



## YAWANAWA REDD+ INITIATIVE IN THE INDIGENOUS LAND OF GREGÓRIO RIVER, TARAUACÁ, ACRE, BRAZIL



*Yawanawá youth overlooking the Gregório River*

### **1. Introduction**

Reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries (REDD+) is part of the United Nations Framework Convention on Climate Change (UNFCCC). The REDD+ model provides a dynamic way for entities to offset their carbon emissions while creating additional environmental and social benefits related to the United Nations Sustainable Development Goals.

One of the most important vectors to fulfill the Paris agreement goal of keeping global warming within two degrees of pre-industrial levels is protecting existing rainforest. Key to protecting rainforests are the indigenous peoples who live there. REDD+ is a model that can empower indigenous people to steward the rainforest while also benefiting local governments.

Since a majority of global rainforest is located in Brazil, it is paramount that the REDD+ model be successfully established and scaled there. Getting the model right will require a true partnership with indigenous peoples, government, and corporations looking for the best way to meet their carbon offset obligations.



The Yawanawá are recognized locally, nationally, and internationally as leaders in protecting rainforest and indigenous peoples rights. Now the Yawanawá are working with government, NGO, and corporate partners to establish a REDD+ model that can be scaled throughout Brazil for the benefit of all parties and the global environment.



*The late great Yawanawá shaman, Tata*



*Yawanawá elder and friend*

## **2. Overview**

Currently the Indigenous Land of Gregório River and its people are threatened by multiple forces, including...

- Predatory fishing and hunting around the territory and the invasions of fishermen and professional hunters within the territory.
- Wood exploitation within the territory driven by logging activity in the surrounding state forest.
- The increase of the indigenous population combined with an increased demand in the quality of food
- The vulnerability of the villages to extreme climatic events (severe floods, prolonged droughts, intense cold, etc).

The Yawanawá people inhabit the Indigenous Land of Gregório River located in the municipality of Tarauacá, in the state of Acre. This territory has approximately 180 thousand hectares, with only 2,081 hectares already converted into other uses. The Gregório River has 98.9% of its rainforest preserved thanks to the efforts of the indigenous peoples who live there. This richly biodiverse area is home to many many endangered species and vulnerable fauna including; black monkey, cat maracajá, painted Jaguar, Jabuti and mutum.

The Yawanawá REDD+ model will work on three important axis to reduce and/or eliminate threats while increasing resilience, according to the Life Plan already developed by the indigenous peoples of the Indigenous Land of Gregório River. The main objectives are:

- To expand and strengthen territorial protection and surveillance
- Achieve an integrated production of the forest, agroforestry and handcrafts
- Recovery of previously converted areas
- Seek a strong, efficient and effective Social Organization, including a strengthening of the Yawanawá Council increased women's leadership

All funds will be raised by the Yawanawá Fund and distributed according to priority actions in the Life Plan.



*Transporting seedlings on the Gregório River*

### **3. Scope of Territory**

The Indigenous Land of Gregório River is located in the headwaters of the Gregório river, an important tributary of the Juruá river. The territory currently covers 187,400 hectares with an estimated perimeter of 245 kilometers.

This area was recognized in the mid-1980s when the Brazilian government recognized the rights of the Yawanawá and Katukina peoples to exclusive use of their traditional territory. At the time, it was demarcated with an area of 92,860 hectares. As this extension did not address several important sites of both peoples, in 2001 the Yawanawá and Katukina began to mobilize to revise the boundaries of the area. In 2006 the extended boundaries was recognized by FUNAI, the Brazilian governmental protection agency for Indian interests and culture. Finally, in 2007, this new extension was made official by the Ministry of Justice.

Access to the territory is either through the city of Tarauacá or through the city of Cruzeiro do Sul. From one of these cities, you cross BR 364 to the town of São Vicente, on the banks of the Gregório river. From there, this river rises to the mouth of the Matrinxã stream, a tributary on its right bank, where the territory begins. All the communities are situated up along the Gregório river.

The Yawanawá REDD+ project will begin in 2019 with annual accounts scheduled for the period up to 2030 and will count on the activation of past credits as a form of cultural valorization.



*Yawanawá youth*

#### **4. Participating Organizations**

The Yawanawá Sociocultural Association - ASCY, will be the legal entity responsible for the project. It was founded in 2008 by 7 communities along the Gregório River: Matrinchã, Amparo, Yawarani, Seven Stars, Tibúrcio, Escondido and Mutum.

The ASCY mission is to:

- Ensure the protection and surveillance of the territory
- Strengthen the cultural and spiritual manifestations of the Yawanawá people
- Create new economic alternatives that socially and economically benefit the people
- Defend the collective interest of the ASCY communities

The ASCY is headed by a Board of Directors elected at an Extraordinary Meeting, composed of a General Coordinator, Vice Coordinator, Secretary, and Treasurer - all with a 4-year term. A Fiscal Council is also elected with a 4-year term.

In 2015, the "Yawanawá Leadership Council" was created by ASCY, composed of 2 members from each community, one woman and one man. The council is a new model of governance of the Yawanawá people, because in it the "voice" of women has the same value as that of men. As part of this new model of internal organization, the Yawanawá Fund is being drafted, which will serve as a base to support the activities of the "Life Plan".

Along the Gregório river there are four Katukina communities of approximately 150 people each that will equally participate and benefit from this program.

The New Hope community (Yawanawá) of approximately 250 people will not participate directly in the project due to having other priorities at this time. However, they will still gain from the indirect benefits of the project, i.e. the health and integrity of the territory. They will also remain updated on the project and will have the option to participate at any time.

The main project participants and their respective roles and responsibilities are listed in the table below.

*Table 1. Main Participants*

Partner	Institution	Role
Brazilian Agricultural Research Corporation Embrapa	Public Enterprise	Technical / Human Resources / Scaling up the results
AVEDA	Enterprise	Financial
Amazon Environmental Research Institute (IPAM)	Research Institute	Technical / Materials
IFAC- Federal Institute of Acre	Research Institute	Human Resources / Scaling up the results
FUNAI - National Indian Foundation	Governmental Institute	Technical and institutional follow-up
The Acre Institute of Climate Change	Governmental Institute	Validate / monitor the program to avoid deforestation



*Yawanawá plant nursery including Acaí and Graviola seedlings*



*Yawanawá women handcrafting beaded art and jewelry*

## 5. Project Management

### 4.1. Financial management

Funds will be managed by ASCY through the Yawanawá Fund. Funding from national and international institutions will be linked to the corresponding certified carbon credits available in the Indigenous Land of Gregório River.

**Operational Budget** - Operating costs are limited to up to 20% of the values traded during a year. These costs are budgeted by ASCY and derive from administrative costs, institutional advice, certification, registration and independent auditing.

**Mechanisms for the sale of assets** - Assets will be traded exclusively through ASCY and managed by the Yawanawá Fund.

**Accounting Audit** - An independent accounting audit will be conducted each year to ensure the proper use of resources and transparency for project donors and partners. These costs are included in the 20% of operating costs.

### 4.2. Human resource Management

**Labor contracting policy** - The contracted workforce will be primarily indigenous, with technical advice from specialized consultants.

**Training policies** - The project is based on programs of continuous training of leaders and indigenous people on issues of territorial governance, ecosystem services, integrated production and indigenous rights.

**Gender policies** - The pursuit of gender equality in the project is a basic guideline. Including all the decision making of the Yawanawá council and the formation of new women leaders.

**Description of the teams involved and their qualifications** - There will be six technicians forming the basic project team who will be under the supervision and coordination of the Yawanawá Council.



Table 2. Main Technical Team of the Yawanawá Environmental Services Incentive Project.

Name	Role in the project	Vocational training and / or qualification	Prior experience related to project objectives	Nature of employment relationship	Weekly workload	Paid with resources requested in the proposal?
Laura Yawanawa	Coordinator	Anthropologist	Over 20 years experience working with indigenous communities	Temporary	30	Yes
Antônio Willian Flores de Mello	Responsible for monitoring activities	Agronomist with Master in Ecology	Professor at the Federal University of Acre with more than 15 years of experience in geotechnology	Permanent	10	No
Emanuel Ferreira do Amaral	Responsible for production activities	Agronomist specializing in geoprocessing and environmental management	More than 10 years of experience with activities in territorial management and more than 3 years of experience in indigenous communities	Temporary	20	Yes
Ellen Acioli	Responsible for the activities of Social Organization	Biologist with a Masters in Zoology with emphasis in Ecology and Conservation and specialist in Sustainable Projects and Climate Change	Experience in projects with traditional communities.	Temporary	2	Yes



Lúcio Flávio Zancanella do Carmo	Responsible for mapping activities	PhD in Soil and Plant Nutrition	Extensive experience in geoprocessing	Permanente	8	Não
Aldeneide Batista de Lima	Responsible for the administrative and financial activities of the Project	Graduated in Administration with Qualification in Foreign Trade - FIRB, conclusion in 2005.	Extensive experience in the areas of Administrative and Financial, Human Resources and Project Management.	Temporary	30	Yes

#### 4.3. Review Mechanisms

Procedures for carrying out periodic project reviews - Every six months, an evaluation will be carried out in the communities, and a general evaluation will be carried out each year to evaluate the positive and negative aspects of the project and allow its revision for the next year. The review process will be carried out by A SKY from 2019 and will have accumulated past credits since 2015.

#### 4.4. Transparency mechanisms

Mechanisms to provide information to all the people involved, affected and other stakeholders - The project foresees the continuous mobilization and communication of actions and results through local leaderships and the involvement of the whole community in the monitoring and evaluation of the project. Transparency of the implementation based on the decision-making by the Council (which would be the monitoring and transparency body) and the activities executed shared with the whole community and articulated with the Acre society will allow the systematic monitoring of all stages and knowledge of the results in a broad way.



*Tree planting site*



## 6. Legal

### **Land Status and Environmental Regulation of the Project Area**

The project area was recognized in the mid-1980s, when the Brazilian government recognized the right of the Yawanawá and Katukina peoples to exclusive use of their traditional territory. At the time, it was demarcated with an area of 92,860 hectares. As this extension did not address several important sites of both peoples, in 2001 the Yawanawá and Katukina began to mobilize to revise the boundaries of the area. The review studies occurred in 2004 and the new boundary encompassing 178,400 was recognized in 2007 by FUNAI, the Brazilian governmental protection agency for Indian interests and culture.

### **Legal Rights Over Carbon Credits Within the Territory**

Indigenous peoples in Brazil have the right to enjoy their land in the constitution and in the governmental regulations currently in force. Through these laws, the rights of the indigenous peoples in Brazil over carbon credits generated from their demarcated lands is assured.

The rights of the Union ownership over Brazilian indigenous lands are instrumental in protecting the rights of Indigenous peoples, who are recognized by the constitution as having natural rights over their territories, including before the constitution itself. Therefore, any payments for environmental services positions forest land users as the beneficiaries of such payments. Additionally, the natural rights of the Brazilian indigenous peoples over the lands they traditionally occupy, as recognized by the Federal Constitution, are among their historical role as "pioneers of all genuinely Brazilian cultures and civilizations." In such capacity, their tradition of sustainable use of natural resources, including the conservation of native forests, is fundamental.

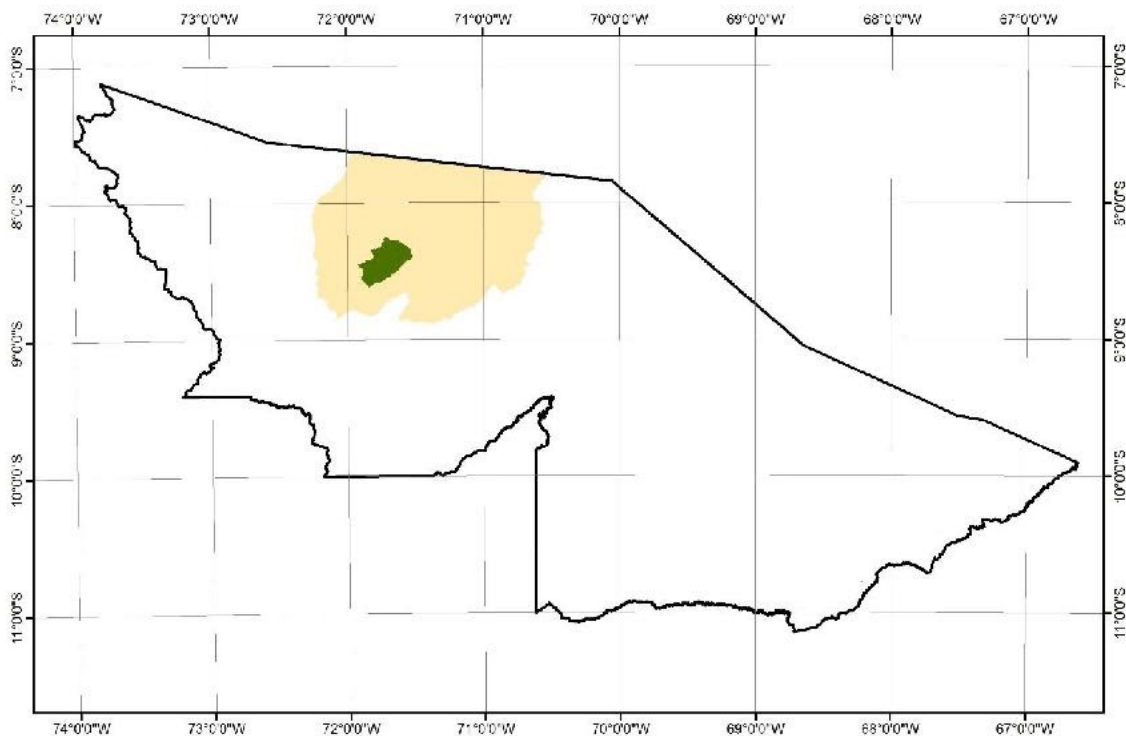


*Gregório River*

## 7. Description of the Project Area

### 7.1. Location of the project area

The municipality of Tarauacá is located in the northwest of the State of Acre, in Brazil, 400 km away from the state capital, Rio Branco. It has the fourth largest population of the state (35,526 inhabitants) and occupies the third place among the municipalities of Acre in territorial extension, with an area of 15,553.43 km<sup>2</sup>. Between 1991 and 2010, the municipality's human development index rose from 0.274 to 0.539.



*Figure 2. Location of the municipality of Tarauacá in the State of Acre and of the Indigenous Land of Gregório River in the municipality of Tarauacá.*

The Yawanawá people inhabit the Indigenous Land of Gregório River located in the Municipality of Tarauacá. This territory has approximately 180 thousand hectares, with only 2,081 hectares of area already converted into other uses such as various agriculture plots and plantations. Indigenous Land of Gregório River has 98.9% of its rainforest intact thanks to the efforts of the indigenous peoples who live there.



The Indigenous Land of Gregório River sets limits with Public Forests, Extractive Reserves and other indigenous lands.

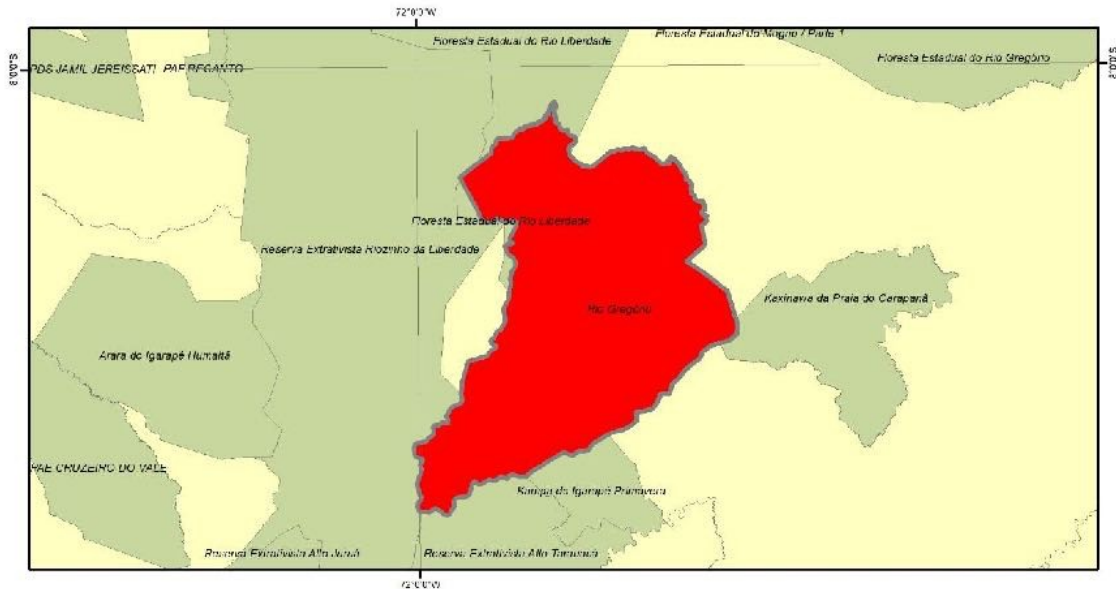


Figure 5. Land situation in the vicinity of the Indigenous Land of Gregório River.

## 7.2. Historical Use of Soil in the Project Area

In the Indigenous Land of Gregório River there are several types of landscapes related mostly to elevation but they are generally classified in two main ways: firm and low land. The first are non-flood areas, while the low land areas are regularly flooded in the Amazon winter season.

The Gregório river is the main water way of the indigenous land and all of its streams flow into it. In addition, all villages are located on its banks. It is also the only access way to towns in the region. It is via the river that all the inhabitants travel and transport goods such as foodstuffs, fuel, etc.

Traditional agriculture is subsistence farming for the maintenance of family groups. It is the activity that provides most of the items in the diet and accounts for most of the working time of men and women. Men assume the exclusive services that require hard work, such as manual labor in the preparation of the ground, i.e. digging, felling, and weeding. Women take part in planting and harvesting.

There are floodplain plantations and dry land plantations. The main planted vegetables in the diet are: yucca, corn, various varieties of banana, cane, papaya, potato, sweet potato, taioba, yam, watermelon, pineapple, and jerimum (pumpkin). Of these, yucca and banana occupy a larger part of the land plots.

The ecological characteristics of indigenous land are summarized in the following table:

Biome	Ecosystems	Hydrographic Basin	Area to be worked (ha)
Amazônia	Open Forest with Palm Trees and Open Forest with Bamboo	Gregório River Basin	180,000

The large conservation area is home to many vulnerable species that are important for biodiversity:

Species of fauna directly included	Species of flora directly included
Macaco preto ( <i>Ateles chamek</i> )	Samaúma branca ( <i>Ceiba pentandra</i> )
Gato maracajá ( <i>Leopardus pardalis</i> )	Seringueira ( <i>Hevea brasiliensis</i> )
Onça pintada ( <i>Panthera onca</i> )	Açaí ( <i>Euterpe oleraceae</i> )
Jabuti ( <i>Geochelone denticulata</i> )	Jarina ( <i>Phytelephas macrocarpa</i> )
Mutum ( <i>Crax globulosa</i> )	Paxiubinha ( <i>Iriartea</i> sp.)



*Indigenous Land of Gregório River*



## 8. Description of Activities

### 8.1. Environmental and Social Activities

Below are the detailed actions according to the objectives and execution schedule:

**Specific objective 1:** Expand and Strengthen Territorial Protection and Surveillance

**Action 1.1.** To structure a high resolution cartographic information base of the seven villages of Indigenous Land.

In this action, a cartographic base of the Indigenous Land will be constructed using the hydrographical base of the Army Geographic Service (DSG), the FUNAI land information database and a collection of control points in the communities, which will include points of land use to obtain a basis on a scale of 1: 100,000.

In each community, a coverage will be made with Remotely Piloted Aircraft (ARP) to obtain a mosaic of land use associated with a digital terrain model at a scale of 1: 10,000, which will be the base of the geographical database of each community with mapping of the houses and their registration.

An image card with medium resolution images (10M pixels) will be structured with cartographic information in the indigenous language for the initial year of the project and in the final year that will be the basis for the monitoring and inspection actions.

This action will be carried out with a continuous training process for the use of GPS and notebooks by each community to obtain control points, area calculation, marking points of interest, navigation, creation of geographical collections, and geo-referenced monitoring actions.

**Action 1.2.** Build an Integrated Community Monitoring System for Indigenous Land

For the construction of the monitoring system, three levels will be used: strategic, tactical, and operational.

At the strategic level we will develop a system of low cost geographic information to be used through smartphones and from the cartographic base of information of the territory.

At the tactical level, we will create a communication network among the seven communities with long-range radio that will allow communication between communities, FUNAI and Vila São Vicente. We will also structure a monitoring and support station at the entrance to the territory and another post in the headwaters of the Gregório river. These monitoring stations will be powered by photovoltaic cells.



At the operational level, we will have a fleet of boats equipped with a fast engine, safety equipment, and medium-range radios.

For each system, communication pieces (border identification plates, maps, folders, and village identification plates) will be created, as well as identification of surveillance boats to allow effective and intelligent community monitoring.

## **Specific objective 2.** Achieve Integrated Production of Forest, Agroforestry and Handcrafts

### **Action 2.1.** Build four management plans for non-timber forest products

In this action we will select four areas to carry out forest inventory to evaluate the potential of exploitation of non-timber forest products. The forest inventory process will also be used to measure the carbon stocks in the territory, based on the volumetric data collected during the fieldwork. The inventory will also compose a layer of information from the geographic information system to be structured. The management plans of the four selected areas will have strategies for the sustainable use of non-timber forest resources, including ways to certify the origin of resulting products, and the definitions and opportunities of an integrated production chain.

### **Action 2.2.** Implement and conduct seven agroforestry consortium with fruit and medicinal species

In order to reduce the impacts of deforestation and promote the sovereignty and food security of the Yawanawá people, in each village, two hectares of agroforestry consortium will be implemented. The main components will be Açaí, Urucum, Cacao, Cupuaçu, Mulateiro, Rubber, Ginger and Mariri, constituting a multiple use arrangement based on traditional culture. Seedlings from community nurseries will also support reforestation activities.

The design of the arrangement and the definition of management strategies will be based on the Dialogue of Knowledge (scientific and traditional), using ethnopedological approaches to build the soil classification system and allowing the adoption of local solutions for the operation of the consortium.

For each product there will be a strategy for obtaining the origin label, and for each consortium the climate change benefits will be measured based on the carbon stored. The climate change benefits will also be measured through samples of each species involved in the project as models will be developed to estimate their CO<sub>2</sub> sequestration potential in the following years.



**Action 2.3.** Provide communities with agroforestry processing and storage structures using renewable energy

In each community we will build a basic processing and storage facility for forest products with a lighting system and water supply powered by photovoltaic cells. Each unit will have basic equipment necessary for cleaning, processing and storing the related forest products.

**Action 2.4.** Integrate the network production and marketing of handcrafts in the seven communities of the territory

In each community a community handcrafts studio will be build for workshops, creation, storage, and marketing of art. This handicraft studio will be integrated with all the houses of the community, starting with the installation of home photovoltaic systems to replace generators. This will allow activities to be carried out during the night, including workshops and organizational meetings. This action also aims to reduce waste production, through recycling activities and environmental education. This includes crafts with products like taboca, a raw material abundant in the forests and seeds of açaí derived from pulp processing.



*Urukum pods containing red seeds used for ceremonial body painting and export*

**Specific Objective 3.** To seek a strong, efficient, and effective Social Organization

**Action 3.1.** Empowering the Yawanawá council through collective training and cultural empowerment actions with the leading role of women

During the project, the Yawanawá council will hold quarterly meetings, which will consist of training, monitoring, and cultural valorization meetings. The training will focus on cross-cutting issues such as: water resource management, sustainability, climate change, environmental services, sustainable development objectives, territorial management, science and technology, social technologies, eco-efficient measures, solid waste management, conflict resolution and leadership, and management based on the leading role of women.

**Action 3.2.** Expand actions to generate economic benefits associated with collective and integrated marketing decisions

During the execution of the project, the Yawanawá Socioenvironmental Fund will be structured to guarantee the continuity of the project as well as maintain ongoing communication with all partners. In this process the integration, dissemination and measurement of the Sustainable Development Objectives of the Yawanawá Life Plan will be carried out. The Fund will also structure marketing plans for the main Yawanawá products and handcrafts that in turn will help raise money for the Fund.



*Painting by Hushahu, the first woman shaman of the Yawanawá*



## 7.2. General schedule of activities

Specific objectives	Actions	Period 01	Period 02	Period 03	Period 04	Period 05	Period 06
1. Expand and strengthen Territorial Protection and Surveillance	1. To structure a high resolution cartographic information base of the nine villages of the Indigenous Land						
	2. Build an integrated community monitoring system for Indigenous Land						
2. Achieve integrated production of the forest, agroforestry and handcrafts	1. Build four management plans for non-timber forest products						
	2. Implement and conduct seven agroforestry consortia with fruit and medicinal specie						
	3. Provide villages with processing and storage structures for agroforestry using alternative energy						
	4. To integrate the network of production and commercialization of handcrafts in the 7 villages of indigenous land						
3. Look for a strong, efficient and effective Social Organization	1. Empower the Yawanawa council through collective training and cultural empowerment actions with the leading role of women						
	2. Extend actions to generate economic benefits associated with collective and integrated marketing decisions						

## 8. Methodology

### 8.1. Scenario Without Project and Baseline Definition

A geographic database was established with the deforestation curve observed at the Gregório river in order to have an accurate assessment of the trend of deforestation. Information from the Geoprocessing Central Unit (UCEGEO) was used. In order to estimate the deforestation rate, the UCEGEO data (minimum mapping unit of 0.6 ha) were used to define the baseline, which covers an annual assessment throughout the State of Acre (since 1988) and allows monitoring at project level with a resolution 10 times greater than INPE (Brazil's National Space Research Institute) to detect deforestation, which will guarantee greater accuracy and reliability.

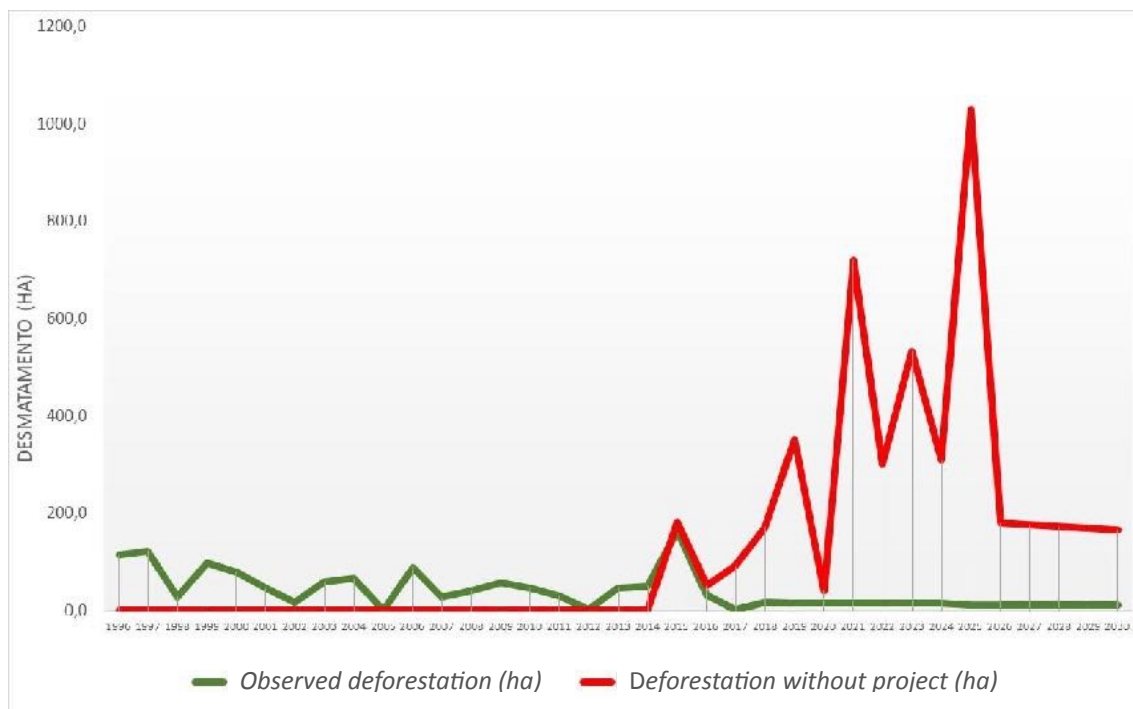


Figure 6. Baseline of the PSA project of the Indigenous Land of Gregório River, municipality of Tarauacá, State of Acre.

For the baseline projection, a line was adjusted with the historical series data for the period from 2015 to 2030 (inclusive 2015). The regression line was adjusted by the least squares method from the historical series of the logarithm of the remaining forest area, in square kilometers, against time. From the result of this regression, the accumulated values of remaining forest for the period from 2015 to 2030, which represent the vision of future deforestation with the integration of past deforestation, are estimated considering the current political and territorial scenario of the country, state, and indigenous land.

The amount of forest remaining in each year, and therefore the sum of deforested area in the period, is obtained directly from the geographic database. The Yawanawá REDD+ project monitoring line was produced ex post and covers two distinct periods. The first one uses the original data produced by the UCEGEO in the period from 1996 to 2017 and the second one projecting the results to 2030 from the regression of the remaining forest area data in hectares against time.

For the purpose of calculating the emission reductions in the period that this proposal aims to generate credits, which covers the years 2015 to 2030, a straight line of the regression was adjusted with the data of the historical series of UCEGEO between 2015 and 2030 by the method of least squares to from the logarithm of the remaining forest area, in square kilometers, against time.

The baseline is not fixed, allowing modelling of annual variations. The prediction is that if the project does not occur, it will not increase deforestation variably each year, and reductions and increases may occur from year to year. This approach is most appropriate for areas with low deforestation rates such as the Indigenous Land of Gregório River.



*The Yawanawá have planted over 7,000 açai trees and 7,000 graviola trees*



To define the annual inventories, it was considered that in each avoided hectare of deforestation corresponds to 123 t C. And the factor of 3.67 was used to convert tons of carbon to tons of CO<sub>2</sub>, obtaining a total of 1,927,911 tons, according to the following Table which would be reduced until the year 2030.

## 8.2. Definition of Carbon Stocks

Year	Avoided deforestation (ha)	Gross reductions (tCO <sub>2</sub> )
2015	17.8	8,022
2016	20.5	9,241
2017	89.1	40,240
2018	155.2	70,045
2019	336.4	151,873
2020	26.5	11,959
2021	705.7	318,557
2022	284.5	128,431
2023	518.1	233,853
2024	294.3	132,839
2025	1,017.0	459,066
2026	168.8	76,188
2027	165.0	74,472
2028	161.2	72,757
2029	157.4	71,041
2030	153.6	69,326
<b>Total</b>	<b>3,458.5</b>	<b>1,927,911</b>

### **8.3. Leak Assessment**

The eventual leaks will be measured from the monitoring of the surrounding 10 km of the Indigenous Land of Gregório River.

### **8.4. Permanence**

All the reductions will be the result of the efforts of the Yawanawá and will not translate into further deforestation guaranteed until the end of the project period.

### **8.5. Additionality**

The project will contribute with differentiated actions that will guarantee the reduction and the maintenance of the reduced rates of deforestation.

### **8.6. Measurement of Benefits**

The social, economic, and environmental benefits related to the project will be measured annually.

## **9. Credit Management**

The harvests will be annual with measurement starting in 2015 and considering a maximum operating costs of 20%. 80% of the funds raised for the Yawanawá Fund will be directed to the activities defined in the Yawanawá Life Plan. Each year, once the resources have been raised, the distribution of the benefits will be done by the Yawanawá Council benefiting all the communities.

The State of Acre has a state system of incentives for environmental services that will constitute the sphere of verification of the credits generated each year. The value of US \$5.00 is referential and depending on the date of the contract may vary more or less according to the voluntary market.



*Yawanawá ceremony in shade of trees*



## 9.2 Carbon and Credit Value Projections

Year	Gross reductions (tCO2)	Credits (tCO2)	Value (U\$)	Average Annual Period (U\$)	Resources Yawanawá Project (U\$)
2015	8,022	8,022.0	40,109.9	242,817.3	242,817.3
2016	9,241	9,241.4	46,206.8		283,358.8
2017	40,240	40,240.4	201,201.8		283,358.8
2018	70,045	70,045.3	350,226.5	283,358.8	283,358.8
2019	151,873	151,872.9	759,364.6		283,358.8
2020	11,959	11,958.9	59,794.3		283,358.8
2021	318,557	318,557.1	1,592,785.4		1,272,746.4
2022	128,431	128,431.2	642,156.1		1,272,746.4
2023	233,853	233,853.0	1,169,264.8	1,272,746.4	1,272,746.4
2024	132,839	132,839.4	664,196.9		1,272,746.4
2025	459,066	459,065.7	2,295,328.7		1,272,746.4
2026	76,188	76,187.9	380,939.5		363,784.1
2027	74,472	74,472.4	372,361.8		363,784.1
2028	72,757	72,756.8	363,784.1	363,784.1	363,784.1
2029	71,041	71,041.3	355,206.4		363,784.1
2030	69,326	69,325.7	346,628.7		363,784.1
<b>Total</b>	<b>1,927,911</b>		<b>9,639,556.3</b>		<b>9,842,263.7</b>



### 9.3 Technical Notes

For the purposes of payments, the year 2015 was considered for the generation of initial credits and from there the average of the 5 year gross reductions was used to allow a better harmonization of the disbursements. For the definition of the annual payments, the average of the annual credits of the project period was considered.

Project payment for environmental services of the Indigenous Land of Gregório River, do not have the project start date coinciding with the start date of credit count. The latter is necessarily well after the first, since it depends on the empirical confirmation of the inflection of the deforestation trend.

In the case of this Yawanawá REDD+ project, in which pioneering the REDD+ framework required the development of a more synthetic and objective methodology, the credits were estimated for a period of four years beginning after the date of inflection of the deforestation trend and ending in the year 2030, that is, between the years 2015 and 2017. They are therefore called Retroactive Credits or Early Credits, although such credits refer to a period that begins several years after the formal start date of the project.

These retroactive credits are "prior" only with respect to the time frame represented by the "Date of Application of the Monitoring and Verification Methodology". Despite the name, they are in no way different from the credits that can be monitored, verified and certified in future periods, since the Baseline projected for the future should not be altered until there are substantive facts that advise its revision.

The denomination of "Early Credits" was therefore only used to characterize the credits that have already been accounted for during the period between the beginning of the inflection observed in the deforestation rates and the dates on which the verification work was carried out.





## 10. Summary

The Yawanawá have risen from near ethnocide to become leaders in the effort for indigenous rights and rainforest protection in the state of Acre, the country of Brazil, and the world beyond.

The Yawanawá are in a unique position to be able to develop a REDD+ model that can benefit all local and international partners as the world seeks to address climate change. This is the greatest challenge in human history and the science is clear that the existing rainforests of the world must be preserved as part of the solution. Indigenous peoples are the proven stewards of the rainforest. Our well-being depends on the vitality of the forest and therefore it is our duty to ensure the integrity of the ecosystem. It is a reciprocal relationship and that is how we think for the partnerships we build with the rest of the world.

We invite you to join us in this critical effort to develop a model that can be scaled throughout Brazil to protect rainforest while upholding the hard won rights of indigenous peoples.

The wisdom of our spiritual practice teaches us that everything is connected. That we are all in this together. That we must take care of each other and our environment to live with true peace, prosperity, and happiness. We are here to do that work. To make sure our land continues to absorb carbon, produce oxygen, cycle the water, hold the river, house the life, and provide food and medicine for our people and others. But we also know that we can not do this alone in the world of today. We all must be a part of this work now. Thank you for your time, your energy, and your consideration in joining us in this effort.

*- Chief Tashka Yawanawa on behalf of the Yawanawá people*



*Hushahu Yawanawá, Shaman*