to cattle pasture.

Measures Needed to Mitigate Negative Impacts on Biodiversity

In order to mitigate negative impacts on biodiversity and to maintain or enhance the High Conservation Values of threatened species, endemic species, and threatened or rare ecosystems, the Project primarily needs to mitigate deforestation. The measures needed to mitigate such deforestation include JR Agropecuária e Empreendimentos EIRELI willingly foregoing the conversion of the Project's primary forests to a large-scale cattle ranch and working with local families to reduce their pressure on the Project's primary forests. The Project Proponents, in consultation with the local families, have developed several social projects and programs (e.g., agricultural extension courses and titling land) to reduce the local community's deforestation.

[67] Richard O. Bierregaard Jr. et. al., "The Biological Dynamics of Tropical Rainforest Fragments," pages 859-866.

Demonstrate No High Conservation Values Negatively Affected
No High Conservation Values (HCVs) – whether with respect to communities or biodiversity – will be negatively affected by the Envira Amazonia Project. Regarding the biodiversity HCVs, the Envira Amazonia Project has several qualifying attributes and this includes threatened species, endemic species, and threatened or rare ecosystems.

To demonstrate that such HCVs will not be negatively affected by the Project, one can observe via satellite imagery or firsthand observations that the Envira Amazonia Project's tropical rainforest (i.e. a threatened or rare ecosystem), and its associated ecosystem services, is being maintained as intact forest cover. In addition, the Envira Amazonia Project developed a full biodiversity monitoring plan which shall monitor threatened tree species and endemic bird species throughout the Project Area.

Identify All Species Used by Project and No Invasive Species Used
There will be no invasive species used by the Project. The Project Proponents reviewed the Global Invasive Species Database, which is managed by the Invasive Species Specialist Group of the International Union for Conservation of Nature's Species Survival Commission. This Database has identified 62 natural forest species which are either native to Brazil and act as an invasive species elsewhere or are native species elsewhere and are considered invasive species within Brazil.[68] Furthermore, three species native to Brazil (i.e., and which are considered invasive species elsewhere) are on the Global Invasive Species Database's 100 of the World's Worst Invasive Alien Species List.[69]

As of right now, the following species will be used by the Envira Amazonia Project:

- Açaí
- Rubber trees

In the future, any additional use of native species will be documented in the CCBS Project Implementation Report.

Describe Possible Adverse Effects of Non-Native Species on Project
The Project will only use native species and thus, there will be no adverse effects of non-native species.

Guarantee No GMOs Used to Generate GHG Emission Reductions
The Project Proponents guarantee that no genetically modified organisms (GMOs) will be used in the Project to generate GHG emissions reductions or removals.

Describe Possible Adverse Effects of Chemicals Used for Project
The Envira Amazonia Project shall not use fertilizers, pesticides, biological control agents and other petroleum-based inputs.

[68] Global Invasive Species Database, "Alien Species," Available: http://www.issg.org/database/species/search.asp?sts=sss&st=sss&fr=1&sn=&rn=brazil&hci=1&ei=-1&lang=EN&Image1.x=30&Image1.y=10
[69] Global Invasive Species Database, "100 of the World's Worst Invasive Alien Species List," Available: http://www.issg.org/database/species/search.asp?st=100ss&fr=1&str=&lang=EN

Describe Process for Waste Products Resulting from Project Activities
There are very few waste products resulting from the Envira Amazonia Project's activities.

The Project Proponents will remove any waste that is brought to the Project Zone from the outside. For example, if the Project Proponents bring plastic bottles of water to the Project Zone, then the Project Proponents will ensure the removal and proper disposal of the bottles back in the city of Feijó, Sena Madureira, or Rio Branco.

The Project Proponents will also take steps to use less waste products and shall attempt to use biodegradable products whenever possible. For example, CarbonCo purchased biodegradable marking tape for TECMAN to use during the forest carbon inventory.

B3. Offsite Biodiversity Impacts

The Project Proponents have evaluated and shall mitigate any negative impacts on biodiversity that occur outside the Project Zone as a result of the Project's activities.

Identify Potential Negative Offsite Biodiversity Impacts
Due to the fact that the Envira Amazonia Project is a payment for ecosystem services forest conservation project, there is unlikely to be any negative offsite biodiversity impacts that the Project is likely to cause. The only identified major negative offsite biodiversity impacts that could potentially occur would be the result of leakage. For example, this activity shifting leakage could include families from within the Project Zone moving to outside the Project Zone.[70] This activity shifting leakage would result in an increase in deforestation, increase in GHG emissions, reduction of habitat availability and more forest fragmentation – all of which would have a negative impact on offsite biodiversity. The Project Proponents are committed to monitoring deforestation within the Project Zone and there are activities planned to reduce leakage effects.

Describe Measures Needed to Mitigate Negative Offsite Biodiversity Impacts
Although negative offsite biodiversity impacts are unlikely, the Envira Amazonia Project has leakage mitigation plans to minimize the likelihood of communities moving from within the Project Zone to outside the Project Zone which would result in negative offsite biodiversity impacts. In addition, the Project Proponents shall practice adaptive management and will collectively address any additional negative offsite biodiversity impacts that are later identified.

As previously mentioned, there were a variety of activity-shifting leakage mitigation activities designed and this includes:

- Discussing the Project with adjacent landowners to potentially expand the forest conservation efforts.
- Alignment with the State of Acre's Payment for Ecosystem Services Scheme.
- Monitoring the leakage belt and offering social projects and programs to communities throughout the Project Zone.

[70] Pitman, N. 2011. Social and Biodiversity Impact Assessment Manual for REDD+ Projects: Part 3 – Biodiversity Impact Assessment Toolbox. Forest Trends, Climate, Community & Biodiversity Alliance, Rainforest Alliance and Fauna & Flora International. Washington, DC., Page 9

The State of Acre's Payment for Ecosystem Services Scheme (known as *Sistema de Incentivo a Serviços Ambientais* or "SISA" in Portuguese) is relevant to the mitigation of leakage; particularly the leakage attributed to families moving from outside the Project Zone to within the Project Zone. This is because the SISA is focusing on improving rural livelihoods through a Certification Program of Rural Production Units which shall "provide for the gradual abandonment of burning; priority access to labor-saving technologies; access to incentives and financing; and inclusion in sustainable production chains to encourage the production and protection of environmental services."[71] Thus by improving rural livelihoods, families will have less incentive to migrate, which shall reduce deforestation in the leakage belt while maintaining forest cover and habitat availability.

To help mitigate the leakage attributed to families moving from within the Project Zone to outside the Project Zone, Ayri Rando consulted families throughout the Project Zone and the Project Proponents will extend Project activities (such as agricultural extension training courses) to families throughout the Project Zone and not just to those living within the Project Area of the Envira Amazonia Project.

Evaluate Unmitigated Negative Offsite Biodiversity Impacts
The Envira Amazonia Project will seek to conserve 39,300.6 hectares of tropical forests, while the unmitigated negative impacts on biodiversity outside the Project – which would result from activity-shifting leakage – shall be minimal.

B4. Biodiversity Impact Monitoring

The Envira Amazonia biodiversity impact monitoring plan will assess the changes in biodiversity resulting from Project activities within and outside the Project Zone.

Develop and Implement a Biodiversity Impact Monitoring Plan
The Project Proponents shall use satellite imagery on an annual or biennial basis to monitor deforestation, forest cover, and thus habitat availability throughout the Project Zone.

The Project Proponents shall monitor vulnerable, endangered and critically endangered flora species throughout the Project Zone via onsite sampling every 10 years. The first assessment was conducted by TECMAN from May to July 2014, with the next assessment to be conducted in mid-2024.

The Project Proponents shall also monitor endemic and threatened bird species within the Project Zone's portion of the Jurupari River via onsite sampling every 5 years. The first assessment shall occur in 2015 with the second assessment to be conducted in 2020.

Develop and Implement High Conservation Values Monitoring Plan
The biodiversity impact monitoring plan has been designed to also monitor the Project's High Conservation Values of threatened species, endemic species, and threatened or rare ecosystems.

[71] Environmental Defense Fund, "Ready for REDD: Acre's State Programs for Sustainable Development and Deforestation Control," Page 8.

Thus, the use of satellite imagery to monitor deforestation and forest cover shall enable the Project Proponents to monitor the Project's rare and threatened ecosystem.

As previously mentioned, the Project will monitor both endemic and threatened bird species along the Jurupari River and monitor threatened tree species throughout the Project Zone.

Disseminate Monitoring Plan
The Project Proponents will make the full biodiversity monitoring plan and the results of the biodiversity monitoring plan publicly available via the internet and the Project Proponents will also make sure summaries are available to both the local community and Other Stakeholders.

GL3. Exceptional Biodiversity Benefits

The Envira Amazonia Project is seeking to conserve a globally significant site of biodiversity on the basis of the Key Biodiversity Area (KBA) framework of vulnerability.

Demonstrate Project Zone's High Biodiversity Conservation Priority
The Envira Amazonia Project is a site of high biodiversity conservation priority due to the KBA framework of vulnerability. The two main trigger species are *Rinorea longistipulata* (known as Canela de Velho in Portuguese) and *Cedrela odorata* (known as Spanish Cedar, Cigar-box Wood, and Red Cedar in English or Cedro rosa in Portuguese).

The following chart demonstrates that more than 30 individuals of *Rinorea longistipulata* and *Cedrela odorata* were identified by TECMAN at the Envira Amazonia Project:

	Kingdom	Genus	Species	Common Names (English)	Nome Vernacular (Common Portuguese Name)	Red List Status	Number of Individuals Identified
1	PLANTAE	Amburana	acreana	N/A	Cerejeira	Vulnerable	15
2	PLANTAE	Cedrela	odorata	Spanish Cedar, Cigar-box Wood, Red Cedar	Cedro rosa	Vulnerable	39
3	PLANTAE	Rinorea	longistipulata*	N/A	Canela de Velho	Vulnerable	297
4	PLANTAE	Swietenia	macrophylla	Big Leaf Mahogany, Brazilian Mahogany, Large-leaved Mahogany	Mogno	Vulnerable	25

Figure 34: IUCN Red Listed Species Identified in Project Area (Credit: TECMAN)

Furthermore according to the Integrated Biodiversity Assessment Tool (IBAT), the region where the Envira Amazonia Project is located has also been identified as a KBA due to the endemic and IUCN Red List bird species. The following chart is the IBAT trigger species:

	Taxonomic Group	Scientific Name	Common Names (English)	IUCN Red List	Endemic to Southwestern Amazon
1	Birds	Brachygalba albogularis	White-throated Jacamar	Least Concern	-
2	Birds	Cercomacra manu	Manu Antbird	Least Concern	-
3	Birds	Conioptilon mcilhennyi	Black-faced Cotinga	Least Concern	Endemic
4	Birds	Crypturellus atrocapillus	Black-capped Tinamou	Near Threatened	-
5	Birds	Cymbilaimus sanctaemariae	Bamboo Antshrike	Least Concern	-
6	Birds	Epinecrophylla leucophthalma	White-eyed Antwren	Least Concern	-
7	Birds	Eubucco tucinkae	Scarlet-hooded Barbet	Least Concern	Endemic
8	Birds	Formicarius rufifrons	Rufous-fronted Antthrush	Near Threatened	Endemic
9	Birds	Galbalcyrhynchus purusianus	Chestnut Jacamar	Least Concern	-
10	Birds	Galbula cyanescens	Bluish-fronted Jacamar	Least Concern	-
11	Birds	Gymnopithys salvini	White-throated Antbird	Least Concern	-
12	Birds	Hemitriccus flammulatus	Flammulated Bamboo-tyrant	Least Concern	-
13	Birds	Hylopezus berlepschi	Amazonian Antpitta	Least Concern	-
14	Birds	Hypocnemoides maculicauda	Band-tailed Antbird	Least Concern	-
15	Birds	Lanio versicolor	White-winged Shrike-tanager	Least Concern	-
16	Birds	Lophotriccus eulophotes	Long-crested Pygmy-tyrant	Least Concern	Endemic
17	Birds	Malacoptila semicincta	Semicollared Puffbird	Least Concern	-
18	Birds	Myrmeciza goeldii	Goeldi's Antbird	Least Concern	Endemic
19	Birds	Myrmotherula iheringi	Ihering's Antwren	Least Concern	-
20	Birds	Myrmotherula sclateri	Sclater's Antwren	Least Concern	-
21	Birds	Nannopsittaca dachilleae	Amazonian Parrotlet	Near Threatened	Endemic
22	Birds	Neopelma sulphureiventer	Sulphur-bellied Tyrant-manakin	Least Concern	-
23	Birds	Nonnula sclateri	Fulvous-chinned Nunlet	Least Concern	-
24	Birds	Percnostola lophotes	White-lined Antbird	Near Threatened	Endemic
25	Birds	Phaethornis philippii	Needle-billed Hermit	Least Concern	-
26	Birds	Picumnus subtilis	Fine-barred Piculet	Least Concern	Endemic
27	Birds	Pionites leucogaster	White-bellied Parrot	Endangered	-
28	Birds	Primolius couloni	Blue-headed Macaw	Vulnerable	-
29	Birds	Psophia leucoptera	Pale-winged Trumpeter	Least Concern	-
30	Birds	Pteroglossus beauharnaesii	Curl-crested Aracari	Least Concern	-
31	Birds	Pyrrhura rupicola	Black-capped Parakeet	Near Threatened	-
32	Birds	Simoxenops ucayalae	Peruvian Recurvebill	Near Threatened	-
33	Birds	Synallaxis cherriei	Chestnut-throated Spinetail	Near Threatened	-
34	Birds	Thamnomanes schistogynus	Bluish-slate Antshrike	Least Concern	-
35	Birds	Thryothorus griseus	Grey Wren	Least Concern	Endemic

Figure 35: IBAT Trigger Species (Credit: IBAT)

Describe Recent Population Trends of Each Trigger Species

The following analysis will focus on the nine trigger species which are endemic to the Southwestern Amazon, along with the four trigger species considered vulnerable or endangered by the International Union for the Conservation of Nature (IUCN).

Grey Wren

According to research compiled by the IUCN, the population trend of the Grey Wren (*Thryothorus griseus*) is decreasing. Furthermore, the IUCN states the Grey Wren:

> Has a very large range, and hence does not approach the thresholds for Vulnerable under the range size criterion (Extent of Occurrence <20,000 km2 combined with a declining or fluctuating range size, habitat extent/quality, or population size and a small number of locations or severe fragmentation). Despite the fact that the population trend appears to be decreasing, the decline is not believed to be sufficiently rapid to approach the thresholds for Vulnerable under the population trend criterion (>30% decline over ten years or three generations). The population size

> has not been quantified, but it is not believed to approach the thresholds for Vulnerable under the population size criterion (<10,000 mature individuals with a continuing decline estimated to be >10% in ten years or three generations, or with a specified population structure). For these reasons the species is evaluated as Least Concern.[72]

Although the Grey Wren has a large range, the Grey Wren's population within the Project Zone would likely further decrease in the without project land-use scenario.

White-bellied Parrot
According to research compiled by the IUCN, the White-bellied Parrot is considered Endangered and the population trend of the White-bellied Parrot (*Pionites leucogaster*) is decreasing. The IUCN states that "based on a model of deforestation in the Amazon basin, and the potential susceptibility of this newly split species to hunting, it is suspected that its population will decline very rapidly over three generations from 2002, and it is therefore listed as Endangered."[73] If the Project Zone were to be clear-cut for cattle ranches, it is likely the population of the White-bellied Parrot would further decrease.

Blue-headed Macaw
According to research compiled by the IUCN, the Blue-headed Macaw (*Primolius couloni*) is considered Vulnerable and the Blue-headed Macaws' population is decreasing. Furthermore, the population is "estimated at 9,200-46,000 mature individuals (roughly equivalent to 10,000-70,000 total individuals), based on conservative estimates of range size and density. (…) This species is listed as Vulnerable because it has a small population which is declining owing to exploitation for the cagebird trade and deforestation."[74] The population of the Blue-headed Macaw would likely decrease in the without-Project land-use scenario.

Fine-barred Piculet
According to research compiled by the IUCN, the Fine-barred Piculet (*Picumnus subtilis*) is considered stable. The IUCN explains that this is because:

> Although this species may have a restricted range, it is not believed to approach the thresholds for Vulnerable under the range size criterion (Extent of Occurrence <20,000 km2 combined with a declining or fluctuating range size, habitat extent/quality, or population size and a small number of locations or severe fragmentation). Despite the fact that the population trend appears to be decreasing, the decline is not believed to be sufficiently rapid to approach the thresholds for Vulnerable under the population trend criterion (>30% decline over ten years or three generations). The population size has not been quantified, but it is not believed to approach the thresholds for Vulnerable under the population size criterion (<10,000 mature individuals with a continuing decline estimated to be >10% in ten years or three generations, or with a specified population structure). For these reasons the species is evaluated as Least Concern.[75]

The Fine-barred Piculet, due to its restricted range, would possibly decrease in population from the without-Project land-use scenario.

[72] IUCN, "Thryothorus griseus," Available: http://www.iucnredlist.org/details/22711479/0
[73] IUCN, "Pionites leucogaster," Available: http://www.iucnredlist.org/details/62181308/0
[74] IUCN, "Primolius couloni," Available: http://www.iucnredlist.org/details/22685593/0
[75] IUCN, "Picumnus subtilis," Available: http://www.iucnredlist.org/details/22680771/0

White-lined Antbird

According to research compiled by the IUCN, the White-lined Antbird (*Percnostola lophotes*) population is decreasing. The IUCN reasons that "based on a model of future deforestation in the Amazon basin, and its particular susceptibility to forest fragmentation, it is suspected that the population of this species will decline by 25-30% over the next three generations, and it has therefore been uplisted to Near Threatened."[76] The without-Project land-use scenario, which would result in deforestation and forest fragmentation, would likely further decrease the population of the White-lined Antbird.

Amazonia Parrotlet

According to research compiled by the IUCN, the population trend of the Amazonia Parrotlet (Nannopsittaca dachilleae) is decreasing. The IUCN states that:

> This species is currently classified as Near Threatened as it is thought to have a moderately small, declining population of which the majority of individuals are in one subpopulation. If the population is found to be considerably larger than previously thought it may be downlisted to Least Concern. (…) The species' population is suspected to number c.10,000 individuals, equivalent to c.6,700 mature individuals. This figure is applied here as a preliminary estimate; however, there are no data available and further research is needed.[77]

The without-Project land-use scenario would likely further decrease the population of the Amazonia Parrotlet.

Long-crested Pygmy-tyrant

According to research compiled by the IUCN, the Long-crested Pygmy-tyrant (*Lophotriccus eulophotes*) population is decreasing. In addition, the IUCN states that:

> This species has a very large range, and hence does not approach the thresholds for Vulnerable under the range size criterion (Extent of Occurrence <20,000 km2 combined with a declining or fluctuating range size, habitat extent/quality, or population size and a small number of locations or severe fragmentation). Despite the fact that the population trend appears to be decreasing, the decline is not believed to be sufficiently rapid to approach the thresholds for Vulnerable under the population trend criterion (>30% decline over ten years or three generations). The population size has not been quantified, but it is not believed to approach the thresholds for Vulnerable under the population size criterion (<10,000 mature individuals with a continuing decline estimated to be >10% in ten years or three generations, or with a specified population structure). For these reasons the species is evaluated as Least Concern.[78]

Although the Long-crested Pygmy-tyrant has a large range, the Long-crested Pygmy-tyrant's population within the Project Zone would likely further decrease in the without project land-use scenario.

[76] IUCN, "Percnostola lophotes," Available: http://www.iucnredlist.org/details/22701776/0
[77] IUCN, "Nannopsittaca dachilleae," Available: http://www.iucnredlist.org/details/22686000/0
[78] IUCN, "Lophotriccus eulophotes," Available: http://www.iucnredlist.org/details/22699564/0

Goeldi's Antbird, Scarlet-hooded Barbet, and Black-faced Cotinga
According to research compiled by the IUCN, the populations of the Goeldi's Antbird (*Myrmeciza goeldii*)[79], the Scarlet-hooded Barbet (*Eubucco tucinkae*)[80], and the Black-faced Cotinga (*Conioptilon mcilhennyi*)[81] are all stable. Each of the species:

> Has a very large range, and hence does not approach the thresholds for Vulnerable under the range size criterion (Extent of Occurrence <20,000 km2 combined with a declining or fluctuating range size, habitat extent/quality, or population size and a small number of locations or severe fragmentation). Despite the fact that the population trend appears to be decreasing, the decline is not believed to be sufficiently rapid to approach the thresholds for Vulnerable under the population trend criterion (>30% decline over ten years or three generations). The population size has not been quantified, but it is not believed to approach the thresholds for Vulnerable under the population size criterion (<10,000 mature individuals with a continuing decline estimated to be >10% in ten years or three generations, or with a specified population structure). For these reasons the species is evaluated as Least Concern.

Although the species each have a large range and staple population, the populations within the Project Zone would likely decrease in the without-Project land-use scenario.

Rufous-fronted Antthrush
According to research compiled by the IUCN, the Rufous-fronted Antthrush (*Formicarius rufifrons*) population is decreasing. In addition, "this species is considered Near Threatened as it is known from only a small range, and is apparently rare and patchily distributed. However, the range is not yet severely fragmented or restricted to few locations (Collar *et al.* 1992). For these reasons, the species is classified as Near Threatened."[82] The without-Project land-use scenario, would further fragment the Rufous-fronted Antthrush's range, and thus likely lead to a decrease in the population.

Canela de Velho
There is no population information on the Canela de Velho (*Rinorea longistipulata*) via the IUCN Red List,[83] the Encyclopedia of Life,[84] or the Global Biodiversity Information Facility.[85] However, the species is considered Vulnerable and the without-Project land-use scenario, which would be the creation of a large cattle-ranch, would likely result in a decrease in population.

Red Cedar
According to research compiled by the IUCN, the Red Cedar (*Cedrela odorata*) is listed as Vulnerable and appears to be decreasing in population:

> Exploitation has continued on a large scale over the past 200 years and the species is now widely threatened at the provenance level. Trees are often cut opportunistically while other species, such

[79] IUCN, "Myrmeciza goeldii," Available: http://www.iucnredlist.org/details/22701838/0
[80] IUCN, "Eubucco tucinkae," Available: http://www.iucnredlist.org/details/22681942/0
[81] IUCN, "Conioptilon mcilhennyi," Available: http://www.iucnredlist.org/details/22700913/0
[82] IUCN, "Formicarius rufifrons," Available: http://www.iucnredlist.org/details/22703203/0
[83] IUCN, "Rinorea longistipulata," Available: http://www.iucnredlist.org/details/35985/0
[84] Encyclopedia of Life, "Rinorea longistipulata," Available: http://eol.org/pages/5748360/overview
[85] Global Biodiversity Information Facility, "Species: *Rinorea longistipulata* W.H.A.Hekking, Available: http://data.gbif.org/species/4074938/

> as mahogany, *Amburana* and *Machaerium*, are being sought-after. Natural regeneration is generally good, but there are reports of trees being felled before they reach maturity.[86]

The without-Project land-use scenario would result in the Red Cedar being logged for commercial purposes and thus, the population of Red Cedar would surely decrease in the Project Area.

Describe Measures to Maintain or Enhance Population of Trigger Species

The essential measure needed and taken at the Envira Amazonia Project is forest conservation, which shall both maintain and enhance the population status of the aforementioned trigger species. This includes JR Agropecuária e Empreendimentos EIRELI foregoing the creation of a large cattle ranch, along with several social projects and programs (e.g., hiring local staff, medicinal plant and rubber tree projects, agricultural extension courses, etc.) aimed at improving the socio-economic status of local families. Furthermore, the Project has climate, community and biodiversity impact monitoring plans in place to ensure the activities are leading to the desired impacts.

The greatest threat to the trigger species – both threatened tree species and endemic bird species - is deforestation. For birds, deforestation leads to a decrease in overall habitat availability, fragmented habitats, less food availability, greater chance of predation and hunting, and fewer potential mates. For trees – particularly Red Cedar – deforestation leads to easier access to the trees for commercial harvesting and degraded landscapes threaten the survival of trees species due to a reduced source of seeds and greater exposure to the elements (e.g., more direct sunlight, drying of soil, etc.).

For example, the IUCN states deforestation as the greatest threat to the white-bellied parrot:

> The primary threat to this species is accelerating rates of deforestation in the Amazon basin (Soares-Filho et al. 2006, Bird et al. 2011). Proposed changes to the Brazilian Forest Code reduce the percentage of land a private landowner is legally required to maintain as forest (including, critically, a reduction in the width of forest buffers alongside perennial steams) and include an amnesty for landowners who deforested before July 2008 (who would subsequently be absolved of the need to reforest illegally cleared land) (Bird et al. 2011). Despite being common in undisturbed landscapes, this species is not thought to be tolerant of secondary forest or agropastoral land and appears restricted to alluvial habitats. It may also be susceptible to hunting (A. Lees in litt. 2011).[87]

Indications of Trigger Species' Population Trend

The Project Proponents will monitor the number of individuals identified for threatened tree species, along with the number of individuals identified for endemic and threatened bird species. In addition, the greatest threat to these tree species and bird species is deforestation, which will be regularly monitored via satellite imagery and via forest patrols to help maintain or enhance their population status.

[86] IUCN, "Cedrela odorata," Available: http://www.iucnredlist.org/details/32292/0
[87] IUCN, "Pionites leucogaster," Available: http://www.iucnredlist.org/details/62181308/0

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APPENDIX B: ACRONYMS

AFOLU	Agriculture, Forestry and Other Land Use
APP	Areas of Permanent Preservation
ARB	Air Resources Board
BNS	Basic Necessity Survey
CCBA	Climate, Community and Biodiversity Alliance
CCBS	Climate, Community and Biodiversity Standard
CNPJ	Cadastro Nacional da Pessoa Jurídica (National Registry of Legal Entities, in English)
CONABIO	Comissão Nacional da Biodiversidade (National Biodiversity Commission, in English)
CREAS	Cenários Climáticos REgionalizados de Mudança de Clima para América do Sul (Regional Climate Change Scenarios for South America, in English)
EMBRAPA	Empresa Brasileira de Pesquisa Agropecuária (EMBRAPA) (Brazilian Agricultural Research Corporation, in English)
ESI	Environmental, Services Inc.
FAO	Food and Agricultural Organization of the United Nations
FPIC	Free, Prior and Informed Consent
FUNTAC	Fundacao de Tecnologia do Estado do Acre (Technology Foundation of the State of Acre, in English)
GCF	Governors' Climate and Forests Task Force
GHG	Greenhouse Gas Emissions
GIS	Geographic Information Systems
GMOs	Genetically Modified Organisms
GPS	Global Positioning Systems
HCVs	High Conservation Values

HDI	Human Development Index
IBAT	Integrated Biodiversity Assessment Tool
IMC	Instituto de Mudanças Climáticas (Climate Change Institute, in English)
INCRA	Instituto Nacional de Colonização e Reforma Agrária (National Institute for Colonization and Agrarian Reform, in English)
IPAM	Instituto de Pesquisa Ambiental da Amazônia (Institute for Environmental Research in Amazonia, in English)
IPCC	Intergovernmental Panel on Climate Change
IRS	Internal Revenue Service
IUCN	International Union for Conservation of Nature
KBA	Key Biodiversity Area
LULUCF	Land-use, Land-use Change and Forestry
PD	Project Description (For VCS)
PDD	Project Design Document (For CCBS)
PESACRE	Grupo de Pesquisa e Extensão em Sistemas Agroflorestais do Acre (Group for Research and Extension in Agroforestry Systems of Acre, in English)
PRA	Participatory Rural Assessment or Participatory Rural Appraisal
REDD / REDD+	Reducing Emissions from Deforestation and forest Degradation
ROW	REDD Offset Working Group
SBIA	Social and Biodiversity Impact Assessment (CCBS Manual)
SISA	Sistema de Incentivo a Serviços Ambientais (System of Incentives for Environmental Services, in English)
STR-Feijó	Sindicato de Trabalhadores Rurais (Rural Workers Union of Feijó, in English)
UFAC	Universidade Federal do Acre (Federal University of Acre, in English)
UNFCCC	United Nations Framework Convention on Climate Change

VCS	Verified Carbon Standard
VCUs	Verified Carbon Units
VERs	Verified Emission Reductions
WWF	World Wildlife Fund

APPENDIX C: STAKEHOLDER IDENTIFICATION

Project Proponents, Communities, and Primary Stakeholders of Envira Amazonia Project

- JR Agropecuária e Empreendimentos EIRELI
- Communities living within the Project Zone, particularly:
    - José Magalhães da Silva ("Zé do Nel")
    - João Nazário Rodrigues
    - Ademar Felipe de Sousa
    - José Ferreira de Sousa (José "Mundico")
    - Raimundo Maurício do Nascimento ("Novo")
    - José Sousa do Nascimento ("Zé Mangu")
    - Antônio Francisco Lopes da Silva
    - Raimundo Cunha da Silva ("Carlisto")
    - Jorginaldo da Silva Pedrosa ("Naldo")
    - Francisco Cirlândio Dimas de Sousa
- Carbonfund.org Foundation, Inc. and CarbonCo, LLC
- Freitas Group International LLC and Carbon Securities

Secondary Stakeholders of Envira Amazonia Project

- TerraCarbon
- TECMAN LTDA
- Professor Antonio Willian Flores de Melo of UFAC
- Ayri Saraiva Rando
- Communities Living Outside the Project Zone and Along the Property's Border on the Envira River:
    - Manoel Pereira do Nacimento
    - Francisco Rodrigo de Melo
    - Francisco Mendes Pinto
    - José Ribamar de Moura
    - Antônio Floriano da Silva Filho
    - Antônio Portela Pontes
    - Antônio Lopes da Silva
    - Francisco Chagas Silva de Araújo
    - Sebastião de Araújo Albuquerque
    - Francisco Osmildo de Sousa Lima
    - Antônio de Lima de Melo
    - Ronaldo de Souza Melo
    - Joaquim de Oliveira da Silva
    - Antônio Geovan de Sousa Rodrigues
    - José Bento de Paula
    - Claudenir Ferreira de Amorim
    - Espedito da Silva Menezes
    - Maria do Carmo
    - Antônio Jones Ferro de Castro
    - José Mariano de Oliveira da Silva
    - João Elias do Nascimento de Castro

    - Raimundo Fortino da Silva
    - Francisco Elias Araújo de Castro
    - José Souza Lima
    - Francisco Mário Gomes da Silva
    - Maria José Martins de Paiva
    - Antônio Ferro de Araújo
    - José Luís Castro de Araújo
    - Luiz Francisco de Aguiar Dimas
    - Jeandro Castro de Araújo
    - Manoel Joaquim Gomes da Silva (Manoel Abreu)
- Adjacent Landowners and Other Communities
    - Seringal Riachuelo, owned by João Severiano da Silveira Filho and Eugenia Morais da Silveira
    - Seringal Santana
    - Fazenda São Jerônimo
    - Fazenda Foz do Jurupari
    - Ser. Veneza S. Braz e Boa Vista (INCRA settlement)
    - Seringal Triunfo
    - Seringal Cruzeiro
    - Seringal Sobral, owned by Benedito Oliveira Filho
    - Fazenda Porongaba and Seringal São Francisco II, both owned by Agropecuária Minas Acre LTDA
    - Seringal Santa Helena (INCRA settlement)
- State of Acre, particularly the Climate Change Institute (IMC)
- EMBRAPA
- State of California, including the California Air Resources Board (ARB) and REDD Offset Working Group (ROW), along with the Governors' Climate and Forest Task Force
- Environmental Services, Inc. (ESI), the Project Auditor
- Verified Carbon Standard Association
- Climate, Community and Biodiversity Alliance
- Moura e Rosa Empreendimentos Imobiliários LTDA (i.e., owners of the Purus Project) – specifically Normando Sales, Felipe Moura Sales, Paulo Silva Cesário Rosa, Leonardo Silva Cesário Rosa, and Wanderley Rosa
- I.S.R.C. Investimentos e Acessória LTDA (i.e., owner of the Russas Project and manager of Valparaiso Project) – specifically Ilderlei Souza Rodrigues Cordeiro
- Manoel Batista Lopes, ME (i.e., owner of Valparaiso Project) – specifically Manoel Batista Lopes
- André Luis Botelho de Moura (wildlife camera specialist)
- Miguel Scarcello from S.O.S Amazônia
- Hammerly da Silva Albuquerque, Mayor of Feijo (Prefeito de Feijó)
- José Cláudio Araújo Bomfim, Secretary of Environmental Affairs for Feijó (Secretário de Meio Ambiente de Feijó)
- José Leitão, Secretary of Agriculture for Feijó (Secretário de Agricultura de Feijó)
- Hermecilda Albuquerque, Secretary of Social Action for Feijó (Secretário de Ação Social de Feijó)

- Mirlane Cordeiro, Secretary of Health for Feijó (Secretário de Saúde de Feijó)
- José Aurimar Tavares Carneiro Manager (Mazinho)
- Francisco Severiano da Silveira, Councilman of Feijó (Vereador de Feijó)
- Francisco Valegro da Silveira (lives on adjacent parcel)
- Francisco Delfino do Aguiar used to live on the property but now lives in Feijó, daughter Joyce works at the Climate Change Institute
- STR-Feijó

Other (Tertiary) Stakeholders of Envira Amazonia Project

Nongovernmental Organizations (NGOs), Unions and Associations

- Conservation and environmental organizations active in and around Acre such as
    - IPAM
    - Worldwide Fund for Nature (WWF)
    - Conservation International
    - The Nature Conservancy
    - Wildlife Conservation Society
- Global Canopy Programme and particilarly Luis Meneses Filho

Private Sector

- Carbon Market participants and especially REDD+ project developers
- California's Capped Entities and participants of California's Cap-and-Trade System
- Donors to voluntary REDD+ projects

Government Agencies and Government Officials

- Cesar Messias, Vice-Governador do Estado do Acre (Vice-Governor of the State of Acre)
- Fábio Vaz, Assessor do Governo do Estado do Acre e coordenador da Comissão que criou o projeto de lei aprovado pela Assembléia Legislativa do Acre sobre Crédito de Carbono, Serviços Ambientais e que deu origem ao IMC – Lei n°2.308/2010 (Advisor to the Government of the State of Acre and coordinator of the Committee that created the bill passed by the Legislative Assembly of Acre on Carbon Credit, Environmental Services which gave rise to the Climate Change Institute - Law No. 2.308/2010)
- Patrícia Rego, Procuradora Geral de Justiça do Estado do Acre, ex-Procuradora responsável pela Coordenadoria do Meio Ambiente (Attorney General of the State of Acre, a former prosecutor responsible for Coordination of Environment)
- Lúcio Flávio, ex-Coordenador Geral da UCEGEO-Acre (former General Coordinator of UCEGEO-Acre)
- Leila Medeiros, ex-Secretaria de Meio Ambiente do Município de Rio Branco e atual Assessora do Ministério Publico Estadual (Former Secretary of Environment of the Municipality of Rio Branco and current Advisor to the State Prosecutor)
- Ministério Publico Estadual
- INCRA (Instituto Nacional de Colonização e Reforma Agrária or the National Institute for Colonization and Agrarian Reform)
- SEMA-Acre (Secretaria Especial do Meio Arnbiente do Acre or Acre's Environmental Secretary of State)
- Fernando Lima, the President of IMAC

- Former President of IBAMA, Hamilton Casara
- Sarney Filho, the Federal Minister of Environment Affairs
- President of the Commission of Environmental Affairs of the Federal Congress
- President Jerônimo Goergen of the Amazon Commission of the House of Representatives
- Natalie Unterstell, the focal point for REDD+ at Brazil's Federal Ministry of Environment

General Public

- Scientific Community such as Biologists, Foresters and Ecologists
- Birding Community and Wildlife Conservationists
- Ecotourism Participants

Academia

- Dr. Irving Foster Brown, Pesquisador da UFAC sobre mudanças climáticas (Senior Scientist at Woods Hole Research Center and Professor in Graduate Program of Ecology and Natural Resource Management at the Federal University of Acre)
- Cleber Salimon, Professor at Centro de Ciências Biológicas e da Natureza (Universidade Federal do Acre)
- Gregory P. Asner, Department of Global Ecology, Carnegie Institution for Science, at Stanford University
- Maron Greenleaf, Anthropology PhD Candidate at Stanford University

Media

- Alan Rick, Apresentador do Programa Gazeta Entrevista da TV Gazeta-Rio Branco (Anchorman on TV Gazeta Entrevista, Rio Branco)
- Jairo Carioca, Jornalista
- Chico Araujo, Diretor da Agência de Notícias Amazônia (Director of News Agency Amazon)
- Mário Nelson Duarte, Jornalista (trabalhou muitos anos na Rádio Jovem Pan de São Paulo) e Consultor aposentado do Senado Federal (Journalist who worked many years for Jovem Pan Radio Station and retired as a Senate Consultant)