



FORTALEZA ITUXI II REDD+ PROJECT



Document Prepared by Ituxi Group

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1 PROJECT DETAILS

1.1 Summary Description of the Project

The Fortaleza Ituxi II REDD+ project aims at protecting forests located in one of the regions having the highest deforestation rate in the Amazon Biome: the municipality of Lábrea. The South of the municipality of Lábrea has already been reached by the “Arc of Deforestation”: since the last 10 years, Lábrea has been one of the most deforested municipalities in the Amazon Biome. Beside the damage caused to natural ecosystems, the land-use changes have provoked severe social conflicts through processes of land-grabbing and installation of agriculture and cattle ranching activities, contributing to the expulsion of family-scale forest extractives from that region.

In the Lábrea region, the deforestation pressure originated from the neighbouring States of Acre and Rondônia. These States have already undergone intense deforestation processes in the past, mainly due to the expansion of agriculture and cattle ranching. According to Vitel (2009)¹, the deforestation in Lábrea is highly related to the proximity of roads: the increase in deforestation rate observed recently is mainly attributed to the “Jequitibá” and “do Boi” (or “do Baiano”) Roads. The “do Boi” Road (Ramal do Boi), is about 100 km long and reaches the “Ituxi” waterfalls, which are located next to the project area.

In the specific case of the project area, professional land-grabbers, and even politicians, have already organised illegal occupation that has been denounced by the landowner and controlled by authorities.

The primary objective of the Fortaleza Ituxi II REDD+ project is to avoid planned (APD) and unplanned (AUD) deforestation in an area of 69,185.87 ha of Amazonian forest.

The APD REDD project area is expected to avoid a predicted 5,153.00 ha of legal deforestation, equating to 1,721,301 tCO₂e in emissions reductions over the 30-year project lifetime (02-August-2023 to 15-December-2051), with an annual average of 57,376 tCO₂e.

The AUD REDD project area is expected to avoid a predicted 64,023.44 ha of illegal deforestation, equating to 16,066,567 tCO₂e in emissions reductions over the 30-year

¹ Vitel, C. S. M. N. (2009). Modelling deforestation dynamics on an expanding frontier, Lábrea, Amazonas [Master's thesis, Instituto Nacional de Pesquisas da Amazônia/Universidade Federal do Amazonas]. Available at: <https://repositorio.inpa.gov.br/handle/1/5151>. Last access: 08/08/2023.

project lifetime (16-December-2021 to 15-December-2051), with an annual average of 535,552 tCO₂e.

1.2 Sectoral Scope and Project Type

Sectoral Scope: AFOLU (Scope 14): Agriculture, Forestry, and Other Land Uses.

Project Activity: REDD (Reducing Emissions from Deforestation and Forest Degradation).

Project Category: Avoiding Planned Deforestation (APD project activity) and Avoided Unplanned Deforestation (AUD project activity).

This is not a grouped project.

1.3 Project Eligibility

According to the VCS Methodology Requirements v4.1², for Reduced Emissions from Deforestation and Degradation (REDD) projects, eligible activities are those that reduce net Greenhouse gases (GHG) emissions by reducing deforestation. Thus, the project is eligible under the scopes of the VCS Program, following the VCS Standard version 4.2, sections 3.2 and Appendix A1.5 – A1.8.

Eligibility Conditions	Fortaleza Ituxi II REDD+ project Justification of Eligibility
Projects shall meet all applicable rules and requirements set out under the VCS Program, including this document. Projects shall be guided by the principles set out in Section 2.2.1	The project meets all applicable rules and requirements set out under the VCS Program, as detailed in this section and in Applicability of Methodology.
Projects shall apply methodologies eligible under the VCS Program. Methodologies shall be applied in full, including the full application of any tools or modules referred to by a methodology, noting the exception set out in Section 3.13.1	The applied methodology is VM0007 - REDD+ Methodology Framework (REDD+MF), v1.6 . Applicability conditions are detailed in section 3.2.

² VERRA – Methodology Requirements. Available at <https://verra.org/wp-content/uploads/2022/01/VCS-Methodology-Requirements_v4.1.pdf>

<p>Projects and the implementation of project activities shall not lead to the violation of any applicable law, regardless of whether the law is enforced.</p>	<p>The project activity involves the conservation of native Tropical Rainforest, including sustainable forest management plan or not. These activities are eligible under Brazilian law according to conditions set out in sections 1.14 and 3.5.</p>
<p>Where projects apply methodologies that permit the project proponent its own choice of model (see the VCS Program document Program Definitions for definition of model), such model shall meet with the requirements set out in the VCS Program document VCS Methodology Requirements, and it shall be demonstrated at validation that the model is appropriate to the project circumstances (i.e., use of the model will lead to an appropriate quantification of GHG emission reductions or removals).</p>	<p>Not applicable. The project applies the VM0007 methodology.</p>
<p>Where projects apply methodologies that permit the project proponent its own choice of third party default factor or standard to ascertain GHG emission data and any supporting data for establishing baseline scenarios and demonstrating additionality, such default factor or standard shall meet with the requirements set out in the VCS Program document VCS Methodology Requirements.</p>	<p>Not applicable. The project applies VM0007 methodology, in addition to the VT0001 for Additionality assessment.</p>
<p>Projects shall preferentially apply methodologies that use performance methods (see the VCS Program document VCS Methodology Requirements for further information on performance methods)</p>	<p>Not applicable. The project applies VM0007 methodology, in addition to the VT0001 for Additionality assessment.</p>

<p>where a methodology is applicable to the project that uses a performance method for determining both additionality and the crediting baseline (i.e., a project shall not apply a methodology that uses a project method where such a performance method is applicable to the project).</p>	
<p>Where the rules and requirements under an approved GHG program conflict with the rules and requirements of the VCS Program, the rules and requirements of the VCS Program shall take precedence</p>	<p>The project applies approved VCS methodology and tools. The project shall take precedence to the rules and requirements of the VCS Program over others approved GHG Program.</p>
<p>Where projects apply methodologies from approved GHG programs, they shall comply with any specified capacity limits (see the VCS Program document Program Definitions for definition of capacity limit) and any other relevant requirements set out regarding the application of the methodology and/or tools referenced by the methodology under those programs.</p>	<p>The project applies approved VCS methodology and tools. The project shall take precedence to the rules and requirements of the VCS Program over others approved GHG Program.</p>
<p>Where Verra issues new requirements relating to projects, registered projects do not need to adhere to the new requirements for the remainder of their project crediting periods (i.e., such projects remain eligible to issue VCUs through to the end of their project crediting period without revalidation against the new requirements). The new requirements shall be adhered to at project crediting period renewal, as set out in Section 3.8.9.</p>	<p>The project was designed under VCS Standard version 4.4 and VM0007 version v1.6. Any new requirements shall be adhered to at project crediting period renewal (i.e. six years from Project Start Date).</p>

<p>There are currently six AFOLU project categories eligible under the VCS Program, as defined in Appendix 1 Eligible AFOLU Project Categories below: afforestation, reforestation and revegetation (ARR), agricultural land management (ALM), improved forest management (IFM), reduced emissions from deforestation and degradation (REDD), avoided conversion of grasslands and shrublands (ACoGS), and wetland restoration and conservation (WRC).</p>	<p>This is an eligible AFOLU project category under the VCS Program: Reduced Emissions from Deforestation and Degradation (REDD).</p>
<p>Where projects are located within a jurisdiction covered by a jurisdictional REDD+ program, project proponents shall follow the requirements in this document and the requirements related to nested projects set out in the VCS Program document Jurisdictional and Nested REDD+ Requirements.</p>	<p>This project is not located within a jurisdiction covered by a jurisdictional REDD+ program.</p>
<p>Where an implementation partner is acting in partnership with the project proponent, the implementation partner shall be identified in the project description. The implementation partner shall identify its roles and responsibilities regarding the project, including but not limited to, implementation, management and monitoring of the project, over the project crediting period</p>	<p>Any implementation partners are described in the project description and sections 1.5 and 1.6.</p>

<p>Activities that convert native ecosystems to generate GHG credits are not eligible under the VCS Program. Evidence shall be provided in the project description that any ARR, ALM, WRC or ACoGS project areas were not cleared of native ecosystems to create GHG credits (e.g., evidence indicating that clearing occurred due to natural disasters such as hurricanes or floods). Such proof is not required where such clearing or conversion took place at least 10 years before the proposed project start date.</p>	<p>This project does not convert native ecosystems to generate GHG. The project area only contains native forested land for a minimum of 10 years before the project start date.</p>
<p>Activities that drain native ecosystems or degrade hydrological functions to generate GHG credits are not eligible under the VCS Program. Evidence shall be provided in the project description that any AFOLU project area was not drained or converted to create GHG credits. Such proof is not required where such draining or conversion took place before 1 January 2008.</p>	<p>This project does not occur on wetlands and does not drain native ecosystems or degrade hydrological functions.</p>
<p>The project proponent shall demonstrate that project activities that lead to the intended GHG benefit have been implemented during each verification period in accordance with the project design. Where no new project activities have been implemented during a verification period, project proponents shall demonstrate that previously implemented project activities continued to be implemented during the verification period (e.g., forest patrols or improved agricultural practices of community members).</p>	<p>PP will demonstrate that project activities that lead to the intended GHG benefit have been implemented during each verification period in accordance with the project design.</p>

<p>For all IFM, APDD (except where the agent is unknown), RWE, APWD, APC, and ALM project types, the project proponent shall, for the duration of the project, reassess the baseline every ten years and have this validated at the same time as the subsequent verification. For all AUDD, APDD (where the agent is unknown), AUC and AUWD project types, the project proponent shall, for the duration of the project, reassess the baseline every six years and have this validated at the same time as the subsequent verification.</p>	<p>The baseline reassessment will be conducted every six years as the project includes AUD.</p>
<p>Where ARR, ALM, IFM or REDD project activities occur on wetlands, the project shall adhere to both the respective project category requirements and the WRC requirements, unless the expected emissions from the soil organic carbon pool or change in the soil organic carbon pool in the project scenario is deemed below de minimis or can be conservatively excluded as set out in the VCS Program document VCS Methodology Requirements, in which case the project shall not be subject to the WRC requirements.</p>	<p>Not applicable. The project activity does not occur on wetlands.</p>
<p>Projects shall prepare a non-permanence risk report in accordance with the VCS Program document AFOLU Non-Permanence Risk Tool for both validation and verification. In the case of projects that are not validated and verified simultaneously, having their initial risk assessments validated at the time of VCS project validation will assist VCU buyers and sellers by providing a more accurate early</p>	<p>The project has conducted a non-permanence risk analysis according to the VCS Program Document AFOLU Non-Permanence Risk Tool for validation and shall prepare the report during subsequent verifications.</p>

indication of the number of VCUs projects are expected to generate. The non-permanence risk report shall be prepared using the VCS Non-Permanence Risk Report Template, which may be included as an annex to the project description or monitoring report, as applicable, or provided as a stand-alone document.

Eligible REDD activities are those that reduce net GHG emissions by reducing deforestation and/or degradation of forests. The project area shall meet an internationally accepted definition of forest, such as those based on UNFCCC host country thresholds or FAO definitions, and shall qualify as forest for a minimum of 10 years before the project start date. The definition of forest may include mature forests, secondary forests, and degraded forests. Under the VCS Program, secondary forests are considered to be forests that have been cleared and have recovered naturally and that are at least 10-years-old and meet the lower bound of the forest threshold parameters at the start of the project. Forested wetlands, such as floodplain forests, peatland forests and mangrove forests, are also eligible provided they meet the forest definition requirements mentioned above.

The project area is composed of 100% native forest. The area is considered forest as per the definition of forest adopted by FAO³: Land spanning more than 0.5 hectares with trees higher than 5 metres and a canopy cover of more than 10%, or trees able to reach these thresholds in situ.

³ Comparative framework and Options for harmonisation of delimitations. Available at <[11](https://www.fao.org/3/y4171e/y4171e10.htm#:~:text=FAO%202000a%20(FRA%202000%20Main,of%20other%20predomina>. Last access: 08/0/2023.</p></div><div data-bbox=)

<p>Activities covered under the REDD project category are those that are designed to stop planned (designated and sanctioned) deforestation or unplanned (unsanctioned) deforestation and/or degradation. Avoiding planned degradation is classified as IFM.</p>	<p>Project activity is designed to stop unplanned (unsanctioned) and planned deforestation, as described throughout this PD draft document.</p>
<p>Activities that stop unsanctioned deforestation and/or illegal degradation (such as removal of fuelwood or timber extracted by non-concessionaires) on lands that are legally sanctioned for timber production are eligible as REDD activities. However, activities that reduce or stop logging only, followed by protection, on forest lands legally designated or sanctioned for forestry activities are included within IFM. Projects that include both avoided unplanned deforestation and/or degradation as well as stopping sanctioned logging activities, shall follow the REDD guidelines for the unplanned deforestation and/or degradation and the IFM guidelines for the sanctioned logging activities, and shall follow the requirements set out in Section 3.5.2.</p>	<p>In case future project activity instances have areas legally sanctioned for timber production, baseline and project activity shall comprehend unsanctioned deforestation and/or illegal degradation, not the reduction of logging.</p>
<p>Eligible REDD activities include:</p> <ol style="list-style-type: none"> 1) Avoiding Planned Deforestation and/or Degradation (APDD): This category includes activities that reduce net GHG emissions by stopping or reducing deforestation or degradation on forest lands that are legally authorized and documented for conversion. 2) Avoiding Unplanned Deforestation and/or Degradation (AUDD): This category includes activities that reduce net GHG emissions by 	<p>The Fortaleza Ituxi II REDD+ project is within categories AUDD: Avoided Unplanned Deforestation and/or Degradation and APD: Avoiding Planned Deforestation.</p>

stopping deforestation and/or degradation of degraded to mature forests that would have occurred in any forest configuration.

1.4 Project Design

- The project includes a single location or installation only
- The project includes multiple locations or project activity instances, but is not being developed as a grouped project
- The project is a grouped project

Eligibility Criteria

Not applicable. This is not a grouped project.

1.5 Project Proponent

Organisation name	ITUXI ADMINISTRAÇÃO E PARTICIPAÇÃO LTDA.
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Email	projetoscarbono@grupoituxi.com

Organisation name	RICARDO VILLARES LOT STOPPE
Contact person	RICARDO VILLARES LOT STOPPE
Title	Landowner

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Organisation name	PAU BRASIL ASSESSORIA FLORESTAL
Contact person	RÔMULO P. S. ARANTES
Title	Project Developer
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Telephone	+55 (27) 99590-9090
Email	projetos@paubrasil.net.br

1.6 Other Entities Involved in the Project

Not applicable.

1.7 Ownership

This property is owned by Ituxi Administração e Participação LTDA. as per information in section 1.5. The legal documents proving the land title and ownership of the property (Environmental Registry for Rural Properties, Land Registry Certificate, Certificate from the Institute for Agrarian Reform) will be made available to the auditors during the validation process.

1.8 Project Start Date

APD – Avoided Planned Deforestation

Based on the applicability of methodology VM0007 (section 4.3.3) which cites that REDD project for planned deforestation activity is applied where the conversion of forest land to a deforested condition must be legally permitted.

Thus, to define the Project Start Date of the APD REDD project was considered the date of issuance of the protocol for requesting a prior licence for raising large animals on the property, issued by the Amazon Environmental Protection Institute – IPAAM. The PSD was defined on 02-August-2023.

AUD – Avoided Unplanned Deforestation

The municipality of Lábrea, as the south portion of the State of Amazonas, is an important region for agribusiness with a resulting increasing trend in deforestation. Most of the deforested areas in the municipality are used for cattle ranching, increasing the deforestation pressure on the remnants of native vegetation each passing year. This pressure can be clearly noted in the surroundings of the project area.

For the AUD REDD project, the Project Start Date was defined on 16-December-2021, the date on which the landowner obtained approval from the Federal Justice of the request for the return of its property rights over the land to use and possess it, within the limits established by environmental regulations, mainly with the exploitation of carbon credit resources. From there, with the return of property management to landowner, it is possible to expand surveillance activities to the project area as an action to help in forest conservation due to the numerous invasions that the region had been suffering. Thus, it is considered that 16-December-2021 is the date on which the project began generating GHG emission reductions.

The legal documents proving both Project Start Dates will be made available to the auditors during the validation process.

1.9 Project Crediting Period

The APD and AUD REDD project has a crediting period of 30 years:

- APD period: from 02-August-2023 to 15-December-2051;
- AUD period: from 16-December-2021 to 15-December-2051.

1.10 Project Scale and Estimated GHG Emission Reductions or Removals

The estimated annual GHG emission reductions/removals of the project are:

- <20,000 tCO₂e/year
- 20,000 – 100,000 tCO₂e/year
- 100,001 – 1,000,000 tCO₂e/year
- >1,000,000 tCO₂e/year

1.11 Description of the Project Activity

The principal objective of the Fortaleza Ituxi II REDD+ project is the conservation of 69,185.87 hectares of Amazon rainforest. The primary objective of the Fortaleza Ituxi II REDD+ project is to avoid the planned deforestation (APD) of the 5,153.00 ha project area, and unplanned deforestation (AUD) of the 64,026.44 ha project area, totalizing 69,185.87 ha of Amazon rainforest.

The Project Proponent will adopt additional conservation measures: remote sense monitoring of changes of the land cover using satellite images, deforestation and heat spots monitoring, increasing surveillance hiring private security, implementing a land, water and air vigilance plan using quads, boats, drones and a plane, build security bases and provide internet signal to improve communication for illegal deforestation complaints.

Other social activities that benefit the local community will be supported, such as improving electricity infrastructure by solar photovoltaic panels, construction of groundwater wells, bioeconomy and environmental education, improvement of rural roads and bridges, associations support, developing the value chain of forest products and agriculture family production (nuts, oils, fish, fruits, legumes and seeds). The CCB Standard is being considered to assess and monitor the project's contribution to sustainability, thus improving the social and environmental conditions in the project region.

In addition to the AUD project, the APD project will avoid the conversion of areas legally subject to planned deforestation.

In the present APD REDD project, it is expected to avoid a predicted 5,153.00 ha of deforestation, equating to 1,721,301 tCO₂e in emissions reductions over the 30-year project lifetime (02-August-2023 to 15-December-2051), with an annual average of 57,376 tCO₂e.

For the AUD REDD project is expected to avoid a predicted 64,023.44 ha of deforestation, equating to 16,066,567 tCO₂e in emissions reductions over the 30-year project lifetime (16-December-2021 to 15-December-2051), with an annual average of 535,552 tCO₂e, including buffer (RF), leakage (DLF) and project efficiency (EI) reductions.

The project is not located within a jurisdiction covered by a jurisdictional REDD+ program.

1.12 Project Location

The project area is situated in the municipality of Lábrea, within the state of Amazonas, in northern Brazil. The project area covers an expanse of 69,185.87 hectares, it lies to the north of the Ituxi River, situated on “Nossa Senhora das Cachoeiras do Ituxi” farm.

The closest access road is BR-364, called Rodovia Marechal Rondon, a highway connecting the Brazilian states of São Paulo, Goiás, Mato Grosso Rondônia and Acre.

The location of the project, rivers and highways are presented in the Figure 1.

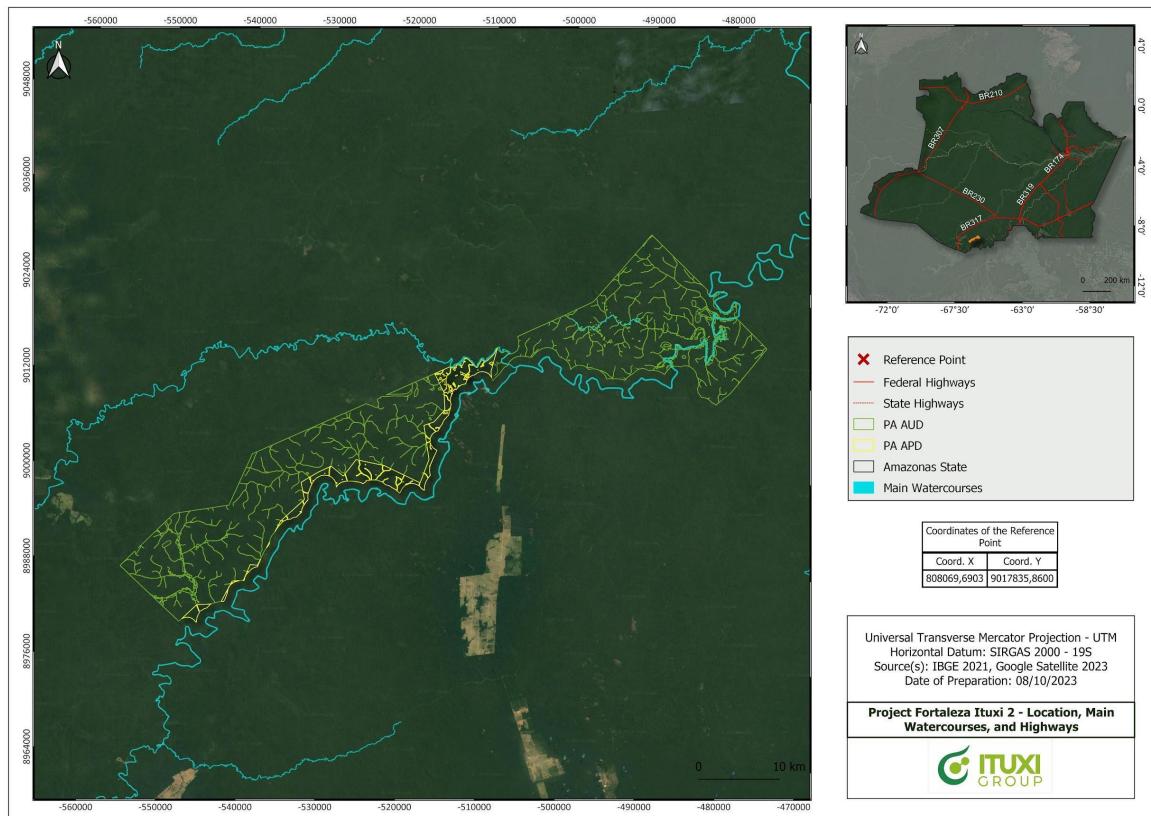


Figure 1. Location of the project, main rivers and highways. Sources: IBGE⁴, DNIT⁵ and FBDS⁶.

⁴Brazilian Institute of Geography and Statistics, 2021. Available in:

<<https://www.ibge.gov.br/geociencias/organizacao-do-territorio/malhas-territoriais/15774-malhas.html>>. Accessed on 25/07/2023.

⁵ National Department of Transport Infrastructure, 2022. Available in: <<https://servicos.dnit.gov.br/vgeo/>>. Accessed on 07/06/2023.

⁶ Brazilian Foundation for Sustainable Development, 2023. Available in: <<https://geo.fbds.org.br/>>. Accessed on 25/07/2023.

The municipality of Lábrea shares borders with five other municipalities in the south of the State of Amazonas, Boca do Acre, Pauini, Itamarati, Tapauá and Canutamai, as presented in figure below. The South of Amazonas is a region that has also been the target of pressure from different segments, loggers, cattleman, soy producers, among others, coming from neighbouring states. The municipality of Lábrea and surroundings are shown in Figure 2.

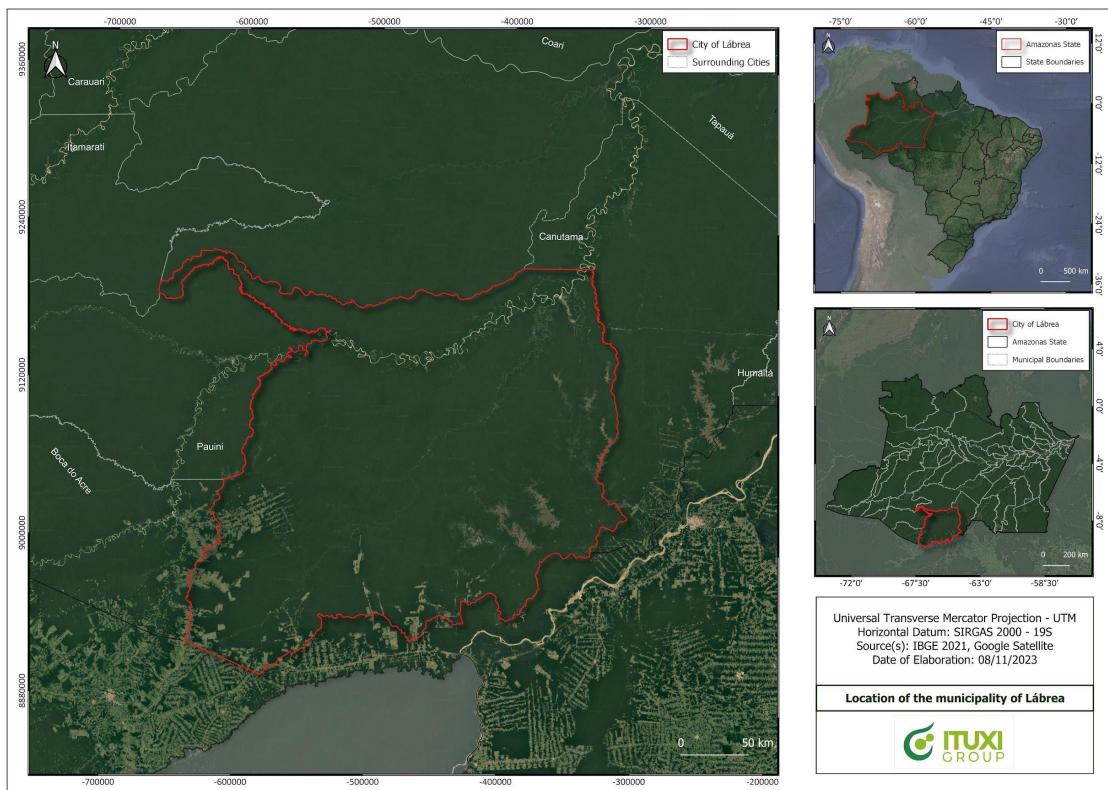


Figure 2. Municipality of Lábrea and surroundings. Source: IBGE⁷.

1.13 Conditions Prior to Project Initiation

- Ecosystem type: The project area is composed of 100% of Amazon Rainforest native vegetation. The Fortaleza Ituxi II REDD project's boundaries are composed predominantly of Open Tropical Rainforest and Dense Tropical Rainforest to a lesser extent.
- Current and historical land-use: The property, where the project area is located, has a history of sustainable management practices. It is emphasised that over the last 10 years, the landscape has remained stable and natural without changes in

⁷Brazilian Institute of Geography and Statistics, 2021. Available in:
<https://www.ibge.gov.br/geociencias/organizacao-do-territorio/malhas-territoriais/15774-malhas.html>. Accessed on 25/07/2023.

land use and coverage. In addition, it is observed that the property is covered in almost all its extension by Ombrophilous Forest, and less than 1% of the area is classified as anthropic use. However, the scenario changes when it is analysed in the surrounding region. It can be noticed in several areas in transformation of their landscape and that it is under pressure to shift the natural forest classes to pasture areas or other anthropic uses. To support this idea, it has the deforestation data for the municipality of Lábrea, which in 2022 occupied the fourth position in the ranking of the highest deforestation rates among the municipalities of Amazonas⁸.

- Has the land been cleared of native ecosystems within 10 years of the project start date?

Yes

No

General characteristics of the project area and surrounding

The Fortaleza Ituxi REDD+ project aims to bring benefits for the climate, local community and biodiversity conservation of the Amazon biome by the protection of forests within the carbon project, which are situated in one of the regions with the highest rates of deforestation in the Amazon Biome. The municipality of Lábrea, where the project is located, is part of the "Arc of Deforestation of the Brazilian Amazon" and which has advanced towards the southern part of the State of Amazonas.

Despite significant external pressures for a change in land use, the project area has remained forested for the last 10 years prior to the project start date. Thus, it is in accord with criteria that establish eligible forests in the last 10 years to carbon projects.

The general characteristics of the project area and reference region are described below.

Climate

According to Köppen and Geiger, the dominant climate in the region is group A, known as Tropical Rainy Climate or Tropical Forest Climate. This climate type is characterised by high temperatures, elevated humidity, substantial rainfall and a short dry season. Annual Rainfall is approximately 2,250 mm and 2,750 mm, with the rainy season typically starting in October, and reaching its peak from January to April. Temperature averages range between 24°C to 26°C and relative humidity is quite high, from 85 to 90%. The Climate Koppen classification map is presented in Figure 3.

⁸ INPE. 2022. Instituto Nacional de Pesquisas Espaciais - Prodes project: Satellite Monitoring of the Amazon Disponível em: <http://http://terrabrasilis.dpi.inpe.br/app/dashboard/deforestation/biomes/amazon/increments> Acesso em: 04/08/2023

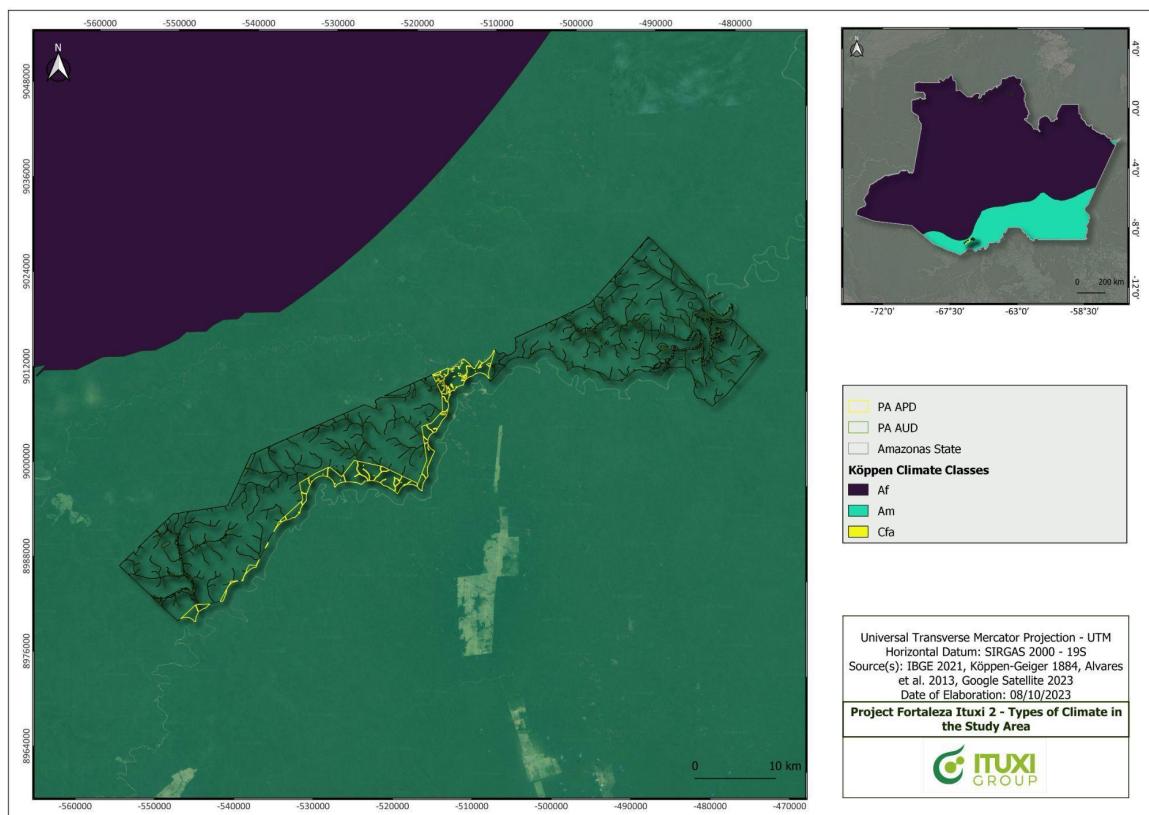


Figure 3. Climate Koppen classification map. Source: Alvares et al.⁹

Hydrology

The main rivers of the project region are Ituxi and Parus Rivers and are shown in Figure 4.

⁹ Kottek, M., J. Grieser, C. Beck, B. Rudolf, and F. Rubel, 2006: World Map of the Köppen-Geiger climate classification updated. Meteorol. Z., 15, 259-263. DOI: 10.1127/0941-2948/2006/0130. Available in: <<https://forest-gis.com/2015/10/classificacao-climatica-de-koppen-geiger-em-shapefile.html/>>. Accessed on 10/08/2023.

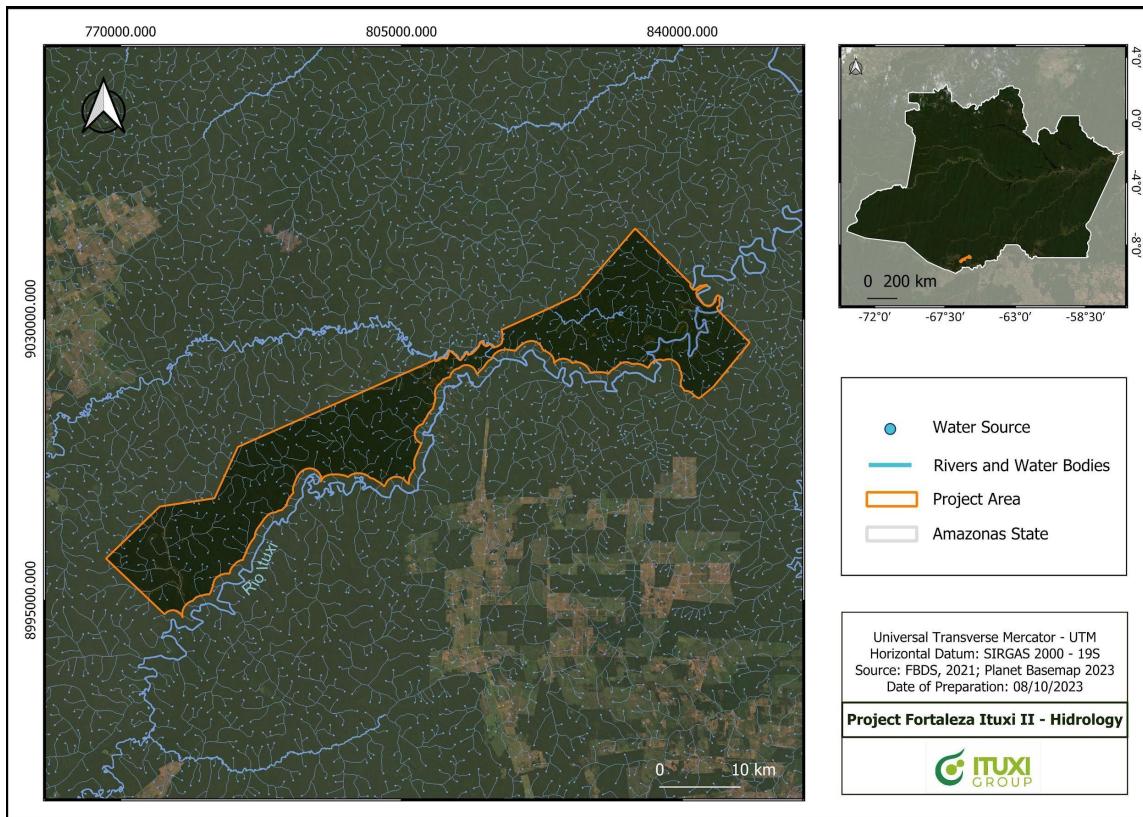


Figure 4. The rivers of the project region. Source: FBDS¹⁰.

Geology, Topography and Soils

Amazonas State is distinguished by an extensive Phanerozoic sedimentary cover (spanning the last 542 million years) deposited on a Precambrian rocky substrate (dating back between 4,5 billion years ago to the Phanerozoic era). The detail of geology classes related can be observed in Figure 5.

The predominant topography of the project region is the Amazon fluvial plain, characterised by the accumulation of sediments from the Andes¹¹.

The environmental conditions of the region promote the formation of Gleissolos soil order¹². The region has various types of soils, including Argisols, Latosols, Luvisol, Plinthosol.

¹⁰ Brazilian Foundation for Sustainable Development, 2021. Available in: <<https://geo.fbds.org.br/>>. Accessed on 10/08/2023.

¹¹ ROSS, J. L. S. Ecogeografia do Brasil, subsídios para o planejamento ambiental. São Paulo: Oficina de Texto, 2006

¹² DANTAS, M. E.; ARMESTO, R. C. G. Origem da paisagem. In: SILVA, C.R. (Ed) Geodiversidade do Brasil: conhecer o passado para entender o presente e prever o futuro. Rio de Janeiro: CPRM, 2008. p. 34-56.

The geology, topography and soil types within the project area are shown in Figures 5, 6 and 7, respectively.

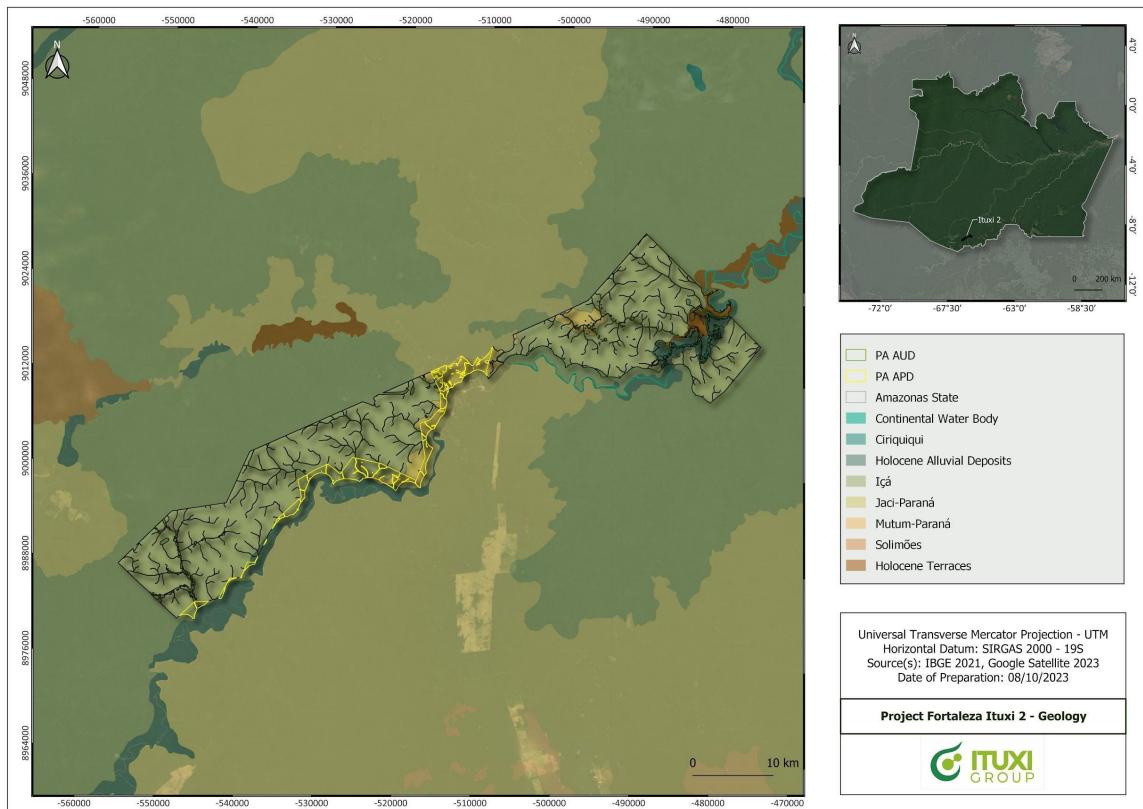


Figure 5. Geology within the project area. Source: IBGE¹³.

¹³ Brazilian Agricultural Research Corporation, 2021. Available in: <<https://portal.inmet.gov.br/paginas/catalogoaut>>. Accessed on: 10/08/2023.

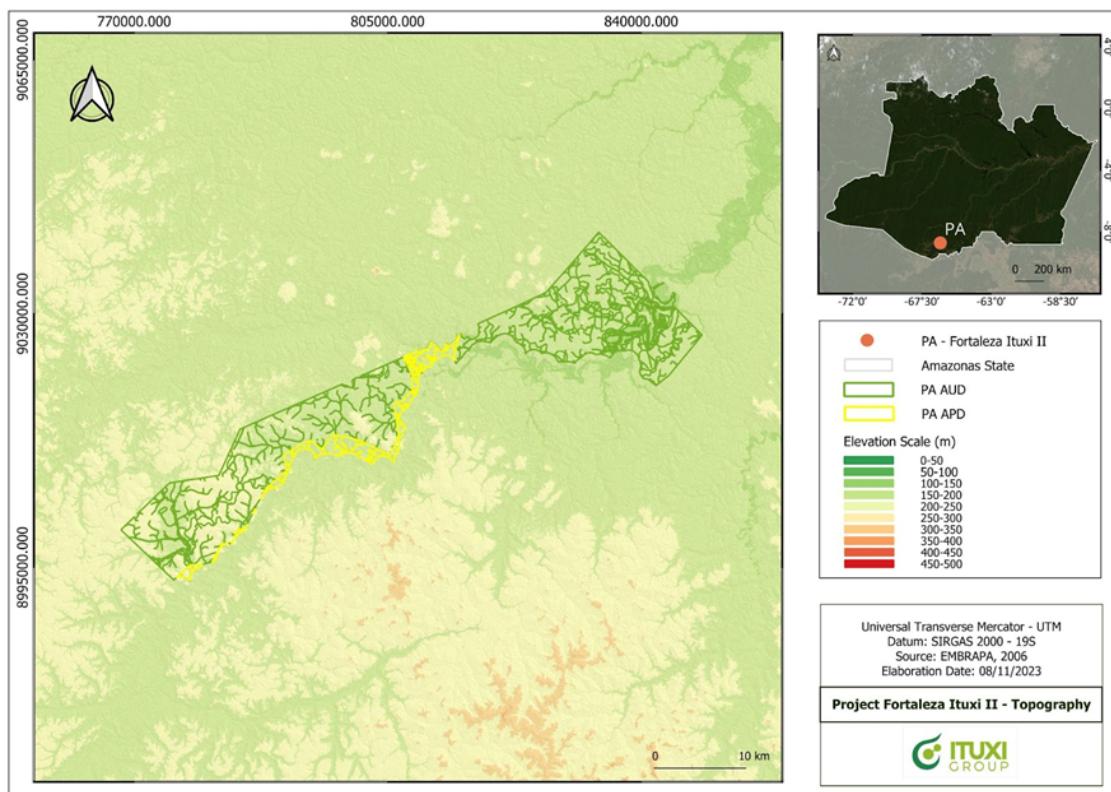


Figure 6. Topography within the project area. Source: EMBRAPA¹⁴.

¹⁴ Brazilian Agricultural Research Corporation, 2006. Available in: <<https://www.cnpm.embrapa.br/projetos/relevobr/>>. Accessed on: 10/08/2023.

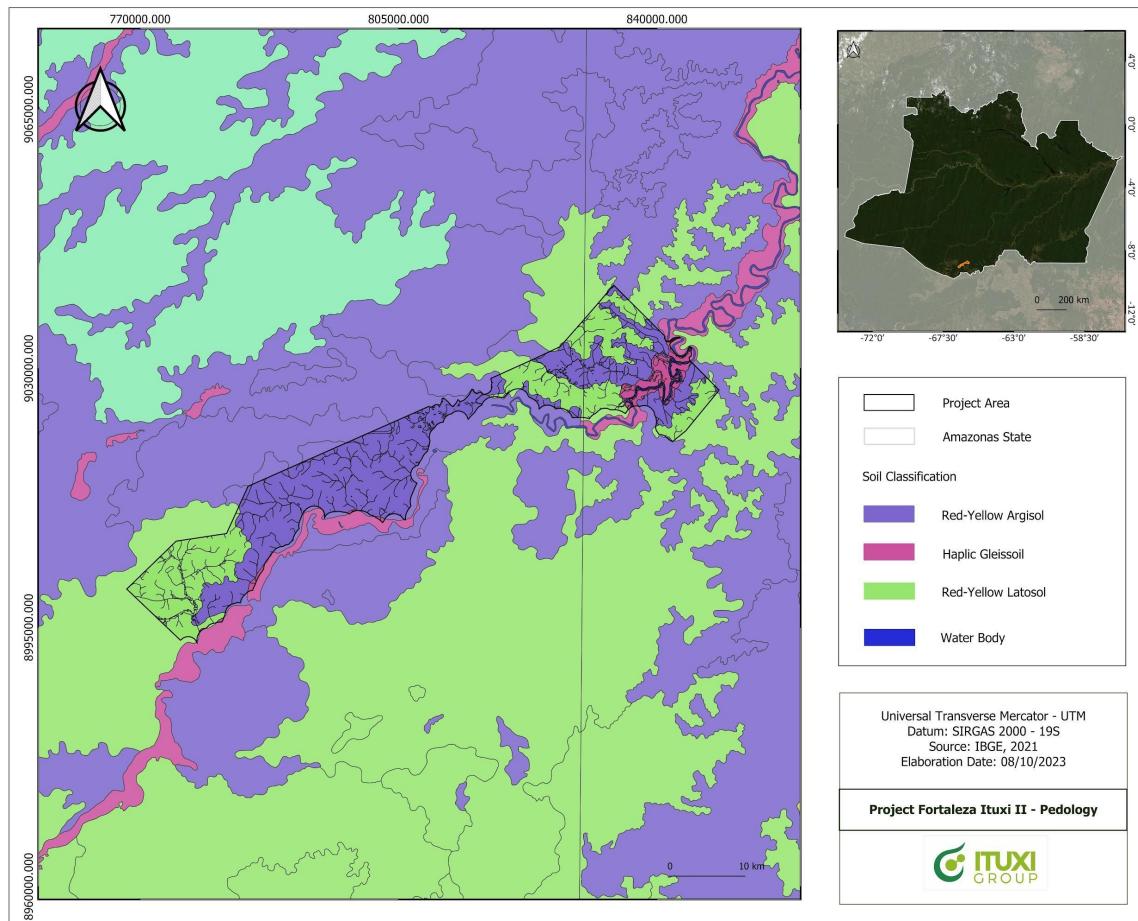


Figure 7. Soil types within the project area. Source: IBGE¹⁵.

Vegetation cover

The Amazon basin forests offer important environmental services at both local and global scale. These benefits of the tropical forest come from diverse and fragility of ecosystems, wherein any alteration can disturb its balance.

Lábrea municipality has four conservation units, two Extractive Reserves (RESEX), one National Forest (FLONA) and one National Park (PARNA).

The location and information of conservation units in the municipality of Lábrea are presented in Table 1 e Figure 8.

¹⁵ Brazilian Institute of Geography and Statistics, 2021. Available in:
<https://www.ibge.gov.br/geociencias/informacoes-ambientais/pedologia/10871-pedologia.html>. Accessed on 10/08/2023.

Table 1. Conservation Units located in Lábrea, Amazonas, Brazil¹⁶.

Conservation units (UC)	Year of creation	Area (km ²)	Percentage of the municipality's area (%)
Resex Médio Purus	2008	6,042.90	8.85
Resex Ituxi	2008	7,769.40	11.38
Flona Iquiri	2008	14,760.70	21.62
Parna Mapinguari	2008	15,724.20	23.03

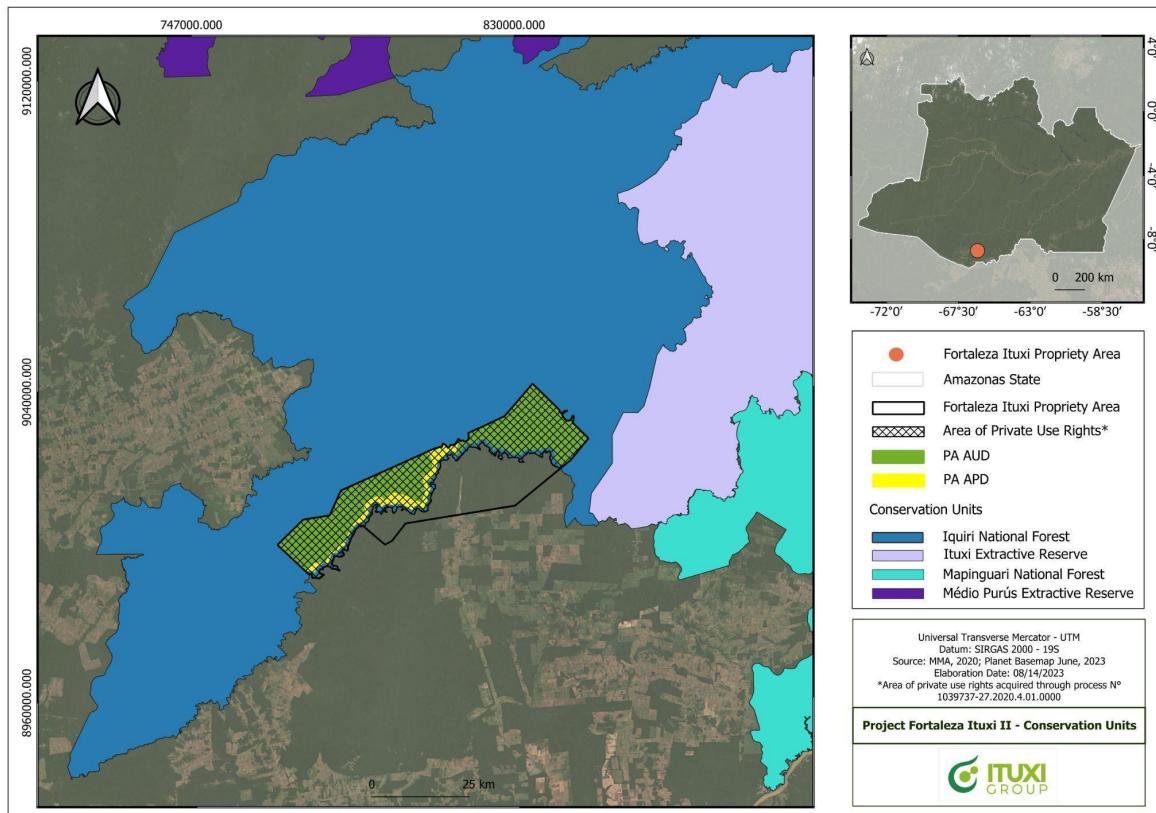


Figure 8. Conservation units in the municipality of Lábrea. Source: MMA¹⁷.

¹⁶ Ferreira, L.V.; Venticinque, E.; Almeida, S. (2005). O desmatamento na Amazônia e a importância das áreas protegidas. Estudos Avançados, 53(19), 157-166.

¹⁷ Ministry of the Environment, 2020. Available in: <<http://mapas.mma.gov.br/i3geo/datadownload.htm>>. Accessed on 10/08/2023.

In the region of the project, the vegetation consists of Dense Ombrophilous Forest, Open Ombrophilous Forest, Pioneer Formation Areas, Ecological Tension Area and Savanna¹⁸ (Figure 9).

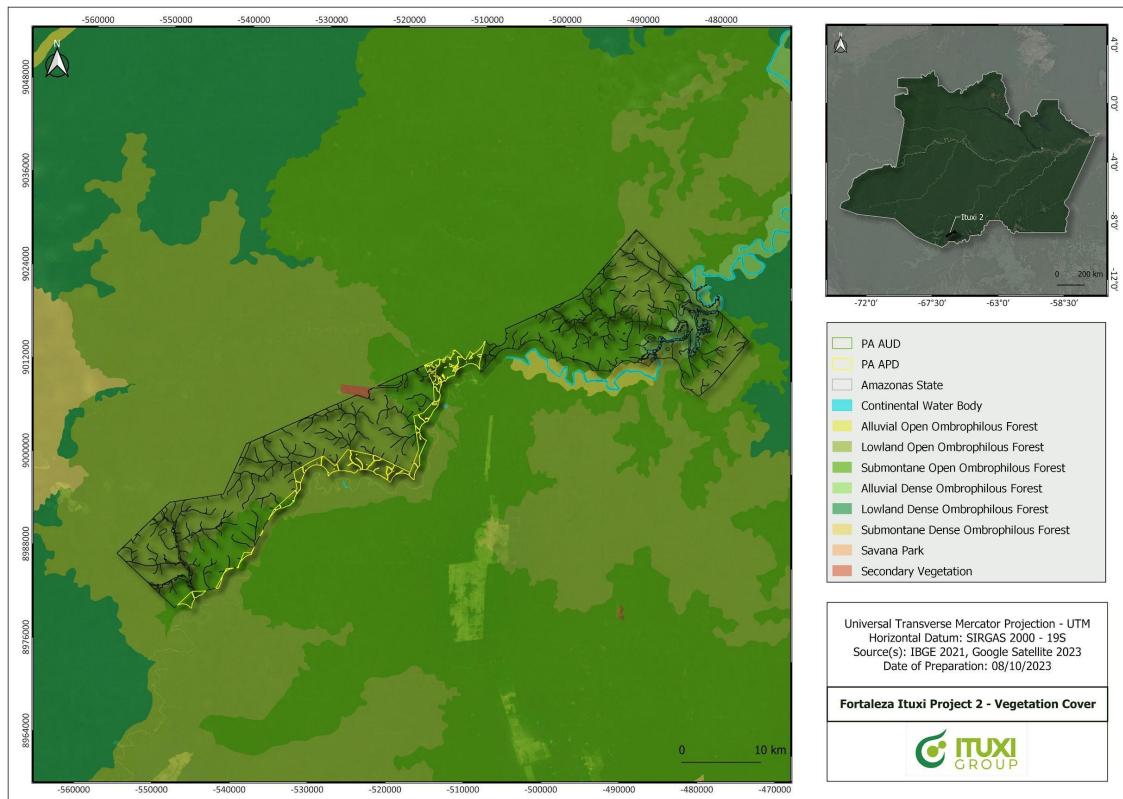


Figure 9. Vegetation cover in project region according to classification IBGE. Source: IBGE¹⁹.

Table 2. Land use and land cover in Lábrea.

Class	Hectares	%
24 - Urban infrastructure	526,809	0,01%
30 - Mining	306,867	0,00%
12 - Grassland formation	117,099	1,72%
11 - Flooded areas	7,106	0,10%
4 - Savanna formation	3,223	0,05%
3 - Forest formation	6,094,446	89,29%

¹⁸ INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA – IBGE. Dados de Cidades. Disponível em: <<http://www.cidades.ibge.gov.br/v4/brasil/am/labrea/panorama>>. Acesso em 07/08/2023.

¹⁹ Brazilian Institute of Geography and Statistics, 2018. Available in: <<https://www.ibge.gov.br/geociencias/informacoes-ambientais/vegetacao/22453-cartas-1-250-000.html>>. Accessed on 10/08/2023.

33 - Water bodies	45,670	0,67%
15 - Pasture	552,108	8,09%
41 - Other temporary cropland	5,749	0,08%
TOTAL	6,825,710	100%

In the “Nossa Senhora das Cachoeiras do Ituxi” farm (131,624,702 ha), around 99% of the landscape is formed by Ombrophilous Forests, with a small percentage of secondary vegetation and pastures.

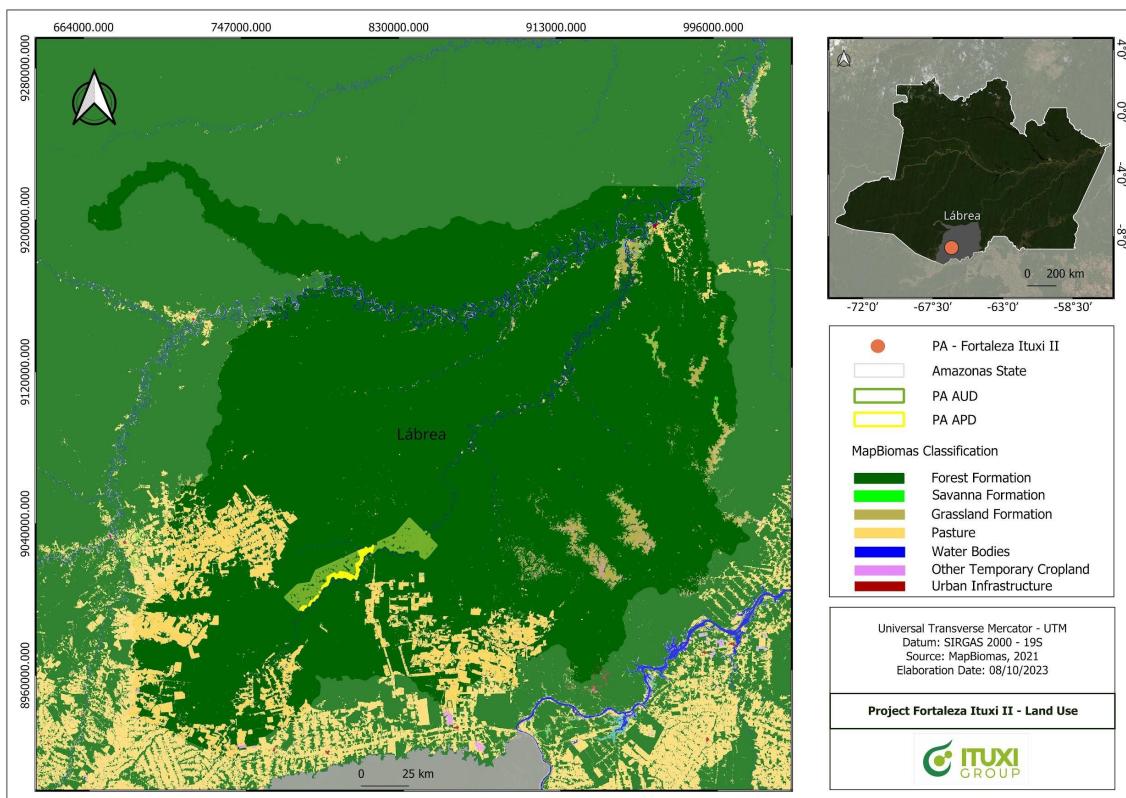


Figure 10. Land use and occupation around the project. Source: Mapbiomas²⁰.

From the potential area destined for the Ituxi II REDD+ project, a total of 69,185.87 ha was eligible for carbon project according to the criteria to define forests. The non-forest areas (ineligible for the project) as grassland formations, rocky outcrops and watercourses.

were identified by analysis of satellite images and confrontation with official national geospatial bases and were removed from the Project Area. For the APD area, the PA is

²⁰ MAPBIOMAS, 2021. Available in: <<https://mapbiomas.org/o-projeto>>. Accessed on 10/08/2023.

formed by the Open Ombrophilous Forest of Lowlands and Submontane physiognomies. In this PA, more than 90% of the area is formed by Argilossolo.

In the area of the PA related to the AUD, there is a predominance of Open Ombrophilous Forests of Lowlands and Open Ombrophilous Forest Submontane, occupying almost 95% of the area of the PA, and in the rest there is an Alluvial Dense Ombrophilous Forest and Secondary Vegetation, according to IBGE ratings. The soil observed in 95% of the PA is Argisol and Oxisol, and a smaller proportion has Gleisol (less than 3%).

Biodiversity

In 2022, the Lábrea municipality occupied the fourth position of ranking of highest annual deforestation rates in the Amazon's municipalities, registering accumulated deforestation of 3,701.31 km² and this represents 3.19% of all deforestation in the Amazon Biome²¹.

Socio-economic conditions

The Fortaleza Ituxi II is situated in Lábrea, the sixth-largest municipality in Amazonas, which has a population of 45,448 inhabitants²² over its 68,263 km², equivalent to a demographic density of 0.67 inhabit/km², a ratio below the state average. Although the municipality has less than 6 km² of urbanised areas, in 2010 about 64% of its population lived in urban areas²³.

The Human Development Index (HDI), an indicator that considers aspects of health, education and income, indicates that Lábrea has a low HDI (0.531). In the reference year, the schooling rate of its inhabitants between 6 and 14 years old was just over 85%, one of the worst rates among all municipalities in the country. In terms of health, in 2020, the average infant mortality rate in the city was 19.98 deaths per thousand live births, the 15th highest rate in the state. Add to such a precarious scenario of human development, the reference values for municipal Gross Domestic Product (GDP) for each person. In the last year cited, the income indicator pointed out that the GDP income divided by the number of inhabitants in its territory would reach R\$ 11,856.93, equivalent to 4,102nd position among the values measured among the other Brazilian municipalities. The sectors that most contributed to the municipal GDP in 2020 were, respectively:

²¹ INPE. 2022. Instituto Nacional de Pesquisas Espaciais - Prodes project: Satellite Monitoring of the Amazon Disponível em: <http://http://terrabrasilis.dpi.inpe.br/app/dashboard/deforestation/biomes/amazon/increments> Acesso em: 04/08/2023

²² Instituto Brasileiro de Geografia e Estatística. Censo demográfico 2022. Disponível em: <<https://sidra.ibge.gov.br/pesquisa/censo-demografico/demografico-2022/primeiros-resultados-populacao-e-domicilios>>. Acesso em 07/08/2023.

²³ IBGE. Censo demográfico 2010. Available in: <<https://sidra.ibge.gov.br/pesquisa/censo-demografico/demografico-2010/inicial>>. Access 07/08/2023.

Agriculture (39.24%), Administration, defence, education and public health and social security (38.06%), services (18.15%) and industry (4.53%).

In addition to the damage caused to natural ecosystems, changes in land use have caused serious social conflicts through land grabbing processes and the installation of agricultural activities, contributing to the expulsion of family forest extractivists from that region.

Over the last few decades, Lábrea has been undergoing a change in its territory characterised by the transformation of forest areas into areas for agricultural purposes, especially pasture²⁴. In 2021, the use and land cover of the municipality was predominantly forest (89%), followed by areas destined for agriculture and livestock (8%), mainly for pastures. Its urbanised area reached just over 500 hectares, equivalent to 0.01% of the total area. In Lábrea, there are also areas destined for mining under little more than 300 hectares.

1.14 Compliance with Laws, Statutes and Other Regulatory Frameworks

The following documents demonstrate compliance of the project with all and any relevant local, regional and national laws, statutes and regulatory frameworks.

International agreements:

- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), 1975;
- Cartagena Protocol on Biosafety to the Convention on Biological Diversity, 2000;
- International Tropical Timber Agreement (ITTA), 1994;
- Convention on Biological Diversity (CBD), 1992;
- United Nations Framework Convention on Climate Change (UNFCCC), 1992;
- United Nations Declaration on the Rights of Indigenous Peoples, 2007;
- Kyoto Protocol, 1997;
- Paris Agreement, 2015.

National laws:

- Brazilian Federal Constitution of 1988, under Title VIII, of the social order, in its Chapter VI, on the environment, article 225 "Everyone has the right to an ecologically balanced environment, a good for common use by the people and essential to a healthy quality of life, imposing on the Public Power and the community the duty to defend and preserve it for present and future generations" and in its 1st paragraph, item III, provides "to define, in all units of the Federation, territorial spaces and their components to be specially

²⁴ MAPBIOMAS. Plataforma Uso e Cobertura do Solo. Disponível em <<https://mapbiomas.org/>>. Acesso em 09/08/2023.

protected, alteration and deletion being permitted only by law, any use that compromises the integrity of the attributes that justify their protection is prohibited”;

Still in the aforementioned article, the Law provides in its § 4th “The Brazilian Amazon Forest, the Atlantic Forest, the Serra do Mar, the Mato-Grossense Pantanal and the Coastal Zone are national heritage, and their use will be made, in law, under conditions that ensure the preservation of the environment, including the use of natural resources”.

Art. 68. Permanent ownership is recognized for the remnants of the quilombo communities that are occupying their lands, and the State must issue them the respective titles.

Art. 215. The State will guarantee to all the full exercise of cultural rights and access to sources of national culture, and will support and encourage the appreciation and dissemination of cultural manifestations.

§ 1º The State will protect the manifestations of popular, indigenous and Afro-Brazilian cultures, and those of other groups participating in the national civilising process.

In its chapter II, which deals with social rights, in its articles nº 7, 8, 9, 10 and 11 there are labour laws.

- National Environmental Policy, provided for in Law 6,938 of 1981. The aforementioned Law determines in its Art. 6 "The bodies and entities of the Union, the States, the Federal District, the Territories and the Municipalities, as well as the foundations instituted by the Public Power, responsible for the protection and improvement of the environmental quality, will constitute the National Environment System - SISNAMA, structured like this:

“IV - executing agencies: the Brazilian Institute for the Environment and Renewable Natural Resources - IBAMA and the Chico Mendes Institute for Biodiversity Conservation - Chico Mendes Institute, with the purpose of executing and enforcing the governmental policy and guidelines established for the environment, according to their respective competences”;

Furthermore, the Law provides in its Art. 9 that "The following are instruments of the National Environmental Policy:

VI - the creation of territorial spaces specially protected by the federal, state and municipal government, such as areas of environmental protection, of relevant ecological interest and extractive reserves”.

- Forest Code, Law 12,651 of 2012. Provides for the protection of native vegetation; In your Art. 12 that:

"Every rural property must maintain an area with native vegetation cover, as a Legal Reserve, without prejudice to the application of the rules on Permanent Preservation Areas, observing the following minimum percentages in relation to the area of the property, except for the cases provided for in art. 68 of this Law:

I - located in the Legal Amazon:

- a) 80% (eighty percent), of the property located in a forested area;
- b) 35% (thirty-five percent), in the property located in a cerrado area;
- c) 20% (twenty percent), of the property located in an area of general fields;

Also, its article 4 provides that "A Permanent Preservation Area is considered, in rural or urban areas, for the purposes of this Law:

I - the marginal strips of any perennial and intermittent natural watercourse, excluding ephemeral ones, from the edge of the channel of the regular bed, with a minimum width of:

- a) 30 (thirty) metres, for water courses less than 10 (ten) metres wide;
- b) 50 (fifty) metres, for water courses that are from 10 (ten) to 50 (fifty) metres wide;
- c) 100 (one hundred) metres, for water courses that are 50 (fifty) to 200 (two hundred) metres wide;
- d) 200 (two hundred) metres, for water courses that are from 200 (two hundred) to 600 (six hundred) metres wide;
- e) 500 (five hundred) metres, for water courses that are more than 600 (six hundred) metres wide;

II - the areas surrounding natural lakes and ponds, in a strip with a minimum width of:

- a) 100 (one hundred) metres, in rural areas, except for water bodies with up to 20 (twenty) hectares of surface, whose marginal range will be 50 (fifty) metres;"
- National Policy on Climate Change, provided for in Law 12,187 of December 29, 2009.
- National Payment Policy for Environmental Services, provided for in Law 14,119 of January 13, 2021. This Law establishes the National Payment Registry for Environmental Services (CNPSA) and the Federal Payment for Environmental Services Program (PFPSA).
- Civil Code, instituted by Law 10,406 of January 10, 2002. Article 1245 "Transfers between living persons to property Civil Code, instituted by Law 10,406 of January 10, 2002".

Art. 1,238. Whoever, for fifteen years, without interruption or opposition, owns a property as his own, acquires the property, regardless of title and good faith; being able to request the judge to declare it so by sentence, which will serve as a title for the registration in the Real Estate Registry Office.

Art. 1,242. The person who, continuously and undisputedly, with just title and in good faith, owns it for ten years also acquires the property of the property.

- Code of Civil Procedure, Law 13,105 of March 16, 2015.
- Statute of the Indigenous, Law 6,001 of December 19, 1973.
- National Policy for Sustainable Development of Traditional Peoples and Communities, instituted by Decree 6,040, of February 7, 2007. Art. 3. "I - Traditional Peoples and Communities: culturally differentiated groups that are recognized as such, that have their own forms of social organisation, that occupy and use territories and natural resources as a condition for their cultural, social, religious, ancestral and economic reproduction, using knowledge, innovations and practices generated and transmitted by tradition;"

III - Sustainable Development: the balanced use of natural resources, aimed at improving the quality of life of the present generation, guaranteeing the same possibilities for future generations.

- Consolidation of Labour Laws (CLT), Decree-Law No. 5,452, May 1, 1943.
- Regulatory Norms for Rural Work, established by Law 5,889 of June 8, 1973.

Amazon State Laws:

- State Law No. 3,785, July 24, 2012, provides for environmental licensing in the state of Amazonas.
- Law No. 3,789, July 27, 2012, provides for forest replacement in the state of Amazonas.
- State Decree No. 32,986, November 30, 2012. Regulates Law No. 3,789/2012, which provides for forest replacement in the State of Amazonas.

1.15 Participation under Other GHG Programs

1.15.1 Projects Registered (or seeking registration) under Other GHG Program(s)

This project has not been registered and is not seeking registration under any other GHG Programs.

1.15.2 Projects Rejected by Other GHG Programs

Not applicable. This project is not requesting registration in any other GHG Programs, nor has the project been rejected by any other GHG programs.

1.16 Other Forms of Credit

1.16.1 Emissions Trading Programs and Other Binding Limits

Does the project reduce GHG emissions from activities that are included in an emissions trading program or any other mechanism that includes GHG allowance trading?

Yes No

If yes, provide the name of the emissions trading program or other mechanism that allows GHG allowance trading.

Not applicable.

1.16.2 Other Forms of Environmental Credit

Has the project sought or received another form of GHG-related credit, including renewable energy certificates?

Yes No

If yes, provide the name of the other program(s) under which the project has sought or received another form of GHG-related credit.

Not applicable.

Supply Chain (Scope 3) Emissions

The reductions in GHG emissions from the Fortaleza Ituxi II REDD project are not in a supply chain, i.e., there is no network of organisations (e.g., manufacturers, wholesalers, distributors, and retailers) involved in the production, delivery, and sale of a product or service to the consumer. Therefore, there are no organisations upstream and downstream of the goods and services whose GHGs are impacted by the present REDD project activity.

1.17 Sustainable Development Contributions

The main objective of the Fortaleza Ituxi II REDD+ project is to avoid the planned deforestation (APD) and the unplanned deforestation (AUD) of its project areas, consisting of 100% Amazon rainforest.

Furthermore, the project has the function of establishing a barrier against the advancement of deforestation, making an important contribution to the conservation of Amazon biodiversity and also to climate regulation in Brazil and South America. These

measures contribute to several nationally stated sustainable development priorities, such as the objectives from the Brazilian Government related to the UN Sustainable Development Goals (SDGs) and the Nationally Determined Contribution (NDC).

1.18 Additional Information Relevant to the Project

Leakage Management

Section not required for Draft Projection Description. Further information will be inserted into the fully complete Draft Projection Description Version 1.

Commercially Sensitive Information

Section not required for Draft Projection Description. Further information will be inserted into the fully complete Draft Projection Description Version 1.

Further Information

Section not required for Draft Projection Description. Further information will be inserted into the fully complete Draft Projection Description Version 1.

2 SAFEGUARDS

2.1 No Net Harm

Section not required for Draft Projection Description. Further information will be inserted into the fully complete Draft Projection Description Version 1.

2.2 Local Stakeholder Consultation

Section not required for Draft Projection Description. Further information will be inserted into the fully complete Draft Projection Description Version 1.

2.3 Environmental Impact

Section not required for Draft Projection Description. Further information will be inserted into the fully complete Draft Projection Description Version 1.

2.4 Public Comments

Section not required for Draft Projection Description. Further information will be inserted into the fully complete Draft Projection Description Version 1.

2.5 AFOLU-Specific Safeguards

Section not required for Draft Projection Description. Further information will be inserted into the fully complete Draft Projection Description Version 1.

3 APPLICATION OF METHODOLOGY

3.1 Title and Reference of Methodology

The Fortaleza Ituxi REDD+ project is applying to the Verified Carbon Standard (VCS) with the intention to reduce CO₂ emissions from unplanned (AUD) and planned (APD) deforestation compared to the baseline levels. As required by VM0007, the project area consists of contiguous and discrete areas covered by forests that meet the definition of eligible forest, which would be an area that has been forested for at least 10 years prior to the project start date.

The list below refers to the methodologies, modules and tools used in this project scope:

Approved VCS Methodology:

- VM0007 “REDD+ Methodology Framework (REDD+ MF)”, v1.6.²⁵

Carbon pool modules:

- VMD0001 “Estimation of carbon stocks in the above and belowground biomass in live tree and non tree pools” (CP AB), v1.1”.²⁶
- VMD0005 “Estimation of carbon stocks in the long-term wood products pool” (CP W), v1.1”.²⁷

Baseline module:

²⁵ Available at: <https://verra.org/methodology/vm0007-redd-methodology-framework-redd-mf-v1-6/>. Last visited on August, 8th, 2023.

²⁶ Available at:

<https://verra.org/methodologies/vmd0001-estimation-of-carbon-stocks-in-the-above-and-belowground-biomass-in-live-tree-and-non-tree-pools-cp-ab-v1-1/>. Last visited on August 8th, 2023.

²⁷ Available at: <https://verra.org/methodologies/vmd0005-estimation-carbon-stocks-long-term-wood-products-pool-cp-w-v1-1/>. Last visited on August 8th, 2023.

- VMD0006 “Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation/forest degradation and planned wetland degradation (BL PL), v1.3”.²⁸
- VMD0007 “Estimation of baseline carbon stock changes and greenhouse gas emissions from unplanned deforestation and unplanned wetland degradation” (BL UP), v3.3”.²⁹

Leakage modules:

- VMD0009 “Estimation of emissions from activity shifting for avoided planned deforestation/forest degradation and avoided planned wetland degradation (LK ASP), v1.3”.³⁰
- VMD0010 “Estimation of emissions from activity shifting for avoiding unplanned deforestation and avoiding unplanned wetland degradation (LK ASU), v1.2”.³¹
- VMD0011 “Estimation of emissions from market effects” (LK ME), v1.1”.³²

Miscellaneous Modules:

- VMD0013 “Estimation of greenhouse gas emissions from biomass and peat burning (E BPB), v1.2”.³³
- VMD0016 “Methods for stratification of the project area (X STR), v1.2”.³⁴
- VMD0017 “Estimation of uncertainty for REDD project activities (X UNC), v2.2”.³⁵

Tools:

- “Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities (T ADD), Version 01”.

²⁸ Available at:

<https://verra.org/methodologies/vmd0006-estimation-of-baseline-carbon-stock-changes-and-greenhouse-gas-emissions-from-planned-deforestation-and-planned-degradation-bl-pl-v1-3/>. Last visited on August 8th, 2023.

²⁹ Available at:

<https://verra.org/methodologies/vmd0007-estimation-of-baseline-carbon-stock-changes-and-greenhouse-gas-emissions-from-unplanned-deforestation-bl-up-v3-3/>. Last visited on August 8th, 2023.

³⁰ Available at:

<https://verra.org/methodologies/vmd0009-estimation-of-emissions-from-activity-shifting-for-avoided-planned-deforestation-lk-asp-v1-3/>. Last visited on August 8th, 2023.

³¹ Available at:

<https://verra.org/methodologies/vmd0010-estimation-of-emissions-from-activity-shifting-for-avoided-unplanned-deforestation-lk-asu-v1-2/>. Last visited on August 8th, 2023.

³² Available at: <http://verra.org/methodologies/vmd0011-estimation-of-emissions-from-market-effects-lk-me-v1-1/>. Last visited on August 8th, 2023.

³³ Available at:

<https://verra.org/methodologies/vmd0013-estimation-of-greenhouse-gas-emissions-from-biomass-and-peat-burning-e-bpb-v1-2/>. Last visited on August 8th, 2023.

³⁴ Available at: <https://verra.org/methodologies/vmd0016-methods-for-stratification-of-the-project-area-x-str-v1-2/>. Last visited on August 8th, 2023.

³⁵ Available at: <https://verra.org/methodologies/vmd0017-estimation-of-uncertainty-for-redd-project-activities-x-unc-v2-2/>. Last visited on August 8th, 2023.

- CDM “Executive Board “Tool for testing significance of GHG emissions in A/R CDM project activities (Version 01)” EB 31³⁶.
- AFOLU “Non Permanence Risk Tool”, Procedural Document, VCS, v4.0.120.

3.2 Applicability of Methodology

Applicability Conditions	Justification of Applicability
VM0007 REDD Methodology Framework: All Project Activities	
<p>All land areas registered under the CDM or under any other GHG program (both voluntary and compliance oriented) must be transparently reported and excluded from the project area. The exclusion of land in the project area from any other GHG program must be monitored over time and reported in the monitoring reports.</p>	<p>The project area does not have any area registered as CDM or any other GHG program (voluntary or compliance). Therefore, there is no exclusion of areas</p>
VM0007 REDD Methodology Framework: All REDD Activity Types	
<p>Land in the project area has qualified as forest (following the definition used by VCS) for at least 10 years before the project start date.</p>	<p>The project area is qualified and meets the condition, with the ecosystem functioning as a forest in the period between 2011 and 2021 for AUD category, and for APD category in the period between 2012 and 2023.</p>

³⁶ Available at: <https://cdm.unfccc.int/methodologies/ARmethodologies/tools/ar-am-tool-04-v1.pdf>. Last visited on August 8th, 2023.

<p>If land within the project area is peatland or tidal wetlands and emissions from the SOC pool are deemed significant, the relevant WRC modules must be applied alongside other relevant modules.</p>	<p>Not applicable. The area is not peatland or tidal wetland. As can be seen in Figure 7, indicating that there is no presence of organic soils. Source: IBGE/BDIA³⁷.</p>
<p>Baseline deforestation and forest degradation in the project area fall within one or more of the following categories:</p> <ul style="list-style-type: none"> ● Unplanned deforestation (VCS category AUD); ● Planned deforestation/degradation (VCS category APD) 	<p>The baseline deforestation and forest degradation in the project area fall within the Categories: Unplanned and planned deforestation (AUD and APD categories).</p>
<p>Leakage avoidance activities must not include:</p> <ul style="list-style-type: none"> ● Agricultural lands that are flooded to increase production (e.g., rice paddy); ● Intensifying livestock production using feedlots and/or manure lagoons. 	<p>Leakage avoidance activities do not include flooding agricultural land or creating feed-lots or manure lagoons. Such activities are not common in the project region.</p>

VM0007 REDD Methodology Framework: Avoiding Unplanned Deforestation

³⁷ Brazilian Institute of Geography and Statistics, 2021. Available in:

<<https://www.ibge.gov.br/geociencias/informacoes-ambientais/pedologia/10871-pedologia.html>>. Accessed on 10/08/2023.

<p>Baseline agents of deforestation must: (i) clear the land for tree harvesting, settlements, crop production (agriculturalist) or ranching or aquaculture, where such clearing for crop production or ranching or aquaculture does not amount to large scale industrial agriculture or aquaculture activities; (ii) have no documented and uncontested legal right to deforest the land for these purposes; and (iii) be either resident in the reference region for deforestation or immigrants. Under any other condition, this methodology must not be used.</p>	<p>(i) The baseline drivers of deforestation are small-scale farmers, who convert land to small-scale crops and pasture production. (ii) The agents of deforestation, according to geospatial data, have no right to deforest the land, since land use in protected areas is not allowed, as Permanent Protection Areas and Legal Reserve;</p> <p>(ii) According to section 3.4, the agents of deforestation are local residents in the reference region.</p>
<p>If in the baseline scenario of avoiding unplanned deforestation project activities, post-deforestation land use constitutes reforestation, this methodology may not be used</p>	<p>Within the area of the project, the post-deforestation land use constitutes livestock and agriculture. Reforestation does not constitute post-deforestation land use of the project.</p> <p>According to sections 3.3 and 3.4 and geospatial images, reforestation is not a common practice in Brazilian land use economics.</p>

VM0007 REDD Methodology Framework: Avoiding Planned Deforestation/Degradation

<p>Where conversion of forest lands to a deforested condition must be legally permitted.</p>	<p>Legal deforestation, in the project zone, must follow the parameters of Brazilian law 12,651/2012. It states that Private properties, in the Amazon biome, can deforest up to 20% for other land uses. Furthermore, even protected areas within private properties can be legally permitted to deforest if it is for a common purpose, such as infrastructure projects, but then requested by the public power.</p>
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Applicability conditions of VMD0001 - CP-AB

This module is applicable to all forest types and age classes.	The module is applicable to the uneven-aged forest types of the project.
Inclusion of the aboveground tree biomass pool as part of the project boundary is mandatory as per the framework module REDD-MF.	The aboveground tree biomass pool is included, being the most significant pool.
<p>Non-tree aboveground biomass must be included as part of the project boundary if the following applicability criteria are met (per framework module REDD-MF):</p> <p>Stocks of non-tree aboveground biomass are greater in the baseline than in the project scenario;</p> <p>Non-tree aboveground biomass is determined to be significant (using the T-SIG module).</p>	Above-ground non-tree biomass was included when it was determined to be significant (using the T-SIG module).
Belowground (tree and non-tree) biomass are not required for inclusion in the project boundary because omission is conservative.	Belowground (tree and non-tree) biomass is included, when it is determined to be significant (using the T-SIG module).
This module is applicable to all forest types and age classes.	The module is applicable to the uneven-aged forest types of the project.
This module is applicable if the dead wood pool is included as part of the project boundary.	This pool is excluded when it does not represent a significant component of the forest biomass.

<h3 style="text-align: center;">Applicability conditions of VMD0006 - BL-PL</h3>	
The module is applicable for estimating the baseline emissions on forest lands (usually privately or government-owned) that are legally authorised and documented to be converted to non-forest land.	Project activities involve avoiding planned deforestation (APD), so the module is applicable. Legal deforestation in the country is regulated by the Brazilian Forest Code (Law No. 12,651/2012) and associated state legislation. There are no legal limits on which proportion of the farm can be legally deforested each year.
	The proponents have the official request documentation that an application for approval has been filed with the relevant government department for permission to clear and convert 20% of the property to alternative land use.
Where, pre-project, unsustainable fuelwood collection is occurring within the project boundaries, Modules BL-DFW and LK-DFW must be used to determine potential leakage.	Unsustainable fuelwood collection was not identified within the project boundary in the initial consultations with stakeholders in the project activity. This will be verified on monitoring occasions.
<h3 style="text-align: center;">Applicability conditions of VMD0007 - BL-UP</h3>	
The module must be applied to all project activities where the baseline agents of deforestation: (i) clear the land for settlements, crop production (agriculturalist), ranching, or aquaculture, where such clearing for crop production, ranching, or aquaculture does not amount to large-scale industrial Agri/aquaculture activities; (ii) have no documented and uncontested legal right	In the baseline scenario, deforestation agents convert land to livestock and small-scale agricultural production, where there is no legal right to clean the land for these purposes; agents are local residents of the region or immigrants seeking land for land use as pasture.

<p>to deforest the land for these purposes; and (iii) are either resident in the region or immigrants.</p>	
<p>Where pre-project, unsustainable fuelwood collection is occurring within the project boundaries, Modules BL-DFW and LK-DFW must be used to determine potential leakage.</p>	<p>Unsustainable fuelwood collection was not identified within the project boundary in the initial consultations with stakeholders in the project activity. This will be verified on monitoring occasions.</p>

Applicability conditions of VMD0009 - LK-ASP

<p>The module is applicable for estimating the leakage of emissions due to activity shifting from forest lands that are legally authorised and documented to be converted to non-forest land, including activity shifting to a forested wetland that is drained or degraded because of project implementation.</p>	<p>The activities of the project involve avoiding planned deforestation (APD) because the project area has legal permissibility for land conversion, so that the module is applicable.</p>
<p>This module must be used for projects in areas where planned deforestation happens on forested wetlands, regardless of the absence of wetlands within the project boundaries.</p>	<p>There are no wetlands in the project area. See section 3.3.</p>
<p>The module is mandatory if Module BL-PL has been used to define the baseline, and the applicability conditions in Module BL-PL must be complied with in full.</p>	<p>The BL-PL module is applied to the project and meets the established applicability conditions.</p>

Applicability conditions of VMD0010 - LK-ASU

<p>This Module is applicable for estimating carbon stock changes and greenhouse gas emissions related to the displacement of activities that cause deforestation of lands outside the project area due to the avoided unplanned deforestation in the project area.</p> <p>Activities subject to potential displacement are the conversion of forest land to grazing lands, crop lands, and other land uses.</p>	<p>The activities of the project involve avoiding unplanned deforestation (AUD), so the displacement of these activities should be monitored, since the pressure for deforestation in the project area includes the conversion of forest land into grazing lands and crop lands.</p>
<p>The module is mandatory if module BL-UP has been used to define the baseline and the applicability conditions in module BL-UP must be complied with in full.</p>	<p>The BL-UP module is applied to the project and meets the established applicability conditions.</p>

Applicability conditions of VMD0011 - LK ME

<p>This module is applicable for calculating market-effects leakage from REDD projects that are anticipated to reduce levels of wood harvest substantially and permanently. When REDD project activities result in reductions in wood harvest, it is likely that production could shift to other areas of the country to compensate for the reduction.</p> <p>As referenced in the Framework (REDD-MF) the module is mandatory where:</p>	<p>Where REDD project activities result in reductions in timber harvest, it is likely that production can be transferred to other areas of the country to compensate for the reduction. The module is required when the deforestation process involves harvesting timber for commercial markets (Commercial markets are defined here as the sale of products to end-users and public and private companies. Public and private companies with sales carried</p>
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<ul style="list-style-type: none"> • The process of deforestation involves timber harvesting for commercial markets³⁸ • The baseline is calculated using BL-DFW AND fuel wood or charcoal is harvested for commercial markets <p>In all other circumstances, the module shall not be used.</p>	<p>out at a distant distance (>50 km) from the project area).</p> <p>In the case of the project, the deforestation process in the baseline involves commercial logging, as a common practice of landowners in the region.</p>
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Applicability conditions of VMD0013 - E-BPB

<p>This module provides a step-wise approach for estimating greenhouse emissions from biomass and peat burning. This module is applicable to REDD project activities with emissions from biomass burning</p>	<p>In the baseline scenario, fire is used to clear the land, and emissions of CO₂, N₂O and CH₄ result. Where used in the baseline, accounting must occur under both the baseline and with project scenarios in both the project area and in the leakage belt. Where fires occur ex post in areas that coincide with areas deforested or degraded in the baseline case, the module shall be used to account greenhouse gas emissions.</p>
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Applicability conditions of VMD0016 - X-STR

<p>This module provides guidance on stratifying the project area into discrete, relatively homogeneous units to improve accuracy and precision of carbon stock and carbon stock change estimates.</p>	<p>Any module referencing strata shall be used in combination with this module. Strata are only used for pre-deforestation forest classes and are the same in baseline and project cases. Post deforestation (conversion) land uses are not stratified, instead using average post deforestation stock values.</p>
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³⁸ Commercial markets here defined as sale of products to end users and public and private companies with sales conducted distant (>50km) from the project area

Applicability conditions of VMD0017 - X-UNC	
This module is applicable for estimating the uncertainty of estimates of emissions and removals of CO ₂ e generated from REDD and WRC project activities.	This module is mandatory when using the methodology REDD+ MF, which is applied to the project. Guidance on uncertainty a precision target of a 95% confidence interval half width equal to or less than 15% of the recorded value must be targeted. This is especially important in terms of project planning for measurement of carbon stocks; sufficient measurement plots should be included to achieve this precision level across the measured stocks.
Applicability conditions of VMD0015 - M-REDD	
Strata, as defined in the relevant baseline modules, are fixed and may not be changed without baseline revision. The module is mandatory for REDD, CIW-REDD, RWE-REDD, and stand-alone CIW project activities. Where selective logging is taking place in the project case: <ul style="list-style-type: none">• Emissions from logging may be omitted if it can be demonstrated the emissions are de minimis using Tool T-SIG.• If emissions from logging are not omitted as de minimis, logging may only take place within forest management areas that possess and maintain a Forest Stewardship Council (FSC) certificate for	The module is mandatory. In addition, the stratification is fixed ex-ante for the baseline and will not be changed and there are no selective logging activities taking place in the project area. The other conditions do not apply.

<p>the years when the selective logging occurs.</p> <ul style="list-style-type: none">• Logging operations may only conduct selective logging that maintains a land cover that meets the definition of forest within the project boundary.• All trees cut for timber extraction during logging operations must have a DBH greater than 30 cm.• During logging operations, only the bole/log of the felled tree may be removed. The top/crown of the tree must remain within the forested area.• The logging practices cannot include the piling and/or burning of the logging slash.• The volume of timber harvested must be measured and monitored.	
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Applicability conditions of Tool VT0001 - T-ADD

AFOLU activities the same or similar to the proposed project activity on the land within the proposed project boundary performed with or without being registered as the VCS AFOLU project shall not lead to violation of any applicable law even if the law is not enforced	As stated in the section 1.14, the project is in compliance with all relevant laws, statutes, and regulatory frameworks.
The use of this tool to determine additionality requires the baseline methodology to provide for a stepwise approach justifying the determination of the most plausible baseline scenario. Project Proponent(s) proposing new baseline methodologies shall ensure consistency between the determination	The approach to defining the baseline scenario using this tool was described in the section 3.4.

of a baseline scenario and the determination of additionality of a project activity.

Applicability conditions of AFOLU Non-Permanence Risk Tool

There are no internal applicability conditions

This tool does not provide any applicability conditions. For additional information regarding the risk assessment and buffer determination assumptions, please refer to section 4.

3.3 Project Boundary

Section not required for Draft Projection Description. Further information will be inserted into the fully complete Draft Projection Description Version 1.

3.4 Baseline Scenario

Section not required for Draft Projection Description. Further information will be inserted into the fully complete Draft Projection Description Version 1.

3.5 Additionality

Section not required for Draft Projection Description. Further information will be inserted into the fully complete Draft Projection Description Version 1.

3.6 Methodology Deviations

Section not required for Draft Projection Description. Further information will be inserted into the fully complete Draft Projection Description Version 1.

4 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

4.1 Baseline Emissions

Section not required for Draft Projection Description. Further information will be inserted into the fully complete Draft Projection Description Version 1.

4.2 Project Emissions

Section not required for Draft Projection Description. Further information will be inserted into the fully complete Draft Projection Description Version 1.

4.3 Leakage

Section not required for Draft Projection Description. Further information will be inserted into the fully complete Draft Projection Description Version 1.

4.4 Net GHG Emission Reductions and Removals

Section not required for Draft Projection Description. Further information will be inserted into the fully complete Draft Projection Description Version 1.

5 MONITORING

5.1 Data and Parameters Available at Validation

Section not required for Draft Projection Description. Further information will be inserted into the fully complete Draft Projection Description Version 1.

5.2 Data and Parameters Monitored

Section not required for Draft Projection Description. Further information will be inserted into the fully complete Draft Projection Description Version 1.

5.3 Monitoring Plan

Section not required for Draft Projection Description. Further information will be inserted into the fully complete Draft Projection Description Version 1.