

JURISDICTIONAL REDD+ PROGRAM IN MISIONES, ARGENTINA









Document Prepared By Coralia Environmental, Fundación Huellas para un Futuro, and SinergiAr

Jurisdictional REDD+ Program Title	Jurisdictional REDD+ Program in Misiones, Argentina
Version	2.1
Date of Issue	31-January-2025
Scenario	2
Nested Elements	The jurisdictional program will allow the registration of lower-level projects, and both the jurisdictional program and the nested projects can request the issuance of Verified Carbon Units (VCUs) (scenario 2a).
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Acronyms

AFOLU Agriculture, Forestry and Other Land Use

BSM Benefit-Sharing Mechanism COFEMA Federal Environment Council

FAO Food and Agriculture Organization of the United Nations

FREL Forest Reference Emission Level

GCF Green Climate Fund GHG Greenhouse gases

GPM Government of the Province of Misiones

ILO International Labour Organization

IPCC Intergovernmental Panel on Climate Change

MAyDS Ministry for the Environment and Sustainable Development
MEyRNR Ministry of Ecology and Renewable Natural Resources
MHFOySP Ministry of Finance, Public Works, and Public Services

NEA Northeast Argentina

NFMS National Forest Monitoring Systems
NGO Non-Governmental Organization

NOA Northwest Argentina

OTBN Territorial Planning of Native Forests

PANByCC National Action Plan on Forests and Climate Change

PBNyC Forests and Community Project PGCF Forest Basin Management Plan

RBP Result-based Payments

REDD+ United Nations Programme on 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

SDGs Sustainable Development Goals SFM Sustainable Forest Management

SIS-AR Argentine Safeguard Information System for REDD+
SNMBN National System for Monitoring Native Forests

UNDP United Nations Development Programme

UNFCCC United Nations Framework Convention on Climate Change

UN-REDD United Nations Programme on Reducing Emissions from Deforestation and Forest

Degradation in developing countries

VCS Verified Carbon Standard VCU Verified Carbon Unit

VVB Validation y Verification Body



1. JURISDICTIONAL REDD+ PROGRAM DETAILS

1.1. Summary Description of the Jurisdictional REDD+ Program

The objective of the Jurisdictional REDD+ Program in Misiones (the "Program") is to develop measures, incentives, and safeguard systems to protect both public and privately owned native forests in the province of Misiones in a manner that ensures transparency and benefit sharing for all key stakeholders. The Program proponent is the Government of the Province of Misiones ("GPM") through the Misiones Ministry of Finance, Facilities and Public Services. The Misiones Ministry of Ecology and Renewable Natural Resources is leading its implementation.

Misiones is located between parallels 25° 28' and 28° 10' South Latitude and meridians 53° 38' and 56° 03' West Longitude in the Northeast Region of the Republic of Argentina. The province is one administrative level below the national level and is politically organized into seventeen departments, divided into 78 municipalities¹.

The activity in the Agriculture, Forestry and Other Land Use sector (AFOLU) of the UNFCCC included in this Program is reducing emissions from deforestation of native forests (REDD+), which aligns with the Intergovernmental Panel on Climate Change (IPCC) category of conversion of forest to non-forest land.

The Provincial Climate Change Response Plan of Misiones², developed by the Provincial Climate Change Cabinet, provides the main framework within which the Program operates. The implementation of the action plan enables a process that efficiently addresses the challenges posed by climate change in a coordinated manner and in alignment with the country's needs. The Program will address two key aspects: (i) the adoption of climate change adaptation measures and (ii) the development of policies, measures, and actions that contribute to limiting and reducing greenhouse gas (GHG) emissions without compromising the sustainable development of the province.

The main drivers of deforestation in Misiones are the advance of the agricultural (including perennial and annual crops) and livestock sectors, commercial forestry and, to a minor extent, the increase of human settlements. Fires are primarily caused by the conversion of forests to agricultural and livestock farming, sometimes resulting in uncontrollable conditions due to climate change that has intensified droughts in recent years. To address these drivers, the GPM has implemented measures (Section 1.10) to comply with the National Law n° 26,331³ through the enactment of the Provincial Law XVI n° 105 on Native Forest

https://ipecmisiones.org/wp-content/uploads/2022/07/IPEC-Anuario-Estad%C3%ADstico-de-Misiones-2020.pdf

¹ Anuario Estadístico de Misiones, 2020.

² Ministerio de Cambio Climático. Subsecretaria de Gestión, Desarrollo Sostenible e Innovación,

https://cambioclimatico.misiones.gob.ar/plan-de-respuesta-misiones/

³ Argentinian Forest Law 26,331, enacted in 2007, is a comprehensive legal framework aimed at regulating and promoting sustainable forest management and conservation practices in Argentina. It establishes the minimum environmental protection standards for the enrichment, restoration, conservation, sustainable use, and management of native forests. It also creates a promotion system to compensate holders of native forests for the environmental services they provide through the National Fund for the Enrichment and Conservation of Native Forests. Decree 91/2009 approves the regulations for this law. Under the law, each province must enact a law that determines a land-use planning of its native forests, following the guidelines set out in national regulations and based on three conservation categories. https://www.argentina.gob.ar/normativa/nacional/ley-26331-136125



Territorial Planning and the update of the Territorial Planning Resolution 265/2017, the development of the 2022-2032 Strategic Plan for Native Forests, and the Provincial REDD+ Strategy (EPREDD+). This enables implementation of measures additional to those already undertaken by the province in terms of implementing Law XVI n° 60 on Green Corridors, Law XVI n° 53 on Protective Forests, and Law XVI n° 103 on Payments for Environmental Services. Additionally, the 2022-2032 Strategic Plan for Native Forests includes measures to reduce excessive selective logging and illegal logging, and complements Law XVI n° 106, which establishes the Regulatory Framework for Renewable Dendro-energy Resources. The operation of systems like Forest Administration, Control and Verification System (SACVeFor) and Early Warning Deforestation System (SAT), combined with provincial actions on climate change, reinforces Misiones' strategies to address the causes of deforestation and generate an impact in terms of REDD+.

Misiones has developed this Program that aims to generate predictable funds, needed to reduce deforestation, and to provide benefits and incentives to those who, through their activities, protect and/or improve the services provided by the forests of Misiones.

This Program will apply Scenario 2 of the JNR framework and is seeking to register emissions reductions generated from areas outside of nested projects. At present, no nested activities have been identified.

The jurisdictional baseline emissions have been estimated in 4,120,722.00 tCO₂e/year for 2009-2014 period.



1.2. Jurisdictional Proponent

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1.3. Other Entities Involved in the Jurisdictional REDD+ Program

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1.4. Program Start Date

The start date of the program is January 1, 2017, which is when the Province of Misiones began important measures to protect native forests and implementing the Forest Law:

- GPM significantly updated and approved a key component of Misiones' forest and land use policy, the Territorial Planning of Native Forests (OTBN)⁴. This updated and approved a more rigorous methodology for establishing compliance with both the national Forest Law (Law n° 26,331) and the Provincial Law (Law XVI n° 105). Notably, this methodology allowed for parcel-level tracking of native forests at a 1:15,000 scale, whereas the previous scale was 1:250,000. This key methodological change improved the control and monitoring of deforestation.
- The Misiones' Ministry of Ecology streamlined the process for effectively monitoring land use changes
 and sustainable management plans by hiring key staff to implement the updated territorial planning
 resolution (two forest engineers to assess Forest Harvesting Plans and Land Use Change Plans in
 2017, two forest engineers to carry out forest monitoring and a park ranger in 2018).
- The Ministry of Ecology started the legal and technical analysis and on-site verification of complaints received via a telephone hotline that allowed stakeholders to report unauthorized forest clearing.
- Enforcement of a prohibition on fuelwood usage from native forests in the commercial yerba mate and tea drying processes (Law XVI n° 106, the Regulatory Framework for Renewable Dendroenergy Resources). (Law XVI n° 106, the Regulatory Framework for Renewable Dendroenergy Resources).

Setting the start date at the beginning of the calendar year ensures methodological consistency in accounting for both the jurisdictional reference level and the quantification of reductions. This is aligned with how National GHG Inventories are prepared according to IPCC Guidelines, as well as Provincial GHG Inventories.

⁴ It was originally conducted in 2016, and officially regulated in 2017 by resolution 265/2017



1.5. Program Crediting Period

The crediting period begins on January 1, 2017, and ends on December 31, 2036, spanning a total of 20 years (with the possibility of renewing it for an additional ten-year period).

1.6. Estimated GHG Emission Reductions and/or Removals

Completion of this information is optional.

Years	Estimated GHG emission reductions and/or removals (tCO ₂ e)
Year A (eg, 2014)	
Year B	
Year C	
Year	
Total estimated ERRs	
Total number of crediting years	
Average annual ERRs	

1.7. Jurisdiction Location and Geographic Boundaries

The Province of Misiones is located between the parallels 25° 28' and 28° 10' South Latitude and the meridians 53° 38' and 56° 03' West Longitude in the Northeast Region of the Republic of Argentina (Figure 1).

The total area is 29,801 square kilometres, which represents 0.8% of the national total territory. Over 80% of the province's borders are international. The north and east borders Brazil, and the west borders Paraguay. A small portion to the south borders the Argentine Province of Corrientes. Almost all its boundaries are formed by rivers, the Iguazú to the North, the Paraná to the West, the Pepirí Guazú and the Uruguay to the East, and the Chimiray to the South.

The Program's area covers the entire Province of Misiones and is aligned with the official administrative boundaries. There is no difference between the geographic boundary of the jurisdictional baseline and the geographic boundary of the jurisdiction, and there are no permitted gaps. The geographical boundaries of the Jurisdictional Baseline Area include the Green Corridor of the Province of Misiones, a strip of Paraná Rainforest that crosses the territory of Misiones known as the "Misiones Forest". This corridor is comprised of the Yacuí, Urugua-í Provincial Parks, and the Iguazú National Park to the North; the Yabotí Biosphere Reserve and the Esmeralda and Moconá Provincial Parks to the East; and the Salto Encantado and Valle del Cuña Pirú Provincial Parks to the South. All forests within these areas are subject to deforestation and are part of the REDD+ Program. Likewise, all forests within these areas are subject to similar agents and



causes of deforestation and degradation, making them part of the Program Area. According to the official territorial agreement ratified in 2021 through Resolution 2/2021 of the National Ministry of Environment and Sustainable Development, native forests in Misiones occupy 1,612,558 hectares, which is 97% of the estimated area of native forests for the Paraná Rainforest region.

Within the jurisdiction, the native forests have been categorized according to the territorial planning approved by the GPM (Resolution 265/2017 of the Misiones Ministry of Ecology and Renewable Natural Resources). See Figure 2.





Figure 1: Political map of the Province of Misiones

Source: National Geographic Institute (IGN)⁵

 $^{^{5}\} Instituto\ Geográfico\ Nacional.\ Publications.\ \underline{https://www.ign.gob.ar/AreaServicios/Descargas/MapasEscolares}$



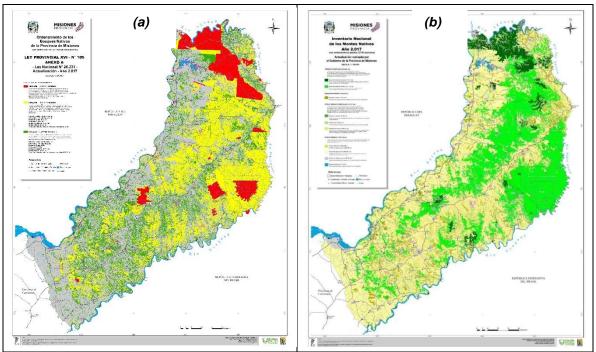


Figure 2: Map with the categorization of native forests in Misiones (a) and map of the zoning of native forests in Misiones (b); values as of year 2017

Source: Subsecretariat of Territorial Planning of the Province of Misiones

1.8. Conditions Prior to Program Initiation

A significant portion of Misiones' forests are considered as Paraná Rainforest, which is part of the Atlantic Forest biome. This biome is one of the most important biodiversity hotspots of Argentina. Misiones contains the largest contiguous remnant of the Paraná Rainforest compared to remnants in neighbouring countries.

Misiones has a humid sub-tropical climate. Annual rainfall totals around 1,700 mm, and the average temperature is 20°C⁶. The province is also defined by three major river basins and its terrain features rolling hills with steep slopes. The soil contains significant amounts of iron and aluminium sesquioxides, and the landscape is marked by "red soils," stony soils, and brown soils. Water erosion is the primary cause of soil degradation.

Over 50% of the population live in urban areas, and nearly 19% have unmet basic needs. The provincial capital is the city of Posadas, located along the Paraná River in the south-western part of the province. The

⁶ Gobierno de la Provincia de Misiones. Ubicación Geográfica. https://misiones.gob.ar/ubicacion-geografica/



following points provide further details about the relevant socio-environmental and historical conditions of Misiones.

Socio-environmental conditions

Climate

The province has a humid sub-tropical climate with no dry season. The total annual rainfall,⁷ of approximately 1,700 mm, is distributed under an isohyet rainfall regime, which remains relatively consistent throughout the year. While the average annual temperature hovers around 20°C, maximum temperatures can reach 40°C, and winter frost with sub-zero temperatures can occur⁸.

Hydrology

The province is defined geographically by three major river basins. The river basin leading to the Paraná River drains down the eastern slope of the Misiones hills to the city of Posadas. The river basin running into the Uruguay River consists of watercourses on the southeast-facing slopes of the Misiones hills. The Iguazu River basin is in the northeast of the province⁹. The rivers are primarily rain-fed. The Paraná River sub-basin is the largest, both in terms of the total length of its tributary rivers and the area they drain. The primary tributary of the Paraná River is the Iguazú River¹⁰.

The principal groundwater system in Misiones is the Guarani Aquifer System (GAS). The GAS is located between parallels 16° and 32° South and meridians 47° and 60° West, covering an area of approximately 1,100,000 km². Its surface coincides with part of Rio de la Plata basin, extending from the geological-sedimentary basin of the Paraná to the Chacoparanaense basin. The area over the GAS includes approximately 1,500 municipalities across four countries: Argentina, Brazil, Paraguay, and Uruguay. The population of this area is over 23 million inhabitants, of whom nine million are supplied by the aquifer. Water is primarily used for human consumption and industrial purposes 11. The Yacyretá hydroelectric plant is located on the Paraná River, approximately two kilometres downstream from the Apipé Rapids, 70 km west of Posadas and Encarnación (Paraguay). It has an average flow of 12,000 m³/s. The hydroelectric plant generates electricity for Argentina and Uruguay 12.

Topography, Geology, and Soil

⁷ Gobierno de la Provincia de Misiones. Ubicación Geográfica. https://misiones.gob.ar/ubicacion-geografica/

⁸ Primer Inventario Nacional de Bosques Nativos (PINBN): informe Selva Misionera. Buenos Aires: Secretaría de Ambiente y Desarrollo Sustentable de la Nación. Edition 2007.

⁹ Ente Provincial Regulador de Agua y Cloacas. Cuencas Hidrográficas. https://eprac.misiones.gob.ar/cuencas-hidricas/

¹⁰ Primer Inventario Nacional de Bosques Nativos (PINBN): informe Selva Misionera. Buenos Aires: Secretaría de Ambiente y Desarrollo Sustentable de la Nación. Edition 2007.

¹¹ Instituto Nacional de Geografía. ¿Qué es el Sistema Acuífero Guaraní? <a href="https://www.ign.gob.ar/content/%C2%BFqu%C3%A9-es-el-sistema-acu%C3%ADfero-el-sistema-acu%

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¹² Entidad Binacional Yacyretá. https://www.eby.gov.py/



Most of the province's surface features rolling terrain with steep slopes, all exceeding 2% gradient. The landscape is characterized by the presence of ridges and plateaus covered with vegetation, lacking defined mountain ranges. Elevations can surpass 800 m above sea level¹³.

The Province's subsurface is part of the Brasilia Massif, one of the oldest formations on the continent. During the Triassic period of the Mesozoic Era, this basic substrate was overlaid by successive layers of basaltic lava (igneous rock). These basalt rocks (melaphyres) extend to depths of up to 1,000 m.

Laterization processes cause these hard rocks to disintegrate and erode due to exposure to the climate, leading to the concentration of iron and aluminium sesquioxides in the soil horizons. The distinctive red soils of the region have formed over this material (laterite)¹⁴. The most important taxonomic units correspond to three types: "tierras coloradas" (red soils), stony soils, and brown soils. Water erosion is the primary cause of soil degradation.

Around 57% of the province's area is soil that is suitable for agriculture, though they require highly complex management and conservation practices. Lands unsuitable for agriculture are suitable for wildlife conservation, reforestation, watershed protection, or recreational purposes, and cover the remaining territory of the province¹⁵.

Ecosystems

The Atlantic Forest biome, of which the Paraná Rainforest is a part, includes 15 terrestrial ecoregions covered by tropical and sub-tropical forests that originally spanned 1,345,300 km² across Brazil, Paraguay, and Argentina. This biome boasts a world record of 443 tree species per hectare and an enormous diversity of different life forms. Over 30 mammal species, nine bird species, and around 100 frog species have been discovered. Currently, less than 17% of this biome remains, due to significant deforestation and forest degradation caused by human activity.

¹³ Anuario Estadístico de Misiones, 2020.

https://ipecmisiones.org/wp-content/uploads/2022/07/IPEC-Anuario-Estad%C3%ADstico-de-Misiones-2020.pdf

¹⁴ Primer Inventario Nacional de Bosques Nativos (PINBN): informe Selva Misionera. Buenos Aires: Secretaría de Ambiente y Desarrollo Sustentable de la Nación. Edition 2007.

¹⁵ Primer Inventario Nacional de Bosques Nativos (PINBN): informe Selva Misionera. Buenos Aires: Secretaría de Ambiente y Desarrollo Sustentable de la Nación. Edition 2007.



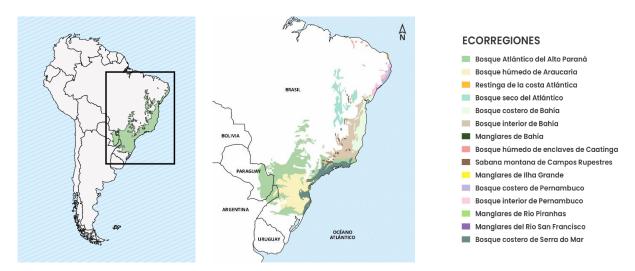


Figure 3: Map of the Atlantic Forest Distribution.

Source: Government of the Province of Misiones¹⁶

The ecoregion of the Upper Paraná Atlantic Forest, known as the "Selva Paranaense", is the southernmost ecoregion of the biome. It is one of the five most important biodiversity hotspots in the world due to its high levels of endemism. By the beginning of the 21st century, Brazil preserved about 3% of its original area, Paraguay about 13%, and Argentina nearly 50%, mainly within the province of Misiones. Furthermore, the largest continuous remnant of the Upper Paraná Atlantic Forest is in the province of Misiones.

In Paraguay, the main causes of deforestation are associated with the significant expansion of agriculture, particularly the cultivation of soybeans and its production complex (including sunflower and corn) since the 1980s. The livestock sector also expanded in terms of cattle population and grazing land. The "Deforestation Zero" Law, known as Law n° 2,524/2005, prohibits land use change in the Eastern Region of Paraguay; however, deforestation still occurred, with 582,040 hectares lost during the 2005-2015 period. In Brazil, processes of urbanization, industrialization, and industrial agriculture have driven land use changes in this region, especially since the mid-20th century. In Misiones, environmental conditions, particularly topographic and soil suitability variables, have posed challenges to the expansion of the agricultural frontier¹⁷.

¹⁶ Gobierno de la Provincia de Misiones. Bosque Atlántico. https://cambioclimatico.misiones.gob.ar/bosque-atlantico/

¹⁷ http://www.geointa.inta.gob.ar/wp-content/uploads/downloads/Laminas_de_Suelos/Misiones_3.jpg



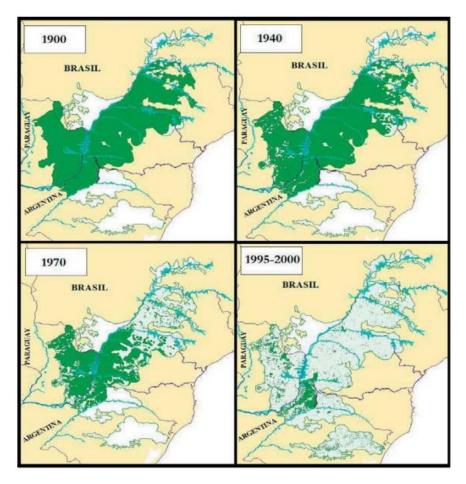
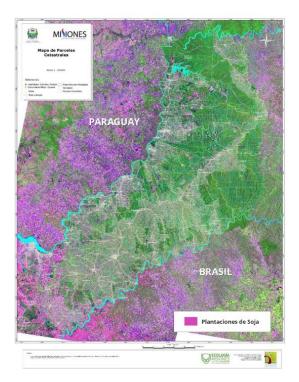


Figure 4: Evolution of the Reduction and Fragmentation of the Paraná Atlantic Forest or Atlantic Forest Since the Early 20th Century.

Source: Holz y Placci, 2003

In Argentina, this region covers about 2% of the total forested regions in the country, encompassing the province of Misiones and the northeast of the province of Corrientes.





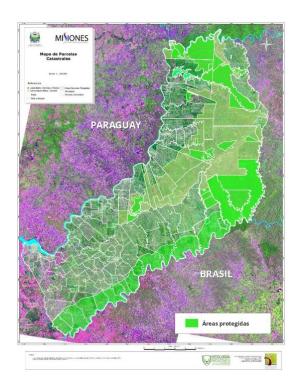


Figure 5: Map of the distribution of the Selva Paranaense Ecoregion.

Source: Undersecretary of Territorial Planning of the Province of Misiones

With more than 3,000 plant species and 1,000 vertebrate animal species, this region boasts the highest biodiversity and ecological complexity in Argentina, representing over 52% of the country's total biodiversity¹⁸. Prominent among the fauna are the jaguar, harpy eagle, hoary fox, and pampas deer.

Vegetation

Within the province, two distinct zones can be identified: "Las Selvas Mixtas" (Misiones Forest or Woodland Zone) and "Los Campos" (Mesopotamian Park or Field Zone)¹⁹.

The Selva Paranaense (the Parana rainforest) is characterized by dense vegetation typical of heterogeneous sub-tropical forests, which exhibit high biological diversity. These forests are multi-stratified formations, reaching heights of 20 to 30 meters, with at least three well-defined tree strata (bamboos and shrubs, herbaceous vegetation, and mossy vegetation). The presence of lianas and epiphytes is also observable. Three climatic communities are noted: laurel (Nectandra lanceolata) and guatambú (Balfourodendron riedelianum) forest, which occupies most of the region; laurel, guatambú, and rosewood

¹⁹ Primer Inventario Nacional de Bosques Nativos (PINBN): informe Selva Misionera. Buenos Aires: Secretaría de Ambiente y Desarrollo Sustentable de la Nación. Edition 2007.

¹⁸ https://imibio.misiones.gob.ar/es



(Aspidosperma polyneuron) forest; and laurel, guatambú, and Paraná pine (Araucaria angustifolia) forest²⁰. Prominent tree species include rosewood (Aspidosperma polyneuron), cedar (Cedrela fissilis), guatambú (Balfourodendron riedelianum), incense tree (Myrocarpus frondosus), jacaranda (Jacaranda mimosifolia), lapacho trees (Handroanthus sp.), marmelero (Ruprechtia laxiflora), laurels of the Ocotea and Nectandra genera, palm heart (Euterpe edulis), timbó (Enterolobium contortisiliquum), and Paraná pine (Araucaria angustifolia), among others. Among the five most representative species, laurel del río and negro (Nectandra angustifola), Ayuí (Chrysophyllum g.), Sota caballo (Luehea divaricata), Rabo itá (Muellera campestris), and Guayabí (Cordia americana) can be mentioned.



Figure 6: Representative species of the Selva Paranaense Ecoregion.

Source: Second National Inventory of Native Forests (Ministry of Environment and Sustainable Development, 2020)

Socio-demographic Aspects

As of 2022, Misiones has a total population of 1,280,960 inhabitants (2.78% of the country), of which 652,184 (51.14%) are female and 622,907 (48.85%) are male²¹. The gender ratio (femininity index) in the province is 105 females for every 100 males. The population density of the province is 42.82 inhabitants per square kilometre, with more than 73% of the population residing in urban areas.

The population of Indigenous Peoples is predominantly from the Mbya Guaraní ethnic group (with only a few communities having members belonging to the Ava Chiripa group). According to surveys conducted by provincial government institutions, there are approximately 135 indigenous communities, comprising

²⁰ Plan de Acción Nacional de Bosques y Cambio Climático (PANByCC). Buenos Aires: Secretaría de Ambiente y Desarrollo Sustentable de la Nación. Edition 2019.

²¹ INDEC. Censo nacional de población, hogares y viviendas 2022. Preliminar results. https://censo.gob.ar/index.php/datos_provisionales/



around 13,000 individuals, distributed throughout the provincial territory (1.2% of the provincial population). There is a 15.62% prevalence of households with Unsatisfied Basic Needs (UBN), which corresponds to 19.09% of the population.

Urbanization

Misiones boasts the largest paved road network in proportion to its area, in the country. The province is traversed by four international bridges and features a dry border line. Additionally, 30 provincial routes and four national routes traverse the Misiones territory. It has 38 authorized border crossings, including two of the country's major border crossings, accommodating nearly two million people. One of these border crossings links the cities of Posadas (Argentina) and Encarnación (Paraguay) through the San Roque González de Santa Cruz International Bridge.

Its capital city, Posadas, is located on the left bank of the Paraná River, which separates it from the neighbouring city of Encarnación, Paraguay. It is the most populous city in the province and serves as the administrative, commercial, and cultural centre of the region. Currently, it is one of the most active and rapidly growing cities in northeastern Argentina.

Misiones has an economy primarily based on traditional industrial crops (such as yerba mate, tobacco, and tea, as well as their industrial processing), and on forestry exploitation. The majority of Agricultural Production Units (EAP) in Misiones are between 1,000 to 1,500 hectares in size and are used largely for family-based production. The next range of EAPs have a size of 2,500 to 5,000 hectares. More than 85% of the surveyed area in Misiones is privately owned²².

Agriculture, livestock, and fishing account for 9.8% of registered employment in the province. Yerba mate harvesting is the activity with the highest demand for workers, especially between March and September of each year.

A distinctive feature of rural workers in Misiones is their settlement in peri-urban areas of intermediate cities, making them multi-active workers. When they are not engaged in agriculture, they undertake other activities such as construction or skilled trades. Many of them live in peripheral neighbourhoods with poor infrastructure and habitat.

Rural workers in Misiones, especially "tareferos" (yerba mate workers), face significant challenges. The demand for labour in yerba mate harvesting is seasonal, and outside March to September, unemployment rates are high. This represents one of the main social issues in the province's agricultural production, as other previously counter-seasonal or alternative crops, such as tea or tung, have been mechanized and require less labour.

²² INDEC. Censo Nacional Agropecuario 2018. Resultados Preliminares. https://cna2018.indec.gob.ar/informe-de-resultados.html



According to the data from the 2010 Census, in the Province of Misiones, there are 76,489 workers involved in occupations related to agricultural, livestock, apiculture, poultry, forestry, hunting, and fishing activities. Of these, 55,548 are identified as male, and 20,941 as female.

Historical Significance

The territory and social fabric of Misiones have been shaped by various historical milestones over the centuries. In the early 1800s, the southern part of the province, which was more populous and better known than the northern part, was a disputed territory among Paraguayan, Brazilian, and Corrientes armies, as well as the United Provinces of the Río de la Plata.

At the conclusion of the War of the Triple Alliance from 1865 to 1870, Misiones was formally annexed to the jurisdiction of Corrientes Province, which exercised control and enjoyed the benefits of its natural resources. During this period, extractive activities focused mainly on exploiting vast yerba mate plantations and natural forests in the northern region, while cattle ranching extended in the southern campo zone, characterized by similar practices to those in Corrientes, and small-scale agriculture emerged in the area where the former Misiones missions had been situated.

In 1884, Law n° 1,532 of the National Territories Organization was enacted, designating Misiones as a national territory and divesting Corrientes of control over its neighbour. The federal government began appointing authorities for the newly designated territory. From 1890 onwards, numerous immigrants settled in the province, engaging in agricultural activities that came to dominate Misiones' economy. The driving forces of the province's economic development at that time were the cultivation of yerba mate and timber use. Traditional forest exploitation was characterized by an extractive approach, particularly the method of selective felling, which focused on extracting commercially valuable species, resulting in biodiversity degradation, forest clearings, soil compaction, and erosion.

In terms of land distribution, the southern and central dorsal areas followed the Spanish grid system established by the state, while in the Alto Paraná and northern regions of the province, agricultural colonies were established by private enterprises, which adopted a linear disposition or open roads into the jungle.

At that time, state-owned colonies were assigned based on the Avellaneda Law, aimed at regularizing colonization and immigration. In Misiones, land granted under this law had an average size of 25 hectares. From 1926, the state imposed the obligation to cultivate yerba mate as a condition for land sale, and a land area of 25 hectares was established for colonization. The first yerba mate crisis occurred in 1935, resulting in a series of protectionist measures to enable family-based agricultural exploitation in Misiones.

In 1953, the Province of Misiones was officially established through National Law n° 14,294, regaining its institutional character and full sovereignty. Until 1955, small and medium-sized agricultural exploitation was consolidated as a result of state regulation of yerba mate production and the incorporation of tung oil. From then until 1975, diversification of crops was promoted, incorporating tea cultivation, citrus fruits, and reforestation. Additionally, following the establishment of *Celulosa Argentina*, a major pulp and paper company in the mid-20th century, large-scale replacement of native forests with conifer plantations was



encouraged, supported by various promotional mechanisms. According to various estimates, between 1960 and 1985 alone, 500,000 hectares of native forests were logged²³.

Between 1960 and the military coup of 1976, various agrarian social movements emerged aiming to modify land tenure systems, among other objectives. The military coup led to greater state deregulation of the economy. During this period, various infrastructure projects were implemented, including the *Altoparaná S.A.* paper mill in the northern part of the province. This marked a shift towards intensive forestry production, forest industry, and intensive agribusiness. In 1978, the construction of the Yacyretá Hydroelectric Dam began, following an agreement that had been reached between Argentina and Paraguay in 1974.

In 1984, the Ministry of Ecology and Renewable Natural Resources was established through Law I n° 70, making it the first ministry of its kind in Argentina. It had the goal of pursuing a state policy for the conservation and preservation of natural resources, including forest policy for native forests in the Province of Misiones.

In the late 1990s and early 2000s, the provincial economic structure still relied on agro-industrial activities, primarily centred on perennial crops such as yerba mate and tea, as well as annual industrial processing crops like tobacco. Additionally, the exploitation of native forests and their implantation were encouraged.

1.9. Approvals

The jurisdictional approval authority is the Executive Unit of the Environmental Services Payment Program of the Province of Misiones, known as "ECO2 Program", which was specially created by the GPM for managing the Jurisdictional REDD+ Program. The ECO2 Program is aligned with Provincial Law XVI-103 on Payments for Environmental Services (PSA). The Jurisdictional REDD+ Program is therefore an initiative of this PSA for the protection of native forests in Misiones. The EPREDD+ combines and leverages the ECO2 Program and the Jurisdictional REDD+ Program to generate emission reduction credits (Figure 7). The GPM holds full authority over all aspects of the Program. Consultations are conducted with the national government to ensure alignment with Argentina's REDD+ implementation framework under the UNFCCC.

²³ Cammarata, E. (1999). Misiones en el Territorio de las fronteras paraguayo-brasileñas: sus efectos ambientales. Universidad Nacional de Misiones.





Figure 7: Jurisdictional REDD+ Program as a component of the EPREDD+ under the ECO2 Program

The GPM is the entity that owns the natural resources in Misiones and thus, the legal rights over them. The Ministry of Ecology is the implementing authority of Law n° 105 for Territorial Planning of Native Forests and is responsible for the management of native forests in the province and, consequently, for initiatives developed under the ECO2 Program. On the other hand, the Ministry of Finance is the program proponent under JNR and has the legal authority over all aspects of this Jurisdictional REDD+ program. The administration of program funds and carbon revenue is carried out through a trust (*fideicomiso*) created for this purpose, managed by Banco Macro S.A. (Decree 1,114/2022).

The following table contains the contact information of the jurisdictional approval authorities.

Organization name	Ministry of Ecology and Natural Renewable Resources	
Role in the program	JNR Program implementing authority	
Contact person	Martín Recamán	
Title	Minister of Ecology and Natural Renewable Resources	
Address	San Lorenzo 1538, N3301 Posadas, Misiones	
Telephone	0376 444-7592	
Email	prensa@ecologia.misiones.gob.ar	

1.9.1 Nested Subnational Jurisdictions

There are no nested subnational jurisdictions (lower-level jurisdictions) expected to seek independent registration under the JNR Program at this time. This section is therefore not applicable.



1.9.2 Nested Projects

The Program will consider as a nested project a:

- Project that will meet the requirements specified in the JNR Requirements, Scenario 2, the VCS Standard and applicable VCS methodologies;
- Project that will follow the requirements of other GHG crediting programs.

Currently, there is no REDD+ project in the Province of Misiones registered under the VCS Program or other GHG crediting programs. The JNR Framework Scenario 2 allows the registration of projects independently registered under the VCS Program.

The GPM has enacted the Decree N° 2179, Resolution N° 441/24 and Resolution N° 022/25 with the objective to align project-level emission accounting with that of the Program. The Decree and the Resolutions require the registration of REDD+ projects that are independently registered under the VCS Program or other GHG crediting program in the Provincial REDD+ Project Registry (the "Registry"). Both the Program and the nested projects can request the issuance of Verified Carbon Units (VCU) from their respective GHG crediting program and the verified emission reductions of the projects shall be deducted from the net GHG accounting of the Program to ensure the avoidance of double counting. Project proponents shall request project registration from the Ministry of Ecology for registration in the Provincial REDD+ Registry.

Projects that will follow the JNR requirements scenario 2 will be allocated a portion of the jurisdictional FREL (where applicable) based on the risk of deforestation and forest degradation and applicable emission factors, in compliance with the requirements outlined in the JNR Allocation Tool document "VT0007 Unplanned Deforestation Allocation (UDef-A)".

The format for submitting a project's registration within the Program is defined by the Executive Unit of the ECO2 Program established by the GPM.

All projects that constitute potential double counting risk within the province (nested or not nested) will need to be registered in the Provincial REDD+ Project Registry established in Decree n° 2179, Resolution 441/24 and Resolution N° 022/25. The Registry will be managed by the MEyRN and the Climate Change Ministry.

In order to be registered in the Registry, land holders will have to provide the following information, not limited to: email address, name, name of legal entity, document evidencing representation, number of National Identification Document (DNI), contact number, cadastral classification (nomenclatura catastral), location of the site, property registration (partida inmobiliaria), name of the project, standard that certificates the project, link to the registry of standard, methodology used, starting date of the project, date of presentation of the project to the standard, accreditation project crediting period of the project, REDD+ project activities covered by the project, surface area of the project, expected emissions reductions in between 2017-2022, among others (Annex I Resolution 441).



1.10. Compliance with Laws, Statutes and Other Regulatory Frameworks

International Context

The Program aligns with the objectives of various international agreements ratified by Argentina. The Program promotes the reduction of GHG emissions and, therefore, contributes to the goals of the United Nations Framework Convention on Climate Change (UNFCCC, 1992) and the Paris Agreement (2015), both of which were ratified by Argentina through Law n° 24,295 (1994) and Law n° 27,270 (2016), respectively. Additionally, the Program will contribute to the conservation of biodiversity and its sustainable use, aligning with the objectives of the Convention on Biological Diversity (CBD, 1992), ratified by the country through Law n° 24,375 (1994).

Furthermore, the Program will not conflict with actions promoted by the International Labour Organization (ILO) Convention n° 169 (1989), which was approved through Law n° 24,071 (1992). This convention mandates that governments must "protect the rights of these peoples and guarantee respect for their integrity". The Program will also align with the Escazú Agreement, (Law n° 27,566, 2021) which aims to enhance access to environmental information and public participation. Finally, the Program contributes to achieving the Sustainable Development Goals (SDGs), primarily SDG 13 for climate action (through GHG emission reductions).

Lastly, the Program will adhere to the Cancun Safeguards adopted by the Conference of Parties to the UNFCCC 2010, as well as the additional requirements set forth in Decision 9/CP.19.

National Context

The Program aligns with Articles 41 and 124 of the reformed 1994 National Constitution. Article 41 mandates the National Government to provide citizens with the right to a healthy environment conducive to human development, managing resources sustainably for the benefit of present and future generations. Provincial governments are allowed to enact complementary rules. The Program adheres to these minimum standards and promotes the generation of ecosystem services while safeguarding environmental quality. Article 124 grants provinces domain over the natural resources within their territories.

The Program aligns with Law n° 25,675 enacted in 2002 (the "General Law on the Environment"), which establishes "the minimum requirements for achieving sustainable and appropriate environmental management, the preservation and protection of biological diversity, and the implementation of sustainable development in Argentina". This law also establishes the Federal Council for the Environment (COFEMA), which includes participation from the national government and provinces. COFEMA's objective is to "set and update the required levels of environmental quality and conduct comparative studies, promoting the alignment of datasets and methodologies for monitoring environmental resources throughout the national territory". Within COFEMA, there are specific commissions for Native Forests and Climate Change, which cover issues related to climate policy, the REDD+ strategy, and forest resources.

The Program is also aligned with Law n° 26,331 enacted in 2007, (the "Forest Law") that establishes the minimum standards for the environmental protection of native forests, regulated by Decree 91/2009. The



national Ministry of Environment and Sustainable Development has the authority to enforce the law, in coordination with the authorized provincial entities in each jurisdiction. A key component of this law is the Territorial Planning of Native Forests (OTBN), which categorizes forests into different conservation classes through a participatory process: Category I (red) with very high value, Category II (yellow) with medium value, and Category III (green) with low value. Each category is associated with specified permissible practices. The Designated Local Enforcement Authorities are responsible for establishing OTBN in each province, and the national Ministry of Environment and Sustainable Development, as outlined in Resolution 380/2019, is responsible for approving the OTBN and evaluating its compliance with the law.

Furthermore, this law establishes the National Fund for the Enrichment and Conservation of Native Forests to promote conservation of these forests by compensating forest owners for the environmental services they provide. This fund is distributed annually among provinces with approved OTBNs, as recognized by Provincial Law and accredited by the National Enforcement Authority. The Designated Local Enforcement Authorities allocate the funds to holders with approved Management or Conservation Plans. Additionally, the law creates the National Program for the Protection of Native Forests, which aims to promote practices to ensure the conservation, restoration, and sustainable use of native forests in Argentina.

To monitor the implementation of Law n° 26,331, the National System for Monitoring Native Forests (SNMBN) has been established. This system generates data that is later used to comply with international agreements related to climate change that the country has agreed to, and to provide information to society about the importance of native forests. The SNMBN comprises four main components: monitoring of native forests area; early warning system for deforestation; forest statistics for quantifying forest-industrial production and fires; and national inventory of native forests regarding their composition, structure, and function.

Law n° 27,487, which extends and modifies Law n° 25,080 for the promotion of investments in planted forests, requires national and provincial authorities to establish zoning by forest basins for the location of enterprises based on criteria of environmental, economic, and social sustainability. This zoning by forest basins must respect the OTBN of Law n° 26,331. This law includes the possibility of non-repayable financial support due to the development of the "enrichment of native forests" forestry activity, complementing this program.

The Program aligns with the objectives of the National Plan for the Restoration of Native Forests (Resolution 267/2019), Law n° 27,520 on Minimum Budgets for Adaptation and Mitigation to Global Climate Change (2019), Law n° 26,815 on Fire Management (2012), Resolution 256/2009 of the Experimental Program for the Management and Conservation of Native Forests and its modification by Resolution 450/2009. Additionally, Misiones adheres to Law n° 22,428 for the Promotion of Soil Conservation (1981).

The Program does not conflict with areas covered by Law n° 22,351 on National Parks (1980) or National Decree 2,148/1990 on Strict Natural Reserves (1990), nor with territorial planning of native forests approved by Resolution 380/2019 and subsequent regulations, such as Resolution 2/2021, which approves the update of territorial planning of native forests in the province of Misiones. The Federal System of Protected Areas (SiFAP) coordinates the efforts of provinces and the national government to implement policies on



protected areas and promotes the planning of regional systems of these areas at the eco-regional level, ensuring connectivity and the realization of provincial systems.

In terms of climate policy, the Program aligns with and contributes to the commitments made by the country at the international level and in its Second Nationally Determined Contribution (NDC). This contribution sets a net emissions cap of 349 million tons of carbon dioxide equivalent (MtCO₂e) by the year 2030 and outlines the country's mitigation goals through implementing measures across all sectors of the economy.

Regarding market mechanisms, Argentina's second NDC states that cooperation mechanisms established under the Paris Agreement must be "transparent, contribute to ensuring environmental integrity, avoid double counting, enhance global ambition for GHG emissions reduction, and be aligned with the SDGs." Additionally, these mechanisms must respect national and provincial legislation, as well as the approaches and safeguards of REDD+.

Law n° 27,520 for Minimum Budgets for Adaptation and Mitigation of Global Climate Change, regulated by Regulatory Decree 1,030, establishes the development and implementation of the National Plan for Climate Change Adaptation and Mitigation (PNAyMCC), along with the creation of Jurisdictional Response Plans. These plans provide information on emissions, mitigation, and adaptation for provinces and the Autonomous City of Buenos Aires. The province of Misiones participated in the construction of the PNAyMCC 2022 through the Provincial Articulation Board of the GNCC. Additionally, the province is developing its Climate Change Response Plan, which includes avoiding deforestation, sustainable management, conservation in productive landscapes, and restoration as key mitigation strategies for the forest sector.

The Program also aligns with Law n° 25,831 on the Regime of Free Access to Environmental Public Information (2003), enabling the provision of information to those who request it. Any information provided through the Communication and Complaint Mechanism will be confidential and protected according to the Personal Data Protection Law n° 25,326.

In addition, the national Ministry of Environment and Sustainable Development developed a National Biodiversity Strategy for 2016-2020 that sets out a national conservation goal (Target 2). Misiones currently conserves more than four times the objective set by the Nation. This strategy defines the main actions to promote greater understanding and appreciation of our common resources and the ecosystem services they provide.

Provincial Context

The Program is implemented in alignment with the Provincial REDD+ Strategy, established by Resolution 241/2023 for the reduction of emissions from avoided deforestation and degradation of native forests in the province of Misiones. This sets out a number of strategic objectives that are focused on the forest sector, and that promote climate mitigation and adaptation through integrated land management, and low-carbon sustainable development. The strategy aligns with Law n° 26,331 through the Law XVI n° 105 on Territorial Planning of Native Forests (2010) and Law XVI n° 103 on Payments for Environmental Services (2009). Similarly, the Program respects protected areas covered under Law XVI n° 29 on the System of Natural



Protected Areas (1992), as well as the areas covered by Law XVI n° 60 on the Green Corridor (1999) and Law XVI n° 53 on Protective Forests (1997). In terms of land ownership, the program complies with Law XVI No. 6 on the Fiscal Land Regime (1974).

Resolution 460/2011 regulates the Authorization of Forest Utilization and the Authorization of Changes in Land Use, while Resolution 253/2011 outlines the evaluation of Sustainable Management Plans and Conservation Plans submitted to access funds from Law n° 26,331. More particularly, Resolution 460/11 establishes plan categories based on their environmental impact and regulates their submission, evaluation, and approval, along with complementary regulations defining the administrative process and requirements for evaluating and approving plans for activities in native forests, sustainable utilization, and land use changes.

Plans approved by the province under the implementation of Law n° 105 must undergo an environmental impact assessment process in line with Law XVI n° 35 on Environmental Impact Assessment, Scope, Violations, and Sanctions. The Program will not undermine the application of this law.

The Program also aligns with the objectives and definitions established in Law XVI n° 7 on Forests (1977), Law XVI n° 37 on Soil Conservation (2009), and Law XVI n° 65 on the Provincial Fire Management Plan (PPMF), as well as those defined within the framework of the Provincial Climate Change Cabinet (GPCC) created by Decree 157/2021.

Regarding forest ownership, Article 10 of Law XVI n° 7 stipulates that "owners, tenants, usufructuaries, or possessors of native forests under any title may not initiate exploitation activities without the approval of the competent authority, requested through a Forest Management Plan".

The Program contributes to the objectives of Law XVI n° 106 on the Regulatory Framework of Renewable Dendroenergetic Resources (2016), and it does not contradict those of Law XVI n° 12 on Adherence to National Law n° 22,428 on Soil Conservation Promotion (2009).

Similar to provisions at national level, the program will provide information to anyone who requests it, guided by Law XVI n° 81 on Environmental Information (2009). The web platform of the Misiones REDD+ Safeguard Information System (SIS-REDD+ Misiones) allows the mass dissemination of information to multi-sectoral stakeholders, while also centralizing key information during the participatory process and facilitating informed dialogue. The platform records workshops, meetings, dialogue encounters, and REDD+ consultative processes in Misiones, whether in-person or virtual. The web platform aims to promote transparency in Misiones' REDD+ public policy, in compliance with standards for the disclosure of public environmental information according to Law n° 25,675, Law n° 25,831, and the Escazú Agreement.

On September 29, 2020, Law I n° 172 came into effect, creating the State Secretariat for Climate Change, known as the Ministry of Climate Change, under the hierarchical and functional dependence of the Governor.

Additionally, the administration of program funds from carbon sales is managed through a trust (*fideicomiso*) created for this purpose, managed by Banco Macro S.A. (Decree 1,114/2022). For the implementation of



the Program, the Provincial REDD+ Project Registry was established in Decree n° 2179 and regulated by Resolution n° 441/24 and Resolution N° 022/25. It is important to highlight that credits sales will take into consideration the requirements of the market in which they will be used, ensuring avoidance of double counting.

1.11. Ownership and Other GHG Programs

1.11.1 Program Ownership

Jurisdictional proponent's rights to emission reductions established by law, policy or regulation.

The physical boundaries of the Program are the jurisdiction's boundaries. Both the national and provincial regulatory frameworks apply to the Program. Currently, a specific legal framework that explicitly grants the rights to emission reductions does not exist in Argentina. Argentina has a legal framework that regulates activities in native forests; the national government enacted Law No. 26,331 (the "Forest Law") in 2008 and regulatory decree 91/2009. It also has a legal framework that regulates environmental policy; the national government enacted Law 25,675 in 2002.

Neither the Forest Law, its regulatory decree nor the General Law on the Environment Law explicitly regulates the rights to emission reductions from forest carbon projects or programs. The "Funding Proposal for the REDD+ Result-Based Payments" approved by the Green Climate Fund states the same argument: "Argentina's legal framework does not explicitly define emission reductions ownership rights."

However, there is a current legal and policy framework that supports the creation of the Program and the rights to emission reductions generated by the Program, as we will explain below.

Program ownership, determined in accordance with the VCS rules

The legal authority of the Government of Misiones to design and operate a Jurisdictional REDD+ Program derives from:

- a) Articles 41, 121, 124 of the National Constitution;
- b) Articles 50, 56 and 57 of the Misiones Constitution;
- c) National Law No. 26.331, Presidential Decree 91/2009;
- d) National Law No. 25,675;
- e) Provincial Law XVI No. 105, Regulation by Decree 67/2011;
- f) Provincial Law XVI n° 103;
- g) Provincial Law XVI n° 53 on Protective Forests; and



h) Decree 2,530/2021.

Constitutional Mandate to Regulate and Preserve Natural Resources

The Republic of Argentina is a federal state, characterized by a decentralized political organization with twenty-three provinces and one autonomous city. Provinces are autonomous entities that retain powers not expressly devolved to the National government according to Article 121 of the National Constitution.

The National Constitution states that Provinces exercise primary ownership over natural resources within their territory, including native forests (Article 124). As such, Provinces can legislate over how natural resources are used by public and private sectors.

Article 41 of the National Constitution states that every citizen has the right to a healthy environment. This is implemented by mandating the national government to establish the minimum environmental standards and the provinces to develop complementary measures and policies that align with such minimum standards.

All provinces have their own constitution as well. Articles 56 of the Constitution of Misiones states that native forests will be protected to ensure its rational exploitation and to provide the highest possible social gain, and Article 57 mandates that laws shall be enacted aiming to preserve and enhance soil, flora and fauna.

Laws: Implementation of Existing National and Provincial Laws

The Forest Law of 2008 established the minimum environmental standards for the enrichment, restoration, conservation, use and sustainable management of native forests. To implement the Forest Law, Misiones enacted the Provincial Law XVI - N° 105 in 2010. The objectives set out by these laws includes the preparation of Territorial Planning of Native Forests (OTBN), authorization of any change in land use or sustainable management of native forests, monitoring and enforcement of forestry and land-use change activities, and the application of sanctions for non-compliance.

Unfortunately, Provinces receive insufficient financing from the national government to implement the minimum standards under the Forest Law. This is a key reason why Misiones has sought to generate revenue through this REDD+ JNR program, as a complementary policy that allows the implementation of the Forest Law by generating additional funds for the conservation efforts of the province.

Misiones also enacted the Provincial Law XVI No 103 in 2009, which regulates payments for environmental services generated by native forests or forest plantations. These payments may come from agreements signed between the Provincial government and private or public entities.

Public Policy: Responsibility for Sustainable Development

National Law No. 25,675 establishes minimum criteria for achieving sustainable and adequate management of the environment, preservation and protection of biological diversity, and the implementation of sustainable development. The law contemplates the following aspects: principles of environmental policy,



policy and management instruments, environmental regulation, among others. The law establishes a federal inter-jurisdictional coordination system for the implementation of environmental policies on a national and regional scale through the Federal Environment Council ("COFEMA"). COFEMA consists of the Minister of Environment and Sustainable Development of the Nation as representative of the national government and the highest environmental authority of each of the provinces and the Autonomous City of Buenos Aires.

Article 50 of the Constitution of Misiones establishes the Provincial Government's authority to propose initiatives that promote economic development within the province in collaboration with all relevant stakeholders. Furthermore, Article 4 of the Provincial Law XVI n° 103 gives the authority to the Ministry of Ecology and Renewable Natural Resources to establish different low carbon development mechanisms. The Program will generate resources to finance activities that will create jobs and opportunities linked to the preservation of the environment and the goals stated in the Provincial REDD+ strategy.

Overall control and responsibility for the Program

The Government of Misiones has overall control and responsibility for the Program, including the design, implementation, financing of the strategy and activities (measures, economic and non-economic incentives, monitoring and enforcement) that result in GHG emission reductions.

To comply with laws, policies and regulations, the GPM has the authority to develop and implement the Jurisdictional REDD+ Program as a public policy and to commercialize carbon credits resulting from the activities of the Program to finance the Program. In particular, the Decree 2,530/2021 stated that the Ministry of Finance, Public Works, and Public Services is authorized to oversee all aspects of the REDD+ program and carbon credit generation, as well as to formalize and manage tasks related to the trust agreement.

The revenues from the Program's carbon credits from verified emission reductions will be used to implement these current laws, with emphasis on activities that reduce GHG.

Law, policy or regulation that has been established governing rights to emission reductions and/or removals and any associated VCUs of any nested lower-level jurisdictions and/or projects.

As mentioned above, a specific legal framework that explicitly grant the rights to emission reductions does not exist in Argentina. However, the GPM allows project-based REDD+ activities to be implemented, and, thus, is applying JNR Scenario 2a. Any credits issued to nested REDD+ projects will be deducted from the Program's accounting.

The GPM has enacted legislation that defines a nesting policy (registration of independent projects and their alignment to the GHG accounting of the Jurisdictional Program) through the Decree No 2179, Resolution N° 441/24 and Resolution N° 022/25. The legislation mandates the GPM to deduct the projects' verified emission reductions from the jurisdictional GHG accounting to prevent double counting.



The regulation also allows a landowner to opt out of the Jurisdictional Program in cases where they do not plan to implement an independent project. The area of the excluded landowner remains within the accounting area of the JNR Program to maintain the environmental integrity of the Program and avoid leakage. However, the GPM will deduct the emission reductions attributed to the excluded areas from the net GHG emission reductions of the Program, as if it were an independent nested project area, following the criteria of the JNR Framework and the VCS Standard.

The Ministry of Ecology and Natural Renewable Resources will be responsible for monitoring the number of emissions reductions from nesting projects or landowner that opt out the Program through the Provincial REDD+ Project Registry.

Moreover, stakeholders will be part of the jurisdictional benefit-sharing mechanism resulting from participation in activities that generate GHG emission reductions.

Payment for environmental services

The Green Climate Fund ("GCF") approved a result-based payment (RBP) to Argentina for REDD+ results during the period of 2014-2016. Under this agreement, the national government receives payments for emission reductions compared to the national FREL submitted to the UNFCCC. COFEMA approved the distribution to the provinces of the benefits received under this agreement, through COFEMA resolutions 424/2020 and 480/2020. The provinces of Misiones, Chaco, Santiago del Estero, Tierra del Fuego, Salta, Formosa and Jujuy were identified as priorities.

In its important to note that, the RBP is clear that the Project's implementation and operational framework is the Law No. 26,331 on Minimum Standards for the Environmental Protection of Native Forests and, therefore, its development must be built based on federal agreements reached at the Federal Environment Council (COFEMA) level, and individual agreements with each provincial jurisdiction.

1.11.2 Participation under Other GHG Programs

Currently, there is no participation under other GHG programs for any of the years of the Program crediting period.

The Green Climate Fund (GCF) approved the "Payments for Results of REDD+ in Argentina (FP142) for the 2014-2016 results period" (PPR REDD+) during Board 27 of 2020. The national Ministry of Environment and Sustainable Development, as the REDD+ focal point and responsible entity in the country, presented this in response to the request for proposals for the REDD+ Results-Based Payments Pilot Program (Decision B.18/07). This program is based on Argentina's reporting of emission reduction results from reduced deforestation in the forest regions of the Chaco, Yungas, Paranaense Jungle, and Espinal²⁴ below

²⁴ Anexo Técnico REDD+ del Tercer Informe Bienal de Actualización (IBA). Buenos Aires: Secretaría de Ambiente y Desarrollo Sustentable de la Nación. Edition 2019.



the FREL of 101,141,848 tCO₂e, established at the subnational level and covering the historical period 2002-2013.

Program name	Argentina REDD-plus RBP for results period 2014-2016		
ID number	FP142 https://www.greenclimate.fund/project/fp142		
Period	2014-2016		
Payments	82 M		
Organization name	Under-Secretary of International Financial Relations for Development of the Ministry of Economy		
Contact person	Mr. Matias Javier Mana		
Title	Undersecretary of International Financial Relations		
Address	Hipólito Yrigoyen 250, Buenos Aires, Argentina		
Telephone	+5411 4349-8137		
Email	MJMANA@MECON.GOB.AR SSRFID@MECON.GOB.AR		

The total volume of emissions reduced for the 2014-2016 period and reported in the REDD+ Technical Annex of the Third Biennial Update Report (BUR 3) was 165,172,705 tCO₂e. Of this total, the volume offered to the GCF was 26,224,390 tCO₂e (18,731,707 tCO₂e for the 2014-2016 results period, along with 7,492,683 tCO₂e reserved due to the risk of reversal)²⁵.

The national Ministry of Environment and Sustainable Development established a REDD+ registry ²⁶ where payments to be received from the GCF are recorded to ensure transparency and prevent double counting and double use of emission reductions. In this context, the National Registry of Climate Change Mitigation Projects (ReNaMi), created through Resolution 363/2021, covers existing mitigation projects within the national territory that have been registered in publicly accessible international databases and are consistent with the reports in Argentina's Biennial Update Reports and the REDD+ Registry.

Regarding the results of emissions reductions from avoided deforestation, the provinces, through COFEMA, unanimously supported the Ministry of Environment and Sustainable Development in the implementation of the GCF's REDD+ pilot program proposal and approved the benefit-sharing scheme proposed by the Ministry, as per COFEMA Resolution 424/2020²⁷. Additionally, the Ministry of Environment and Sustainable Development signed technical collaboration agreements with each province for the

²⁵ Pagos por Resultados de REDD+ de la Argentina para el período de resultados 2014-2016. Propuesta de financiamiento. Ministerio de Ambiente y Desarrollo Sostenible (2020).

https://www.argentina.gob.ar/sites/default/files/arg_rbp_fp_v0082020-10-07_esp.pdf

²⁶ Ministerio de Ambiente y Desarrollo Sostenible. Dirección Nacional de Cambio Climático. Registro REDD+.

https://www.argentina.gob.ar/sites/default/files/2020/07/registro_redd_v.3.pdf

²⁷ Pagos por Resultados de REDD+ de la Argentina para el período de resultados 2014-2016. Propuesta de financiamiento. Ministerio de Ambiente y Desarrollo Sostenible (2020).

https://www.argentina.gob.ar/sites/default/files/arg_rbp_fp_v0082020-10-07_esp.pdf



implementation of REDD+ Results-Based Payments for the 2014-2016 period. The documentation with the province of Misiones was signed in 2022 during the 102nd Ordinary Assembly of COFEMA.

Misiones has participated in the preparation of the National Strategy for Climate Change Mitigation, and it is involved in the implementation of the strategy, along with other provinces. Furthermore, information relevant to Misiones has been included both for the development of the FREL and for the REDD+ results accounted for through reduced deforestation during the 2014-2016 period, given that the province contributed to emission reductions through reduced deforestation, resulting in internationally recognized REDD+ payment for the 2014-2016 period. Misiones is part of the benefit-sharing scheme planned through the Program, facilitated by the technical collaboration agreement (Decree 2,164/2022).

Emission reductions from reduced deforestation for 2017-2018 have been voluntarily reported in the REDD+ Technical Annex 2 of BUR 4. These results have also been included, for informational purposes, in the proposal for financing PPR REDD+. However, this volume of emission reductions from reduced deforestation has not been offered to any entity or market mechanism as of now. Thus, there is currently no double counting or double use to report. If this changes in the future, Misiones will report this to Verra.

It is important to note that neither the FREL submitted to the UNFCCC, nor the emission reductions results reported in the REDD+ Technical Annex include any volume of emission reductions associated with REDD+ degradation activities. This is due to the lack of sufficient available national-level information to quantify these activities. Consequently, degradation activities are excluded from the National Inventory of GHG Emissions and Removals (INGEI) as well.

Emission reductions and/or removals of GHGs from the jurisdictional REDD+ program will not be claimed under any other GHG program (e.g., other than JNR), including market-based and fund-based mechanisms. The Program has not been registered and is not seeking registration under other programs.

Additionally, the administration of program funds and from carbon revenue sales is managed carried out through a trust (fideicomiso) created for this purpose, managed by Banco Macro S.A. (Decree 1,114/2022). For the implementation of the Program, the Provincial REDD+ Project Registry was established in Decree N° 2179 and regulated by Resolution N° 441/24 and Resolution N° 022/25. It is important to highlight that credits sales will take into consideration the requirements of the market in which they will be used, ensuring avoidance of double counting.

Lastly, non-forest projects that have a direct impact on reducing deforestation will be considered in a timely manner under criteria to be selected at the time the project is listed in the corresponding standard. Given the diversity of non-forest projects that could be developed in the jurisdiction, the criteria will be defined on a project-by-project basis.

1.12. Benefit-Sharing Mechanism (BSM)

A key component of this Program is the BSM, which is a framework and set of procedures to administer and allocate benefits and create economic incentives to different relevant actors associated with REDD+ implementation ("beneficiaries").



The GPM recognizes that benefit-sharing is a fundamental component of any REDD+ initiative, as it is key the effective involvement of various sectors and stakeholders. The BSM ensures conformance with national and international treaties and agreements, adherence to the Cancun Safeguards, and to a large extent, the commitment to reduce deforestation and degradation for the long term.

The GPM led a stakeholder consultation and participatory process during the development and design of the BSM from its inception. This process was conducted in a manner that promoted equity, transparency, and respect for the Cancun Safeguards²⁸, along with compliance with existing national and international regulations and requirements of JNR. The BSM consultations were ongoing and extensive during the period following the initial PD submission. Therefore, in response to stakeholder inputs, updates to the BSM were made after the initial PD was submitted.

Legal Structure Chosen for the BSM

The financial mechanism to implement the BSM has been structured legally through the establishment of a trust (fideicomiso). GPM (represented by Mr. Adolfo Safrán, Minister of Finance, Public Works, and Public Services) and BANCO MACRO S.A.²⁹, which acts as the financial agent for GPM. signed a trust agreement. The Governor of Misiones formalized this agreement through Decree 1,114/2021, which was later modified through annex II of Decree 1,179/2024.

GPM's authority to enter into such contracts is described in Article 23 of Provincial Law VII n° 94, which states that the Executive Branch can establish trusts financed with special resources or contributions received by Misiones for its contribution to environmental preservation, biodiversity, and water resources. Additionally, in the Decree 2,530/2021, the Ministry of Finance, Public Works, and Public Services was authorized to oversee all aspects of the REDD+ program and carbon credit generation, as well as to formalize and manage tasks related to the trust agreement³⁰. The details of the implementation of the BSM, mainly about the registration of projects and distribution of funds to private actors, has been established in Decree N° 2.179, Resolution N° 441/24 and Resolution N° 022/25.

§a. Operation of the BSM

Emissions reductions from deforestation and degradation resulting from Program activities will be periodically verified and carbon credits issued as VCUs will be sold by the GPM in the voluntary carbon markets. The proceeds from these sales will be managed by the Trust, which will channel the funds through various accounts and sub-accounts of the BSM. This process will be repeated for the duration of the

²⁸ Ley n° 26,994. Código Civil y Comercial de la Nación. http://servicios.infoleg.gob.ar/infolegInternet/anexos/235000-239999/235975/texact.htm

²⁹ Banco Macro. https://www.macro.com.ar/home-page

³⁰ Foro Multisectorial de Seguimiento del Programa REDD+ ECO2. Acuerdo de Cooperación y Compraventa de Créditos de Carbono. https://programajnr.misiones.gob.ar/salvaguardas/acuerdos-y-convenios-oficiales-esenciales-para-el-desarrollo-del-programa-redd-eco2/. More information about the composition and mandate of the Multi-Sectoral Forum for Monitoring the REDD+ ECO2 Program can be found below, in Section 2: Safeguards.



crediting period following the sale of VCUs after each issuance. Success of the program will be a result of the effective implementation of the REDD+ Program under the framework of EPREDD+.

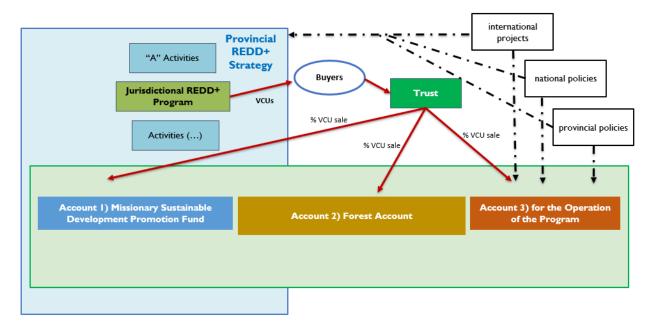


Figure 8: Benefit Sharing Mechanism

As shown in Figure 8, the BSM is comprised of three accounts, each of which is further divided into various sub-accounts. Table 1 describes the key aspects of these three accounts, each designed to address the essential objectives contributing to the Program's effective performance.

Account	Objective	Main beneficiaries	Alignment with the EPREDD+ Strategic Axes (EEE/EEO)
Account 1) Misiones Sustainable Development Promotion Fund	Act as an incubator / promoter of projects aligned to EPREDD+ presented by the private sector, NGOs, indigenous peoples, and academia to benefit Misiones society in general, directly and indirectly related to the conservation of native forests. At the same time, promote enabling conditions to improve access to the Forest Account (2) and the performance of the Program.	The conditions to participate in the sub-accounts are as follows: Sub-account 1.1: Indigenous Peoples Sub-account 1.2: Municipalities Sub-account 1.3: NGOs / Cooperatives/Small and	 EEE 2. Strengthening local communities EEE 4. Recognition of the importance of native forests as an asset for society EEE 5. Knowledge management



		Medium Companies (PyMES) Sub-account 1.4: Educational Institutions Sub-account 1.5: Reserve fund	
Account 2): Forest Account	Provide monetary incentives according to the Benefit Quantification Formula to beneficiaries that contribute directly to reducing emissions caused by deforestation and degradation of native forests through their actions.	The beneficiary of Account 2 is any owner of native forest who maintains forest cover during a given monitoring period.	 EEE 2. Strengthening local communities EEO 7. Sustainable forest management EEO 8. Conservation in productive landscapes EEO 9. Restoration and recovery EEO 10. Prevention of forest fires
Account 3): Operation of the Program	Allocate sufficient resources to strengthen institutional capacities to address and control the causes (drivers) of deforestation and degradation, such as: strengthening early warning systems for fires and fighting fires, the monitoring of illegal logging and control of the traceability of the use and trade of logging to reduce its illegality, etc. Also, this account will cover costs of implementing the EPREDD+, SIS and BSM to ensure the continuity and good performance of the REDD+ Program.	Assignments to the MEyRNR, through the sub-accounts: • Sub-account 3.1: necessary investments and their maintenance to reduce the causes of deforestation and degradation (Strengthening Subaccount) • Sub-account 3.2: Operational • Sub-account 3.3: Reserve	 EEE 1. Strengthening governance EEE 3. Strengthening management, control and monitoring capabilities EEO 6. Territorial planning EEO 10. Prevention of forest fires

Table 1: Accounts of the REDD+ ECO2 Fund

Further description of the Accounts, Sub-accounts, and Activities of the BSM



The three main accounts described above are further organized into various sub-accounts (see *Figure 9*), to ensure that carbon revenue is channelled to all relevant stakeholders and REDD+ activities. The BSM was designed in a manner that considers social needs and priorities.

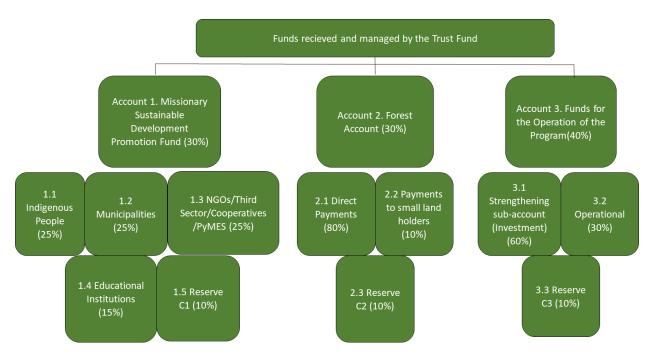


Figure 9: Accounts and Sub-accounts of the Trust

A specified percentage of available funds will be allocated to each of the three accounts of the Trust.

One of the key actors are the owners of land with native forests. For this group, the BSM foresees:

- Direct payments based on maintaining native forest cover (Account 2. Forests).
- Participation in indirect monetary benefits through requests for proposals for projects related to the reduction and capture of GHG emissions in the forestry or agricultural sector (Account 1.3 Sustainable Development).
- An economic compensation mechanism is planned to support municipalities that implement municipal tax exemptions for individuals (private) that successfully participate in the benefit sharing mechanism. It is important to note that GPM must enter into agreements with the municipalities before this can be implemented. It will also depend on the revenues allocated to Account 1.2.
- A given landowner has the potential to receive benefits from more than one account. This could include, for example, payments to forest owners under Account 2, municipal tax exemptions under Account 1.2,



and the implementation of a successful proposal, or benefits from a project is awarded funds under Account 1.3. The accounts and sub-accounts are described as follows:

Account 1. Misiones Sustainable Development Promotion Fund:

This account is intended to function as an incubator/promoter of projects that align with the EPREDD+, and implemented by the private sector, NGOs, indigenous peoples, and academia to benefit all of Misiones society, directly and indirectly, in relation to the preservation and conservation of native forests. It also promotes enabling conditions to improve access to Account 2 (Forest Account) and the overall performance of the Program.

Through this Account, the Program will fund projects that provide benefits to key stakeholders in Misiones that rely upon, live in, or work near native forests. The incentives from this Fund, therefore, will be directed towards financing projects that are aligned with some strategic lines:

- Increase the conservation and value of forests.
- Promote the enhancement of the environmental services of native forests.
- Promote investments and job creation in adaptation and mitigation initiatives.
- Improve enabling institutional conditions.
- Foster knowledge of the economy as long as it contributes to the Program's objectives.

In this way, revenue generated by the Program will be shared and distributed to a variety of stakeholders to enhance capacities and create enabling conditions that result in contributions to Program performance. For this purpose, the Fund has the following sub-accounts:

- Sub-account 1: Indigenous Peoples.
- Sub-account 2: Municipalities.
- Sub-account 3: NGOs / Third Sector/Cooperatives/PyMES.
- Sub-account 4: Educational Institutions.

Sub-account 5: Reserve fund

Part of Subaccount 1.2 will be used to compensate municipalities for municipal tax exemptions that they may offer to private forest owners.

Fund allocations to sub-accounts will focus on the following areas of activity:

- ✓ Promotion of plans that include: forest and natural resource management plans, conservation plans, community development plans. This will be directed at stakeholders, including indigenous peoples, local communities, small producers, and other vulnerable groups. These groups will receive a variety of non-monetary benefits such as promoting gender inclusivity in the Program (such as support for female entrepreneurs, forest guardians) among others.
- ✓ Competitive project selection: aimed at the academic sector and civil society organizations in Misiones to finance selected projects for national and international funds that focus on



environmental and/or social topics and goals that are aligned with to the Program's REDD+ objectives, especially with a focus on gender, interculturality, and sustainable value chains, among others. This will promote capacity development in the province and leverage additional international funds that can co-finance projects.

- ✓ Direct allocation for key sectoral policies: additional incentives to complement resources allocated by other policies (national or provincial), complementary to the REDD+ ECO2 Program, and of interest to GPM, for example, for beneficiaries of the Family Agriculture Law scheme.
- ✓ Support for technological changes + technical assistance: non-repayable loans, subsidies, or other types of support, aimed at promoting the adoption and/or development of new technologies for economic activities that contribute to reducing emissions from the degradation or deforestation of native forests.

Account 2. Forest Account:

This account is intended to provide monetary incentives according to the Benefit Quantification Formula to individuals whose activities directly contribute to reducing emissions from deforestation and degradation of native forests.

Benefit Quantification Formula for the Forest Account

Account 2 will provide direct monetary benefits to owners of native forests that maintain forest cover in each monitoring period of the Program. The beneficiaries of Account 2 include private owners of all native forests (Provincial Parks, National Parks, and other categories of public lands are excluded).

Account 2 has 3 sub-accounts:

- a. Subaccount 2.1 Direct Payments to Forest Owners.
- I. Direct payments will be determined based on a combination of property attributes. The property must be comprised of native forests. Three key attributes have been identified to determine the calculation of payments to landowners. The attributes are:
- (A) The conservation category for native forests defined by Law n° 26,331:
 - Category I (red): Forests with very high conservation value that may never be converted.
 - Category II (yellow): Forests of medium conservation value that may be sustainably managed (i.e., degraded), but if they are restored may have a high conservation value. No clearing is allowed.
 Only sustainable use, recreational use, NTFP gathering and scientific research are permitted Category III (green): Forests of low conservation value that may be partially or totally converted but only after an environmental impact assessment has been conducted and with a Land Use Change Plan approval.
- (B) Whether the property is located within the Green Corridor (A2); and



- (C) Long-term commitment of the Landowner (A3): in cases where the property is converted into a Private Reserve in accordance with Law XVI n°29 (Chapter IX).
- II. Combination of Attributes: Each hectare of forest will possess a combination of these three attributes. Consequently, each hectare of native forest can be categorized in one of the following combinations (once a landowner establishes a Private Reserve, that property cannot be categorized as green for the OTBN):
 - Green Category + Green Corridor + No Private Reserve
 - Green Category + No Green Corridor + No Private Reserve
 - Yellow Category + Green Corridor + Private Reserve
 - Yellow Category + Green Corridor + No Private Reserve
 - Yellow Category + No Green Corridor + Private Reserve
 - Yellow Category + No Green Corridor + No Private Reserve
 - Red Category + Green Corridor + Private Reserve
 - Red Category + Green Corridor + No Private Reserve
 - Red Category + No Green Corridor + Private Reserve
 - Red Category + No Green Corridor + No Private Reserve
- III. Assignment of Weighting Factor: Each attribute mentioned above (A1, A2, and A3) will be assigned weighting factors based on their relative importance to the goals of the Jurisdictional Program to reduce deforestation and forest degradation. The weightings are:

OTBN (f₁)

Green Category	150%
Yellow Category	100%
Red Category	75%

Green Corridor (f2)

Green Corridor	125%
No Green Corridor	100%

Private Reserve (f₃)

Private reserve	200%



No private reserve 100%	
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IV. Calculation of Factors for Each Combination

Factors for each combination of attributes	Calculation	Factors (f _c)
Green Category + Green Corridor + No Private Reserve	150% x 125% x 100%	188%
Green Category + No Green Corridor + No Private Reserve	150% x 100% x 100%	150%
Yellow Category + Green Corridor + Private Reserve	100% x 125% x 200%	250%
Yellow Category + Green Corridor + No Private Reserve	100% x 125% x 100%	125%
Yellow Category + No Green Corridor + Private Reserve	100% x 100% x 200%	200%
Yellow Category + No Green Corridor + No Private Reserve	100% x 100% x 100%	100%
Red Category + Green Corridor + Private Reserve	75% x 125% x 200%	188%
Red Category + Green Corridor + No Private Reserve	75% x 125% x 100%	94%
Red Category + No Green Corridor + Private Reserve	75% x 100% x 200%	150%
Red Category + No Green Corridor + No Private Reserve	75% x 100% x 100%	75%

Determination of the number of hectares in each combination (at the beginning of each monitoring period).

Combination of attributes	Number of hectares of private land**
Green Category + Green Corridor + No Private Reserve	77,000
Green Category + No Green Corridor + No Private Reserve	295,000
Yellow Category + Green Corridor + Private Reserve	18,000
Yellow Category + Green Corridor + No Private Reserve	505,000
Yellow Category + No Green Corridor + Private Reserve	5,000



Yellow Category + No Green Corridor + No Private Reserve	233,000
Red Category + Green Corridor + Private Reserve	4,000
Red Category + Green Corridor + No Private Reserve	18,000
Red Category + No Green Corridor + Private Reserve	300
Red Category + No Green Corridor + No Private Reserve	8,000
Total	1,163,300

^(**) numbers are included as an example.

VI. Weighted scores for each combination: The total score is calculated by multiplying the number of hectares of each combination by the respective factor and the points for each combination are added together.

Factors for each combination of attributes	Calculation	Score
Green Category + Green Corridor + No Private Reserve	77.000 * 188%	144.375
Green Category + No Green Corridor + No Private Reserve	295.000 * 150%	442.500
Yellow Category + Green Corridor + Private Reserve	18.000 * 250%	45.000
Yellow Category + Green Corridor + No Private Reserve	505.000 * 125%	631.000
Yellow Category + No Green Corridor + Private Reserve	5.000* 200%	10.000
Yellow Category + No Green Corridor + No Private Reserve	233.000* 100%	233.000
Red Category + Green Corridor + Private Reserve	4.000 * 188%	7.500
Red Category + Green Corridor + No Private Reserve	18.000 * 94%	16.875
Red Category + No Green Corridor + Private Reserve	300 * 150%	450
Red Category + No Green Corridor + No Private Reserve	8.000 * 75%	6.000
Total	1.163.300 * f _c ⁱ	1.536.950

VII. The payment for each score is determined: The total revenue from the sale of carbon in a given monitoring period for sub-account 2.1 is divided by the sum of all scores. As an example, if Account 2



revenues total \$17,167,500 and sub-account 2.1 receives \$13,734,000 (80% of \$17,167,500), divide that amount by 1,536,950 score points and that gives a payment of \$8.94 per score point.

VIII. Index of Monetary Benefit (IMB): Once the payment per score is obtained, the IMB is obtained for each combination of attributes.

Combination of attributes	Calculation	IMB
Green Category + Green Corridor + No Private Reserve	\$8,94 x 188%	16,75
Green Category + No Green Corridor + No Private Reserve	\$8,94 x 150%	13,40
Yellow Category + Green Corridor + Private Reserve	\$8,94 x 250%	22,34
Yellow Category + Green Corridor + No Private Reserve	\$8,94 x 125%	11,17
Yellow Category + No Green Corridor + Private Reserve	\$8,94 x 200%	17,87
Yellow Category + No Green Corridor + No Private Reserve	\$8,94 x 100%	8,94
Red Category + Green Corridor + Private Reserve	\$8,94 x 188%	16,75
Red Category + Green Corridor + No Private Reserve	\$8,94 x 94%	8,38
Red Category + No Green Corridor + Private Reserve	\$8,94 x 150%	13,40
Red Category + No Green Corridor + No Private Reserve	\$8,94 x 150%	13,40
Total	\$8,94 * f _c i	

IX. Distribution of benefits to each owner: The amount of monetary benefits for each owner is the result of multiplying the payment per score and the factor of the corresponding combination. As an example, owner A has a property with 1,000 hectares distributed as follows:

Combination of attributes	Number of hectares	IMB	Payment
Native forest yellow category + no green corridor + no private	800	9,12	\$7149
Native forest red category + no green corridor + no private reserve	25	5,9	\$168
Agriculture	175	0	0



Total	1000	\$7316

b. Subaccount 2.2 Small landowner payments

Subaccount 2.2 is aimed at owners of properties of up to 50 hectares, provided that 50% or more of the area is covered by native forest. Payments are differentiated according to the percentage of forest cover that exceeds 75%.

Only 10% of the income from account 2 will be allocated. If this income amounts to \$17,167,500, sub-account 2.1 receives \$1,716,750.

c. Subaccount 2.3 Reserve Funds

Subaccount 2.3 in the example above would receive an amount of \$1,716,750 (10% x \$17,167,500), which will serve to supplement payments from sub-accounts 2.1 and 2.2 in the event that carbon sales revenues fall below a previously defined threshold.

Allocation of benefits in the initial stage of the Program

For the first period, following the first issuance and sale of VCUs, the allocations from the Forest Account to private individuals will be calculated exclusively based on the IMB of each parcel of the private property. This is because the REDD+ program started in 2017 and many of the newer features of the BSM cannot be retroactively implemented.

Account 3. Program Operation:

This account is intended to ensure sufficient resources for strengthening institutional capacities essential for the Program's viability and for addressing the drivers of deforestation and degradation. This includes strengthening early fire detection and firefighting, monitoring illegal logging, and controlling traceability of timber use and trade to reduce illegality. Additionally, this account aims to cover costs necessary to ensure the continuity and proper performance of the Program (including implementation of the BSM, EPREDD+, MRV, reporting to Verra, and implementation of SIS).

To fulfil its objectives, Account 3 provides allocations to the MEyRNR through the following sub-accounts:

Sub-account 3.1 Necessary Investments and Maintenance for Reducing Deforestation and Degradation Drivers (Strengthening Sub-account):

This will finance activities such as the following (the list is not exhaustive):

1. Strengthening monitoring of authorized forest management plans, both utilization and forest promotion plans under Law n° 26,331 (conservation), implemented in conjunction with the Executive Unit and the forest promotion department of the DGBN that require periodic monitoring.



- 2. Strengthening the rapid detection system for illegal or unplanned deforestation.
- 3. Improving the rapid detection of intrusion episodes.
- 4. Strengthening and improving the mobile, fixed, and strategic forest control system for the forestry industry.
- 5. Strengthening and improving the forest control scheme for the three fixed posts within the province (Paraíso, Pozo Azul, and El Soberbio), expanding to two additional posts.
- 6. Strengthening and improving forest control at the two fixed posts leaving the province (Centinela and El Arco), expanding to two additional posts (Azara and Estación Apóstoles).
- 7. Strengthening the ministry's delegations and detachments in infrastructure and equipment:
- Technical areas of the General Directorate of Forests in six delegations (El Dorado, Andresito, San Pedro, San Vicente, Oberá, and Posadas).
- Delegations that group lower-ranking activities and Amirby, which manages the Yabotí Biosphere Reserve.
- Creation of an additional technical area in the Puerto Rico/Jardin América area.
- 22 provincial parks.
- Implementation of an ongoing training plan for security forces: police, coast guard, gendarmerie, fire brigades, and firefighters.

Sub-account 3.2 Operational:

This aims to ensure resources to cover all annual costs of the Program, such as trust fund operation, advisor expenses, the Program's Executive Unit, MRV, Verra reporting, document reviews, verification costs, SIS implementation, BSM implementation, and others.

Sub-account 3.3 Reserve:

The objective is to ensure the availability of sufficient resources to cover recurring expenses when verified carbon credits are not sold, or other situations arising from legal issues (claims) or unforeseen emergencies.

Allocations to Different Accounts and Sub-accounts of the BSM

Account 3 (Program Operation) will be the first to be funded as it includes the costs and expenses necessary for the proper functioning of the Program. This account will have an initial maximum allocation limit of 65% of the total revenue from the sale of VCUs for the first period. This is when the largest investments are required to address the causes of deforestation and degradation. This amount will gradually decrease to 40%. Once these necessary requirements for the Program's sustainability are met - validated by methodology and endorsed by the market - the distribution of funds between Account 1 (Development Promotion Fund) and Account 2 (Forest Account) will be evenly split. Table 2 presents an initial version of the allocation percentages for each account and sub-account of the BSM:

Account	Sub-account	Allocation Percentage
Account 1) Misiones Sustainable Development Promotion Fund		30%



1.1	Indigenous communities	25%
1.2	Municipalities	25%
1.3	NGOs / Third Sector	25%
1.4	Educational institutions	15%
1.5	Reserve	10%
Account 2) Forest Account		30%
2.1	Direct payments	80%
2.2	Base payments for small owners	10%
2.3	Reserve	10%
Account 3) Program Operation		40%
3.1	Strengthening	60%
3.2	Operational	30%
3.3	Reserve	10%

Table 2: Allocations to Different Accounts and Sub-Accounts of the BSM

Periodic Updates to Allocation Percentages and Performance Monitoring of the BSM by the Multisectoral Monitoring Forum of the REDD+ ECO2 Program

The percentages from the previous table may be adjusted in subsequent reporting periods based on the experience gained from the Program's implementation. To make these changes with the participation of various involved sectors and to ensure the proper performance and overall transparency of the BSM, the Program's Executive Unit will consult with the Multisectoral Monitoring Forum of the REDD+ ECO2 Program³¹. This forum will also be granted access to reports on the flow of resources and impacts of the BSM, which will serve as inputs for regular reporting in the SIS.

§b. BSM modality for indigenous populations

The BSM of the Program includes a modality for the effective benefit of indigenous populations. This approach arises from the recognition that due to the vulnerable situation of a portion of this sector of society, special measures are needed to ensure their access to the benefits of the Program. These measures aim

³¹ Programa JNR de Misiones. Proceso participativo del Programa: FASE 3, de retroalimentación de documentos. https://programajnr.misiones.gob.ar/salvaguardas/consulta-fase-3/



to overcome gaps related to technical capacity, economic resources, land tenure, cultural aspects, and more. A generalized approach to BSM that holistically and proactively considers the circumstances of the Mbya Guaraní community at the Program's design stage, especially when determining benefit allocations, will reduce the likelihood of conflicts in the short and/or medium term, and will support the Program's long-term performance.

In this manner, applying the UNFCCC Cancun Safeguards for REDD+ as well as best practices for REDD+, a consultation process was conducted involving representatives of indigenous populations. During this process, a series of requirements and characteristics were identified that this modality should contain to be acceptable and appropriate to their needs. These aspects were integrated into the overall scheme of the Program's BSM, resulting in the special modality illustrated in Figure 10:

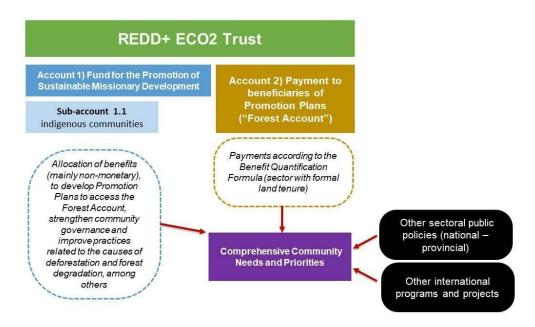


Figure 10: Special Modality for Indigenous Communities

The special BSM modality for indigenous communities can be summarized as follows:

a) Needs:

Indigenous community members, across different villages, will be treated as a unified community for the purposes of the Program's BSM. Through their own decision-making processes, they will define the Comprehensive Community Needs and Priorities to be addressed. They will also determine the internal distribution of benefits and related aspects (to be decided among themselves in accordance with their right to self-determination) and distribute all benefits received within the community.

The Provincial Guarani Affairs Department, under the Ministry of Human Rights, will present a unified list of needs to the Program's Executive Unit. These will be those that emerged from the participatory process



involving community representatives. Priority will be given to the capacity to access dignified living conditions, building climate-resilient infrastructure, biodiversity protection, and respect for their traditions.

b) Benefits:

Considering that Indigenous Communities lack the technical and financial resources to develop a Promotion Plan, this population's effective and equitable inclusion in the Program is addressed with a Sub-account for Indigenous Peoples. This sub-account (1.1) is established within the Sustainable Development Promotion Fund for Misiones and includes allocation of a range of benefits (primarily non-monetary). These benefits are specifically aimed at improving the living conditions of this vulnerable population. The sub-account will include support to develop Promotion Plans for accessing the Forest Account, strengthening of community governance, and enhancing practices to address the causes of deforestation and forest degradation. This sub-account can directly provide benefits to the indigenous population and can also achieve this through:

- 1. Strengthening existing public policies, such as the Community Comprehensive Plans (PIC) outlined in Law n° 26,331 or programs in the Family Farming Law, among others.
- 2. Engaging various sectors of Misiones society (e.g., NGOs/third sector, educational institutions, etc.) to develop projects and programs addressing social and/or environmental aspects that ultimately benefit the Mbya Guarani community.
- 3. Other modalities emerging from practice and/or participatory processes.

Community lands meeting the legal requirements to develop and implement a Participation Plan, that are registered in the REDD+ Registry, will receive benefits on equal terms as other Program Promotion holders, according to the Forest Account Benefit Quantification Formula. These revenues will be directed to a single bank account under the Community's name, with unrestricted access, to cover general needs as outlined in section (a), above.

Furthermore, this special modality for the Guarani Community seeks to channel resources from various public policies, programs, and projects that can cater to the aforementioned Comprehensive Community Needs and Priorities. This includes leveraging funding activities with other programs such as funds provided by the Program for Results of the Green Climate Fund, the Native Forest Law, the Family Farming Law, and projects from the Sustainable Development Promotion Fund of the Program. As part of this effort, the Program, through the Guarani Affairs Department and the Executive Unit, will particularly evaluate potential opportunities to address community needs through non-monetary benefits from various sources. These may include strengthening land tenure security, training, and other socio-cultural context-appropriate measures, aligned with the community's own decisions.

§c. Alignment with Applicable Safeguards in the JNR

The design and the development process of the BSM were carried out in a manner that respects and addresses the Cancun Safeguards and the specific requirements for jurisdictional programs under Scenario 2. The following excerpts from Scenario 2 are particularly relevant:



<u>Social and Environmental Safeguards and Benefit Distribution</u>: It is crucial for jurisdictional programs to communicate transparently with stakeholders during program development and implementation. Compliance with relevant safeguards is necessary to prevent or limit negative environmental and social impacts. Benefit Sharing Mechanisms are employed to ensure that stakeholders, including indigenous peoples, local communities, and other relevant carbon rights holders, are acknowledged and rewarded for their role in reducing GHG emissions.

<u>Benefit Distribution</u>: Jurisdictional proponents must implement an equitable, transparent, and legally binding benefit distribution system. This system should consider the carbon rights of stakeholders, including rights to land, forests, forest resources, as well as their contribution to ecosystem services resulting in GHG emission reductions. Benefit distribution systems are developed through a transparent and participatory process, where stakeholder participation is duly representative, with special emphasis on indigenous peoples, local communities, women, and the most marginalized and/or vulnerable³².

The requirements in Verra's standards regarding BSM focus on the transparency and participatory nature of the development process, rather than the structure of the BSM itself, which is left to the discretion of the proponent. Similar considerations apply to the Cancun Safeguards. Although none of the seven safeguards specify specific BSM requirements, they do encompass aspects that directly influence both the design process and the respect for rights and other factors essential for the environmental and social integrity of the BSM and the underlying REDD+ strategy as an inclusive and effective public policy. Table 3 provides examples of how the BSM design integrates the main principles of these UNFCCC safeguards:

Safeguard	Reflection in the BSM Program
A: Alignment with national and international forest policies	 The financing lines of Account 3.1, necessary investments and their maintenance to reduce the causes of deforestation and degradation, are aligned with EPREDD, which follows the same strategic axes as the National Forest and Climate Change Action Plan, the country's national REDD+ strategy. The Promotion Plans promoted by BSM in Account 2 are aligned with National Law n° 26,331, the framework for the management of native forests in the country. BSM's financing strategy, especially concerning indigenous populations, aims to leverage other sources of funding for public policies, programs, and related projects.
B: Transparent and Effective Forest Governance	 The operation and allocations of BSM are objective and predictable. BSM's trust deed has been approved by decree and is publicly accessible.

³² Verra. JNR Requirements, Scenario 2, v4.0.



	The Multisectoral Forum for Monitoring the REDD+ ECO2 Program will have functions for monitoring the accountability of BSM.
C: Knowledge and rights of indigenous peoples and local communities	 BSM's special modality for indigenous peoples was designed specifically to ensure the concrete benefit of the Mbya Guaraní Community, and for them to establish priorities according to their needs and culture. BSM's special modality was designed through a participatory in-person process, involving traditional authorities and with simultaneous translation into Guaraní, resulting in free, prior, and informed consent, in accordance with ILO Convention 169 and the country and provincial legal framework. Sub-Account 1 of the Misiones Sustainable Development Promotion Fund is aimed at providing a series of Program-derived benefits (mainly nonmonetary), especially aimed at improving the living conditions of this vulnerable sector, developing Promotion Plans to access the Forest Account.
D: Full and Effective Participation of Parties	 In addition to the process with indigenous populations, the initial participatory events for the dissemination and construction of the Program included a session to build capacities and obtain inputs for the design of BSM. BSM foresees a participation stage for various interested sectors and monitoring of its correct implementation through the Multisectoral Forum for Monitoring the REDD+ ECO2 Program.
E: Conservation of native forests and biodiversity, enhancing other social and environmental benefits	 The three accounts of BSM aim to strengthen the sustainable management of native forests, prevent Land Use Change (CUS), and promote more sustainable means of production than usual practices. BSM, especially through the Misiones Sustainable Development Promotion Fund, will seek to finance projects related to carbon forestry, biodiversity, and sustainability in general, with the potential to benefit society as a whole through its various sub-accounts.
F: Prevention of reversals and	Account 3 aims specifically to strengthen monitoring capabilities, enforceability of the law, and fire prevention, directly impacting the strengthening of capacities within the Ministry of Ecological Transition and
G: Leakage risks	Natural Resources (MEyRNR) to mitigate these risks.

Table 3: Inclusion of the Cancun Safeguards in the Program's Safeguard Framework



1.13. Program Sensitive Information

No information is excluded from the public version of the JNR program description, as the available information is not considered confidential.

2. SAFEGUARDS

While there is no universally standardized definition of safeguards, for the purposes of this document, safeguards refer to a set of principles, procedures, policies and measures that are designed to mitigate and minimize adverse environmental and social impacts that may arise in the implementation of development REDD+ programs. The safeguards approach used in this Program, is based on a rights-based principles, aimed at preventing or mitigating environmental and social harm while respecting and ensuring the fundamental rights of individuals. Furthermore, this approach seeks to ensure that all relevant stakeholders are consulted in a participatory manner and are given access to a share of benefits. This framework for applying safeguards to REDD+ activities was developed during COP16 via the Cancun Safeguards. The REDD+ Safeguards Approach of the Province of Misiones aims to address and respect these safeguards comprehensively, in a manner that is aligned with Argentina's REDD+ safeguards process. This safeguards approach consists of various tools and processes that the REDD+ ECO2 Program implements to ensure that it addresses and respects all safeguards.

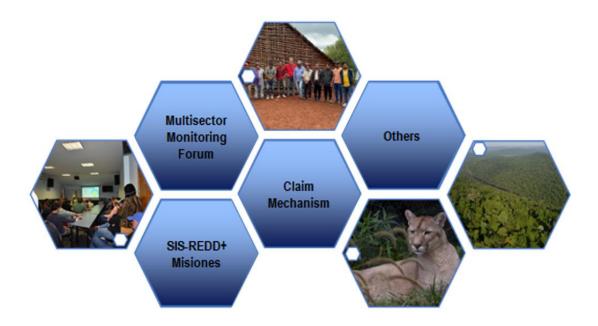


Figure 11: Tools and processes showing the scope of the Program safeguards

§d. The UNFCCC Safeguards for REDD+ (Cancun Safeguards)



The Cancun Agreements were adopted by the UNFCCC during the 16th Conference of the Parties (COP 16) in 2012 (Decision 1/CP.16)³³. These agreements consist of seven Safeguards, also known as the Cancun Safeguards, that must be addressed and respected during the preparation and implementation stages of REDD+. These concepts are interpreted as follows:

<u>Address</u>: Each country must ensure the existence of a regulatory framework to implement REDD+ initiatives in accordance with the Safeguards established by the UNFCCC.

<u>Respect</u>: Each country will implement the regulatory framework through institutions, mechanisms, policies, plans, and programs to comply with the Safeguards within the context of REDD+.

These Safeguards are designed to ensure that REDD+ activities contribute to climate change mitigation while simultaneously protecting the rights of indigenous peoples, local communities, and ecosystems. The address and respect principles are intended to ensure that REDD+ initiatives not only achieve emission reductions but also promote social and environmental integrity.

The following Cancun Safeguards must be promoted and supported when carrying out the REDD+ activities:

- a) **Complementarity or Compatibility**: Measures should be complementary or compatible with the objectives of national forest programs and international conventions and agreements related to the subject matter.
- b) **Transparency and Effectiveness of Governance**: The transparency and effectiveness of national forest governance structures should be respected, considering national legislation and sovereignty.
- c) Respect for Indigenous Knowledge and Rights: Indigenous peoples' knowledge and rights should be respected, taking into account relevant international obligations and national circumstances and legislation. The United Nations General Assembly has approved the United Nations Declaration on the Rights of Indigenous Peoples.
- d) **Full and Effective Participation**: Full and effective participation of stakeholders, particularly indigenous people and local communities, should be ensured in the measures mentioned in paragraphs 70 and 72 of this decision.
- e) Compatibility with Conservation and Biodiversity: Measures should be compatible with the conservation of natural forests and biodiversity. They should encourage the protection and conservation of these forests and the ecosystem services they provide, rather than be used for the conversion of natural forests. These measures should also enhance other social and environmental benefits.
- f) Addressing Reversal Risks: Measures to address the risks of reversal should be adopted.

³³ https://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf



g) Reducing Emission Displacement: Measures to reduce emission displacement should be adopted.

These Cancun Safeguards emphasize the importance of integrating social, environmental, and governance considerations into REDD+ activities. They ensure that the benefits of REDD+ are achieved without causing harm to people or the environment and that the rights and participation of indigenous peoples and local communities are respected. The implementation of these safeguards contributes to the sustainable and equitable outcomes of REDD+ initiatives.

§e. Requirements regarding Verra JNR safeguards

The JNR Scenario 2 requirements for safeguards are summarized in Table 4.

Original reference	Approach in this document and other annotations			
JNR Program Guide (v.4.0, 15 April 2021)				
Scenario 2 jurisdictional programs must include all elements needed for jurisdictional accounting at a minimum, a jurisdictional strategy or plan to develop REDD+ activities, a jurisdictional FREL, a jurisdictional measuring and reporting system, and a safeguards information system. (p. 3)	SIS-REDD+ Misiones developed in §j. REDD+ Strategy of ECO2 REDD+ program (EPREDD+)			
JNR Scenario 2 Requirements (v.4.0, 15 April 2021)				
3.8 Social and Environmental Safeguards and Benefit-Sharing 3.8.1 Jurisdictional programs shall comply with all UNFCCC decisions on safeguards for REDD+,7 and any relevant jurisdictional (national and sub-national) safeguards requirements otherwise established by any law, statue or regulatory framework (e.g., including those that are not specific for REDD+).	The SIS-REDD+ Misiones was designed in accordance with all the decisions of the UNFCCC in this matter, following the relevant guidelines of the SIS-AR, ensuring its alignment and information exchange. To achieve this, the SIS-REDD+ Misiones reports at three different levels (see Objectives and Scope in §j).			
3.8.2 Jurisdictional proponents shall provide information in the monitoring report with respect to how, during the design and implementation of the program, UNFCCC decisions on safeguards and any relevant jurisdictional (national and sub-national) safeguards requirements have been addressed and respected. Jurisdictional proponents shall report any advances in the jurisdictional information systems	The SIS-REDD+ Misiones provides information on the approach and compliance with the Safeguards as required by the UNFCCC. Likewise, the REDD+ ECO2 Program implements the SIS for all types of REDD+ activities in the Province to ensure alignment and consistency. To do so, the SIS-REDD+ Misiones reports at three different			



created for providing information on how safeguards are addressed and respected, where available.	levels (see Objectives and Scope in §j). §f describes the participatory process carried out for the design of the REDD+ ECO2 Program and how the Cancun Safeguards were considered. In §j, a summary is provided of the multistakeholder consultation for the design of this SIS.
3.8.3 Jurisdictional proponents shall ensure information about how safeguards have been addressed is made readily accessible to all relevant stakeholders throughout implementation of the jurisdictional program ().	All information about Safeguards, from the design to the implementation of the Program, has been available since the beginning of the participatory process at: https://programajnr.misiones.gob.ar/salvaguar das/
3.8.4 Jurisdictional programs shall be developed and documented in a transparent manner and in consultation with stakeholders. Stakeholders include, inter alia, project proponents of existing AFOLU projects, private landowners, rural and/or indigenous communities, as well as relevant government agencies, private sector, academy representatives, and NGOs. Principle 6 of the REDD+ Social & Environmental Standards (REDD+SES); the Guidelines on Stakeholder Engagement in REDD+ Readiness of the Forest Carbon Partnership Facility and/or the UN-REDD Programme may be used to guide the stakeholder consultation process.	The program website transparently describes all aspects of the JNR and REDD+ Program. The consultation process was comprehensive and robust and is described in this section (below) of this document.
3.8.5 Jurisdictional proponents shall develop a mechanism for receiving, screening, addressing, monitoring and reporting feedback on grievances and concerns submitted by stakeholders relating to the design, implementation and evaluation of the jurisdictional program at the local, sub-national and national levels. This mechanism shall include appropriate means of communication to enable all interested stakeholders to participate. Principle 6.6 of the REDD+ SES may be used to guide the development of grievance mechanisms.	The Program has had a Complaints Mechanism on the SIS website since its design stage: https://programajnr.misiones.gob.ar/salvaguar das/comunicacion-y-reclamos/. The mechanism will be supplemented with the necessary requirements to reach various stakeholders in the field once the Program is registered and operational.
3.8.6 Additional standards, such as the REDD+SES, may be applied to demonstrate compliance with the social and environmental safeguards requirements.	The SIS-REDD+ Misiones applies indicators that are partially based on the ART-TREES standard, as it is one of the most robust frameworks in the field (see §j), along with others from the SIS-AR or already in use by the MEyRNR.



Table 4: Requirements on safeguards for Verra's JNR programs

In addition, a Program Environmental and Social Management Plan (ESMP) was developed, according to the VCS Standard requirements, as detailed in section 6 for the Safeguards Information System (SIS).

§f. Participatory process for Program design

As previously mentioned, the Program's design included the implementation of a fully transparent participatory process which adheres to the JNR safeguard requirements.

Clarification on the organization of information relating to the participatory process

The most important aspects of the participatory process are provided in §f, with a summarized description of the methodology used and the results obtained. For further information, this section will be complemented by the following documents available for the VVB at validation:

- ✓ Participatory Process (additional information): provides supplementary information on key aspects of the process directly related to the results explained in §f.
- ✓ Full Documentation of the Participatory Process: this includes complete documentary support for the entire participatory process, including photos, directories with detailed information about the individuals invited. This information serves as a record, archive, and support for the process carried out.

§g. Summary of the approach taken for the consultation process

It is worth noting that the representation of the Huellas para un Futuro Foundation, and/or whoever the Council of Chiefs of the Guaraní Nation appoints to mediate and coordinate actions to address concerns and claims (Pindó Poty Community) before the respective Organizations, is supported by 2 notes (2017 and 2018) to the National Institute of Indigenous Affairs (INAI). Moreover, the UN REDD and FCPF (Forest Carbon Partnership Facility of the World Bank) programs were implemented jointly by the Ministry of Ecology and the Huellas para un Futuro Foundation (HFF) between 2019 and 2022. HFF is the Argentina's Focal Point Organization of the World Bank FCPF as it relates to the adherence of Safeguards in the for the development of its programs.

The projects were implemented within the program "Capacity building in REDD+ for Civil Society Organizations, local residents and indigenous communities in Central and Latin America." Within several activities carried out by the program, the preliminary obtention of the CPLI for the implementation of REDD+ and the Convention on Biological Diversity in its Nagoya Protocol chapter was carried out, which meant obtaining the FPIC to safeguard the emerging rights to agree sharing ancestral knowledge associated with genetic resources and participate in the benefit sharing mechanism regarding the sustainable use of biodiversity and its components. The FPIC obtained for this purpose was signed by the 3 chiefs of the communities involved in the program. It is worth noting that during the program, a type of commercial value



was identified, which ultimately obtained the INTERNATIONALLY RECOGNIZED CERTIFICATE OF COMPLIANCE (IRCC) granted under the ABS regulatory framework and Law n° 27.246 (approval of the Nagoya Protocol) of the Convention on Biological Diversity endorsed by Argentina.

The accreditation process involved the supervision of the Local and National Enforcement Authorities (IMIBIO, GPM, and Ministry of Environment and Sustainable Development of the Nation, respectively) in order to guarantee respect and alignment with local and international laws and regulations. Post-completion audits of FCPF/BM programs verify and certify the full compliance of the Executing Organization (the FHF) ensuring that the guiding principles, technical and financial guidelines have been achieved. Finally, it is considered that the concurrence of FCPF/BM/Convention on Biological Diversity demonstrates that the full application of its requirements and compliance to international regulations for FPIC processes have been adequate, accredited and executed during the implementation of the Program.

- a) **Conducted by a third party:** the GPM engaged an external organization (through a competitive bidding process) to conduct the public consultation and participatory process. The use of the third-party ("Huellas para un Futuro" Foundation³⁴) ensured impartiality and thus was able to achieve greater involvement from stakeholders representing a range of sectors. This participatory process ensured that stakeholders felt safe and comfortable to engage in open dialogue. The Huellas para un Futuro Foundation, an NGO based in Misiones, has been working on REDD+ since 2011³⁵, specially with the Mbya Guaraní Community. Additionally, the Foundation partnered with the consultancy firm SinergiAr, an international platform specialized in environmental and social safeguards and other sustainability-related aspects³⁶. The two organizations worked under the direction of the GPM and designed an approach tailored to each stakeholder's profile.
- b) **Three phases:** Consultation was conducted in three phases to ensure effective communication, wide reach in stakeholders and opportunities for feedback and opinion sharing. Each phase included the presentation of progressively more detailed information, with increasing complexity. The first phase focused on dissemination and training, progressing to discussions on technical aspects, such as those described with the National Forest Carbon Table, as indicated in the previous section. Table 5 outlines the three phases, and the objectives and expected outcomes of each one.

Phase	Period	Objective	Approach	General results
1	September 30th to November	Presentation of the Program and capacity building for general public on the topics	In-person.Virtual.Live streaming	 Broad participation and interest.

³⁴ www.huellasparaunfuturo.org

Additionally, it currently serves as an Expert Panellist for Get REDDY, a component of the World Bank's EnABLE Program.

³⁵ Among its contributions in the field, it has participated in the Capacity Building Program for REDD+/FCPF/World Bank, where two sub-projects were developed:

[&]quot;Bringing REDD+ Closer to Children, Youth, and Women Involved in the Kaa'guy Porá Project".

⁽SUB-ACICAFOC-BM/REDD+/SUB006-19)

[&]quot;REDD+: Design of Cross-Cutting Strategies for the Benefit of Vulnerable Communities"

⁽SUB-ACICAFOC-BM/REDD+/SUB005-22)

³⁶ www.sinergiar.com



	20th, 2022	of reference. Gathering inputs on the SIS, Communication and Complaints Mechanism, and Benefit Sharing Mechanism to ensure the design was based on a multi-sectoral participatory process. Preventing and deactivating conflicts with certain stakeholders stemming from lack of information, communication/ interpretation issues, and biases. Empowering the general public and, through representative sectors, enabling collaborative participation in program design.	and online availability of audiovisual products. • Specific communication design for each sector through linguistic and conceptual adaptation.	 Appropriate establishment of the conceptual framework and specific axes for the evolution and progression of the process. Receiving initial general feedback. Achieving an appropriate and consensus-driven scenario to proceed with phase 2.
2	December 1, 2022, to February 20, 2023	 Presentation of the program, highlighting the modifications incorporated as a result of Phase 1. Communication about the activities and specific objectives promoted by the program. Monitoring the level of understanding of each sector, requesting suggestions, justifying the implementation framework. Invitation to participate in the Dialogue Table (Phase 3) to continue to improve the documents. In-depth discussion of technical aspects, programspecific regulations, and scope. Faster validation, incorporation, and/or communication of the inadmissibility of received suggestions. 	 In-person. Virtual. Live streaming and online availability of audiovisual products. Specific communication design for each sector through linguistic and conceptual adaptation. Operational Dialogue Table 100% update of informational capsules. 	 Progression of the process in line with expected results. A higher level of understanding was observed among participating actors and sectors. During the Assembly, the FPIC process was adopted in a resolution by the Guaraní Implicit citizen endorsement for the implementation of the Program as a state policy was obtained. The private sector had the tools needed to assess the possibilities offered by scenario 2 and make informed decisions accordingly.
3	March to June 2023	Socialization and online document availability for	Operational Dialogue Table.	Virtual exchanges with



receiving feedbac Exchange public regarding s and/or modificatio	with the ggestions s. ble documents han available for • • • • • • • • • • • • • • • • • • •	rious sectors. Ad-hoc ndling of specific chnical nsiderations.
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Table 5: Consultation process phases

- c) **Hybrid and innovative approach:** The consultation process was designed in an innovative manner, using digital tools to facilitate active participation from stakeholders that required minimal effort on their part and in line with current behaviours. Key aspects included:
 - ✓ Hybrid Process: Except for Phase 3, which was exclusively virtual, the participatory process followed a hybrid approach. This involved combining in-person workshops held in different areas of the province with virtual workshops and the establishment of the ECO2 Dialogue Table.
 - ✓ ECO2 Dialogue Table: This virtual space was set up by the GPM on the SIS-REDD+ Misiones
 website. It was created to solicit and receive the perspectives, concerns and comments of various
 stakeholders within Misiones who might be interested in the ECO2 REDD+ Program. The sectors
 included were indigenous peoples and local communities, construction companies, timber industry,
 agricultural producers, forest owners, NGOs, and others.

The Dialogue Table featured various informative sessions covering topics such as a Program overview, the planning of the Participatory Process, informational summaries after each workshop, a Frequently Asked Questions (FAQ) document, official agreements and conventions of the Program, and more.

Due to the positive reception from the public, the Dialogue Table, which was originally intended solely for the Program's design process, evolved into a mechanism for ongoing and active participation of the Misiones Safeguard Approach. It has been named the Multisectoral Forum for Monitoring the ECO2 REDD+ Program. This forum will be an important facility during every stage of the Program's implementation, aimed at enhancing access to information, stakeholder participation, and transparency.



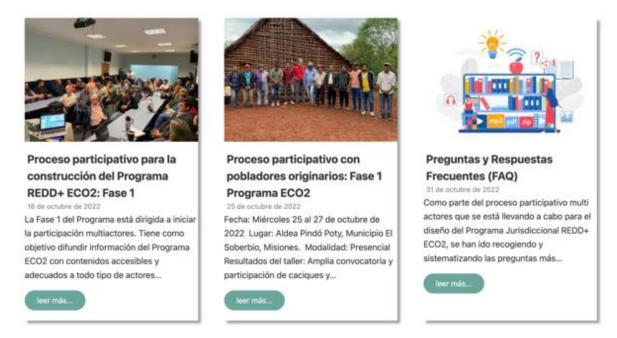


Figure 12: Illustrative photographs of some of the informational capsules from the Forum. Figure translation (left to right): Participatory process for the development of the REDD+ ECO2 Program: Phase 1. October 18, 2022. Phase 1 of the Program was aimed at launching multi-stakeholder participation. It aimed to disseminate ECO2 Program information with accessible and appropriate content to all types of stakeholders (...) / Participatory process with indigenous peoples: Phase 1 ECO2 Program. October 25, 2022. Date: Wednesday October 25 to 27. Venue: Pindó Poty Village, Municipality of El Soberbio, Misiones. Modality: Face-to-face. Results of the workshop: large attendance and participation of caciques and (...)/ Frequently Asked Questions (FAQ). October 31, 2022. As part of the multi-stakeholder participatory process being carried out for the design of the REDD+ ECO2 Jurisdictional Program, the most frequently asked questions have been collected and systematized (...).

The official site of the Multisectoral Forum for Monitoring the ECO2 REDD+ Program can be found at: https://programajnr.misiones.gob.ar/salvaguardas/foro-eco2/

The site provides key information about the Program, along with a detailed account of the participatory process, including photos, downloadable materials, and other resources, presented in a clear and simple manner for all interested parties.

An Operational Communication and Complaint Mechanism was put in place at the beginning of the process and is accessible from the SIS-REDD+ Misiones website (see section below for more information about this mechanism).

d) **Wide-ranging participation:** The design of the participatory process began with the identification and mapping of stakeholders. The list of stakeholders was initially based on an extensive existing database and was expanded by incorporating newly identified actors. The original and updated database includes provincial and national levels. Additionally, during the stakeholder mapping exercise, different sectors and actors were identified and characterized based on their potential interest in the Program, role in forest governance, association with forests and level of understanding. As a result, the following categories of stakeholders were engaged:



- Public.
- Private.
- Technical and Academic.
- Civil Society Organizations.
- Indigenous Peoples and Local Communities (IPLCs).
- Unions, Producer Organizations, and Labor Organizations.

Complete information about the stakeholder mapping process and a summary of the participatory process will be provided to the VVB during validation.

e) **Cultural Sensitivity Approach:** For the consultation process with Indigenous People, a participatory approach was developed to ensure that the specific needs of this population were considered. This included in-person consultations that focused on the aspects of greatest interest to these groups. The consultation process with the Mbya Guaraní People is described in more detail in the section below.

§h. Considerations on the outcome of the participatory process

<u>Phase 1</u>: The launch of the ECO2 Program in the Chamber of Representatives successfully introduced the topic through multiple communication channels. The Faculty of Forest Sciences was selected as one of the consultation hubs to attract various stakeholders in the forest sector. These sessions were live streamed on the internet to enable the Program to reach a wide range of people and facilitate high-level discussions about the Program and the BSM. Where conflicts of interest were identified among various stakeholders, the process design was adjusted to avoid and address them.

More information about this phase is provided in the Summary of the REDD+ ECO2 Dialogue Forum, made publicly available after each session, and reproduced here:



Figure 13: Participatory process - Phase 1

<u>Phase 2</u>: All inputs provided by stakeholders during Phase 1 were summarized and incorporated into the design of the BSM during Phase 2. The consideration of stakeholder feedback instilled confidence and added to the credibility and transparency of the process. The increase in the understanding of the program and the broader framework was highlighted, enabling deeper exploration of specific technical aspects.



Discussion of JNR, in the context of the Provincial REDD+ Strategy, enabled participants to visualise and understand the approach

More information about this phase is found in the Summary of the REDD+ ECO2 Dialogue Forum. This was made available to the public upon the conclusion of the second phase, and is available at the following link: https://programajnr.misiones.gob.ar/salvaguardas/proceso-participativo-para-la-construccion-del-programa-redd-eco2-fase-2/.



Figure 14: Participatory process - Phase 2

<u>Phase 3</u>: The availability of SIS and BSM documents on the platform, and the subsequent analysis by interested stakeholders, facilitated a fluid exchange for clarifications, suggestions, and proposals. Significant interaction occurred with the National Forest Carbon Table about critical aspects of the Program, evaluated jointly with Government authorities and consulting groups. The nine-month timeframe (September 22-June 23) for the execution of the three phases is considered sufficient and appropriate for addressing the relevant aspects outlined in the Program's implementation. More information about this phase will be provided to the VVB.

Phase 4: Following the receipt of 4 letters during the Verra JNR public comment period (which ran between 29 February 2020 – 29 April 2024) GPM determined that many key stakeholders had not been sufficiently consulted, that there was broad misunderstanding of some key aspects of the program, and that the BSM account allocations should be re-considered based on various discussions with private landowners. The letters received were from The Sociedad Rural de Agricultura (SRA), QD Sustainability, and two letters from the Mesa Argentina de Carbono. During the months of June – October 2024 numerous bilateral discussions between GPM and private landowners were conducted. In addition, three virtual workshops were held (between July – October 2024) that directly addressed stakeholder concerns that were expressed in these letters submitted to Verra. The recording of these workshops is available on the Program's website. The first workshop covered the technical requirements of Verra JNR and Jurisdictional REDD+. The second workshop covered the legal aspects of the program, specifically related to carbon rights. The third workshop covered several key updates to the benefit sharing mechanism and highlighted changes that had been made to the BSM based on stakeholder feedback (from the letters referenced above and during bilateral conversations with numerous landowners).



Summary of the stakeholder inputs received and resulting adjustments that were made to the BSM (Phases 1, 2, 3)

As a result of this extensive multi-stakeholder consultation process, a series of inputs from the 3 phases were collected and incorporated. The inputs gathered during the three phases were incorporated into the Benefit-Sharing Mechanism (BSM), Therefore, the first version of the BSM presented in this PD incorporates the received inputs, as detailed in the document "Anexo - Respaldo completo del Proceso Participativo" outlining the participatory process. The main inputs received regarding the BSM are summarized in the following points:

- A request (Phase for municipalities that access benefits through Account 1 to use the funds to prove tax exemptions to owners of native forests. (This has been introduced as an optional mechanism)
- 2. For Indigenous People (IP). Request for the resolution of land tenure conflicts. (This is considered within the scope of benefits that IP's can access through the BSM).
- 3. For Indigenous People, a protocol was established for convening and mediating through the Guaraní Affairs Directorate.
- 4. Addressing concerns of landowners who own forests located within the red category of Native Forest Law (and therefore unable to legally change land use) to enable their access to program benefits. (This in the creation of a comprehensive approach to assigning benefits which calculates a score depending on attributes related to the land's relative legal protection status (see details on this later in this section of the PD).
- 5. Public lands should not receive payments from Account 2, (this ultimately resulted an increase to account 2 and an update to allocate fund under this account only to private landowners, responding to concerns from several key stakeholders)
- 6. Account 1 will cover expenses and technical support for small landowners and Indigenous communities that have never had the opportunity to submit management plans.
- 7. The suggestion to hold funds for landowners for up to 2 years to address concerns about accessing the benefits or choosing to opt out of the program.
- 8. Additionally, negotiations were made with Banco Macro to apply interest on accounts to prevent depreciation of funds due to delays in payments.
- 9. The creation of the Multisectoral Forum for the program was proposed to ensure transparency in a broad and participatory manner regarding the program's development.

³⁷ https://programajnr.misiones.gob.ar/webjnr/wp-content/uploads/2024/08/Anexo-Participativo-Respaldo_completo_del_Proceso_Participativo_compressed.pdf



10. Stakeholders were not informed sufficiently about the Verra public comment period, and request reopening/extending the period

All of these points are already reflected as inputs gathered during Phase 1 (detailed in the documents) and have been taken into account for application in Phases 2 and 3.

Summary of comments received During the Verra Public Comment Period

Four letters were received from three organizations during the Verra Public comment period and full detailed letters with responses (in Spanish) were submitted to each of the stakeholders, and to the VVB. The comments are summarized below.

- Stakeholders were not informed sufficiently about the Verra public comment period, and request reopening/extending the period
- Stakeholders are unaware of the program and lack understanding of how REDD+ works.
- Questioned the position taken by GPM regarding the legal legitimacy of the program and the rights to the Emission Reductions generated from the program
- The Program did not sufficiently request proposals for program related work
- The Program's published documents on the Verra registry are only available in English
- The benefit sharing mechanism accounts, validation process, and the accounts are not equitable
- The BSM will not sufficiently meet the objectives of the REDD+ program
- The program does not sufficiently promote the development of carbon offset projects in the province
- The unchanging political situation in Misiones could negatively impact the program
- Questioned the FREL, and suggested that reported deforestation emissions estimates and forest areas were incorrect,
- Suggested that excluding degradation was not favourable, and that emission factors were not robust.

§i. Consultation process with Indigenous Communities

Building on the general methodology of the participatory process described in §g above, adjustments were made to conduct an appropriate consultation process with indigenous communities. This followed a cultural sensitivity approach aligned with the Cancun Safeguards and best practices in the field. As a result, two phases of in-person consultations were conducted with the Mbya Guaraní Community, along with a Guarani translator. Each phase consisted of three sessions to allow for internal deliberation, in accordance with the requirements for obtaining Free, Prior, and Informed Consent (FPIC) under ILO Convention 169 and Cancun Safeguard C.

A summary of the consultations is provided below. More information will be provided to the VVB.

Phase 1 with Indigenous Communities

Pre-Meeting Consultation



To implement an appropriate consultation process in line with the local context of the Mbya Guaraní Community, and in alignment with the relevant requirements and standards, a pre-meeting consultation was held in August 2022 before the participatory workshop (Phase 1). Indigenous leaders and community members were consulted to ensure that the process respected their worldview and customs for conducting the official convening. The following aspects were specifically discussed during this pre-meeting consultation:

- ✓ Whether the proposed invitation for Phase 1 would achieve adequate representation for all indigenous residents of the province.
- ✓ How the consultation process should be conducted, along with the logistical requirements for ensuring broad, meaningful, and rewarding participation.
- ✓ As a result of this preliminary meeting, the following key points were highlighted:
- ✓ The indigenous community can only arrive at a consensus-based, binding response through a Community Assembly specifically held for this purpose. The government's program presentation and proposal can be examined under this format.
- ✓ The Community Assembly will span three consecutive days, beginning with ceremonies in the presence of spiritual leaders.
- ✓ The hosting chieftain guarantees proper food and lodging for invited guests over the three-day process.
- ✓ The process entails receiving information (Program Presentation) and addressing queries and concerns on the first day. On the second day, the community engages in internal deliberations without external participants, followed by a return of the territorial team on the third day for responses and document creation.
- ✓ As a result, the process and agreement ensure that the event takes place in accordance with the
 consent, self-determination, worldview, and customs of the Mbya Guaraní indigenous population
 in Misiones.

Following the exchange in the pre-meeting, a consensus-based plan was developed for the execution of Phase 1. The following was agreed and implemented:

- ✓ The dates of the event (October 25 to 27, 2022) and the location (Aldea Pindó Poty, led by Chief Alejandro Benítez, Municipality of El Soberbio, Guaraní Department) were determined. The promotion and invitation were carried out jointly.
- ✓ Five medium-distance buses were provided for the transportation of chiefs and community representatives situated in various locations across the province. The transportation service included round-trip travel to their respective communities of origin.



- ✓ Catering for 250 people over the three-day event duration (breakfast, lunch, and dinner) was arranged.
- ✓ A Guarani translator was available throughout the sessions (presentation, internal deliberation, feedback, and document creation) to facilitate the internal discussion in line with the set guidelines. The community selected Javier Villalba, a representative of the province's chiefs, a UNDP fellow, and the indigenous focal point for the UNDP committee in Argentina.

Participatory process Phase 1 - Indigenous Communities

Date: October 25 to 27, 2022

Location: Aldea Pindó Poty, Municipality of El Soberbio, Misiones

Format: In-person

Objective: General presentation of the ECO2 Program and REDD+ ECO2 in particular

Results achieved

The event had a significant turnout and active participation of chiefs and representatives from Mbya Guaraní communities. The Program Proposal was presented, ensuring and confirming the interpretation and understanding of its components, in pursuit of a consensus position after three consecutive days of community deliberation.

To facilitate open dialogue in the Guarani language, Alejandro Benítez, a community member, served as the event host alongside technicians from Huellas Foundation. It is worth noting that shortly after the event, on November 14, 2022, the electoral process for the Guaraní People took place. This election was overseen by the Provincial Directorate of Indigenous Affairs to validate the newly elected authorities. The outcome determined that Chief Alejandro Benítez constitutes the representative of the communities in the province, holding the position of President of the Council of Chiefs of the Mbya Guaraní Nation³⁸.

³⁸ https://canal12misiones.com/noticias-de-misiones/sociedad/caciques-en-misiones-organizados-con-su-nuevo-consejo/





Figure 15: Participatory process - Phase 1 - Indigenous Communities

As a result, the Mbya Guaraní People reached decisions and proposals through a written assembly resolution, aiming to continue to progress in subsequent phases of the Program consultation.

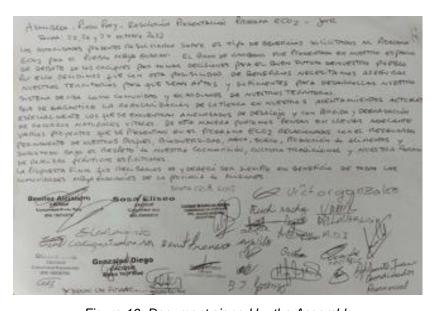


Figure 16: Document signed by the Assembly

Transcription: The present authorities decided on the type of benefits requested from the ECO2 Program for the Mbya Guaraní People. The carbon bonus was presented in our chiefs' debate space to make decisions for the better future of our people. Therefore, we decided that with this possibility of benefits, we need to ensure our territories are suitable and sufficient for developing our way of life as a community and guardians of our territories. The regularization of land in our current settlements, especially those facing eviction threats and loss and degradation of vital natural resources, must be guaranteed. This way, we can contemplate carrying out various projects presented in the ECO2 Program related to the permanent protection of our forests, biodiversity, water, soil, food production, and, above all, in respect of our worldview, traditional culture, and our spiritual practices.



Key conclusions and strengths from Phase 1

- ✓ The community's primary concern focuses on territorial aspects. They perceive the Program as presented as a long-term policy opportunity that could initiate a process of normalization concerning current settlements, envisioning a ten-year timeframe.
- ✓ They present themselves as the Guaraní People, with legitimate representation of all communities settled in the province of Misiones, and consequently request to be treated as a single entity.
- ✓ The proposal to construct the BSM collaboratively has been positively received, aligning with the identified needs and an active participation approach that respects their customs and worldview.

Initial proposal for a Special BSM presented in Phase 1 to the Mbya Guaraní People

The BSM design of the Program includes a special approach for indigenous communities, as indicated in \\$b above. In the initial meeting, the following preliminary BSM framework was presented:

- ✓ The special attention given by Verra to the participation of indigenous communities in the BSM design of a JNR program³⁹, as well as the Cancun Safeguards and comparable best practices for REDD+.
- ✓ A significant percentage of the Mbya Guaraní community lacks legal land tenure security and experiences high levels of poverty and marginalization.

A partial approach that does not comprehensively and proactively consider the Guaraní community's situation at the beginning of the JNR Program design, especially concerning the BSM, increases the likelihood of conflicts in the short or medium term. In the light of this, the following proposal for a Special BSM for indigenous communities was developed:

³⁹ "3.8.7 (...) The benefit distribution systems will be developed through a transparent and participatory process (...), with a special emphasis on indigenous peoples, local communities, women, and the most marginalized and/or vulnerable individuals."



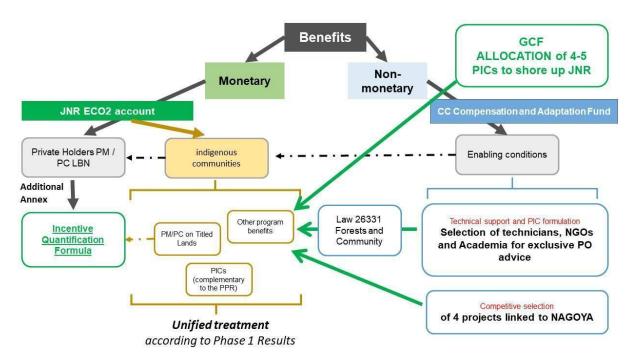


Figure 17: BSM Modality for Indigenous Communities

Key features of the initial proposal for Special BSM presented

- ✓ Indigenous communities will be treated as a unified entity, in which their own decision-making processes will define prioritized needs, internal benefit distribution, and related aspects (to be determined by themselves, in accordance with their right to self-determination). They will concentrate and distribute all benefits within the community.
- ✓ Community lands meeting the legal conditions for inclusion in the JNR ECO2 Plan will receive benefits on par with private landowners. Benefit quantification will be based on the Monetary Benefits Formula for Participants and deposited into a community-owned bank account for communal needs.
- ✓ This BSM aims to channel resources from various public policies, programs, and projects (non-carbon-related benefits) to address community needs. It aims to leverage resources from the REDD+ ECO2 Program alongside other initiatives for a comprehensive impact.
- ✓ The BSM will consider non-monetary benefits derived from different sources, such as strengthening land tenure security, providing culturally appropriate training, and other activities aligned with the community's decisions.

Inputs obtained from community authorities



- ✓ Peaceful land tenure, even in cases of irregular land ownership, is crucial for the Mbya Guaraní community's participation in the REDD+ ECO2 Program.
- A joint approach will be taken for the Mbya Guaraní people, treating them as a whole.
- ✓ In cases of irregular settlements, the community commits to land use aligned with the Program's activities.
- ✓ Special dialogue tables will be established in case of potential conflicts, involving the Community, Guaraní Affairs, and formal landowners.
- ✓ The Program will support the development of culturally appropriate promotion plans, allowing communities to access monetary benefits and others.
- ✓ This proposal emerged from the first consultation phase with community authorities and was presented for consideration to the CLPI at the January 2023 in-person meeting (Phase 2).

More information about this Phase can be found in the Summary of the REDD+ ECO2 Dialogue Forum made available to the public after the Phase, including the Representative video of the event: at YouTube Channel

Phase 2 with Indigenous Communities

Dates: January 10 to 12, 2023

Location: City of San Pedro

Format: Community Assembly with the presence of caciques and representatives from Guaraní communities.

<u>Invitation</u>

The logistical aspects of the event were designed to match the planned phase's scale, involving coordination between the Ministry of Ecology and RNR and the Provincial Directorate of Guaraní Affairs.

Communication channels within the Guaraní community were reinforced through official government agencies and direct contacts.

A three-day assembly was organized. The intention was for this, if consensus was reached, to have a binding character for the entire Guaraní Community in relation to the Program.





Figure 18: Participatory process - Phase 2 - Indigenous Communities

Logistics and Methodology

Transportation logistics were planned to accommodate attendees from distant communities.

Adequate accommodation and catering were provided, respecting cultural dietary preferences.

The assembly took place at the E1602 EFA CRISTO REY School in the City of San Pedro.

The Cacique Alejandro Benítez, President of the Council of Caciques, communicated the developments of Phase 1 and the Program to representatives who could not attend the previous meeting.

He also conveyed the close contact maintained with the Consultancy to stay informed about the proposal's progress, which would be presented and discussed during this assembly.



Figure 19: Chief Alejandro Benítez addressing the Community



Subsequently, the Procedure of Participatory Process Phase 2 for native inhabitants was initiated. A PowerPoint presentation⁴⁰ was used for multimedia projection, provided through paragraphs in Spanish, allowing for simultaneous translation into Mbya Guaraní, the native language of the Community.

Results achieved

- ✓ The process took place between January 10th and 12th, 2023, with 67 attendees, chiefs, and representatives of the Guaraní Community of the Province of Misiones.
- ✓ The dynamics and methodology proposed for Phase 2, with consensually agreed-upon guidelines from the community, were implemented successfully, and delivered the anticipated results.
- ✓ A framework proposal for the BSM was presented, on which feedback was provided. The proposal was accepted by the Assembly of the Council of Chiefs of the Mbya Guaraní People (see BSM process below).
- ✓ Validation and adherence of the Guaraní People to the REDD+ ECO2 Program were obtained through their Community Assembly, under the Council of Chiefs.
- ✓ The Guaraní People, through the Council of Chiefs, provided Free, Prior, and Informed Consent (FPIC) regarding the BSM proposal, applicable to the entire indigenous population of the province.
- ✓ Steps were taken to achieve recognition that the community requested during Phase 1 for their ancestral role as guardians of the forests. To this end, a presentation by the Ministry of Ecology and Natural Resources was made, requesting the establishment of the honorary title "Guardian of Misiones Biodiversity for the Mbya Guaraní Indigenous Peoples in the Province of Misiones" (reference in Official Gazette publication).

Special BSM for Indigenous People

This was the main topic addressed in Phase 2. On this occasion, a proposal adjusted to the requirements resulting from Phase 1 was presented. The illustration below provides a graphical representation of the BSM framework proposal, presented for participatory work with community authorities.

⁴⁰ This PowerPoint presentation will be provided to the VVB.



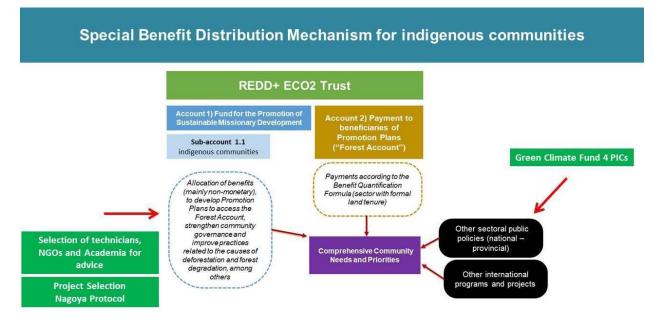


Figure 20: BSM model presented in the workshop with indigenous people

Free, Prior, and Informed Consent (FPIC)

Legal and reference framework: The country is a party to ILO Convention 169, ratified by National Law n° 24,071 (Official Gazette 07/04/1992), which introduces the institute of free, prior, and informed consultation (FPIC) within the national legal framework. According to Convention 169, "(...) governments shall: a) consult the interested peoples through appropriate procedures and in particular through their representative institutions whenever consideration is being given to legislative or administrative measures which may affect them directly" (Article 6). As there is no protocol or regulation for carrying out FPIC, the suggested guidelines from the Technical Manual for Consultation with Indigenous Peoples in Forest Management and Climate Change (MaAyDS, 2021) were applied. While not binding, this manual presents the state of FPIC in the country and was developed within the framework of the UN-REDD Programme, specifically for activities related to the scope of the REDD+ ECO2 Programme⁴¹.

The representation of the Guaraní People of the Province is composed of four entities, each with varying degrees of adherence. These are: Aty Marangatu; Aty Ñeychyro; the Association of Guaraní People's Communities (ACPG); and the Council of Chiefs. To achieve a unified position ratified by the Assembly, the community decided that, from this point forward, the Council of Chiefs would represent the Guaraní population in its entirety under the concept of the 'Guaraní Nation.' Alongside this entity, which incorporated the other three organizations, the FPIC process was undertaken⁴².

⁴¹See manual in: https://www.argentina.gob.ar/sites/default/files/mayds 2021 - salvaguardas redd pueblos originarios web 0.pdf

⁴² The Council, through recent elections in which all three entities are convened and participate, has elected Alejandro Benítez as President and accompanying authorities. Their primary objective is the homologation and unification for the representation of the Guaraní People/Nation.



Process carried out to obtain FPIC: Given the nature of a JNR project (with potential implementation over one or two decades) and, primarily, its incorporation as a complementary instrument for a future public policy based on the provincial REDD+ Strategy, during Phase 1, discussions were held about an additional window of opportunity that this process provided. Two main interconnected axes were analysed: the strength and representativeness that unifying the Guaraní people under a single entity as the spokesperson to the GPM would offer, and the guarantee of establishing long-term binding agreements that could systematize a foreseeable community development within the timeline, aligned with Guaraní cosmology, through benefits derived from both the ECO2 Program and complementary instruments (FVC, Law n° 26,331, among others).

The consultants communicated that if, through their own decision, the community addressed and achieved internal consensus, this determination would be documented in a specific procedure called free, prior and informed consent. The consultants informed the GPM of this possibility and proceeded to draft a document with the specificities of this protocol. Once validated by the GPM, the preliminary draft document was presented to indigenous authorities in face-to-face meetings for consideration during December 2022. The indigenous authorities approved the document to be formally presented during Phase 2, scheduled for January 2023.

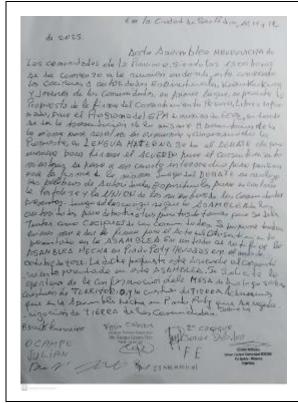
During Phase 2, the preliminary document was presented for internal community analysis and discussion. The proposal presented by the GPM and the FPIC Document (as such) were read, simultaneously translated, and analysed for consideration and feedback to be received during this process in the form of a Community Assembly. In this Assembly, the need to strengthen specific aspects was determined, leading to the drafting and validation of the so-called Complementary Annex, an integral part of the main body of the FPIC Document.

Results of FPIC

Among the most notable points are:

- ✓ Signature of the FPIC Document and Complementary Annex by attendees, recognizing and accepting that the signature of the President of the Council of Chiefs represents that of their constituents in their absence.
- √ 100% adherence of representatives of the Guaraní community, as evidenced by the signed documents, to the REDD+ ECO2 PROGRAM according to the agreed terms.





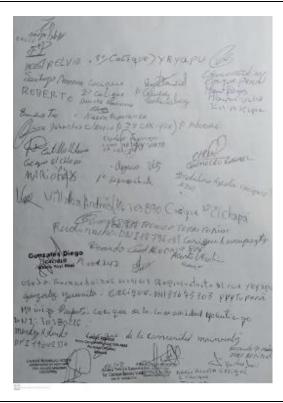


Figure 21: Meeting records of the Council of Chiefs

Transcription: In the City of San Pedro, January 10th, 11th, and 12th, 2023, Minutes of the MBURUVICHA Assembly of the Communities of the Province. At 1:00 PM, the meeting begins, where chiefs, spiritual authorities, Nuñakaikuery, and young members of the communities are summoned. Firstly, the proposal for signing the Free, Prior and Informed Consent (FPIC) for the GPM's ECO2 PROGRAM is presented. The presentation is made to address the proposal in harmony and consensus. In the mother tongue, a debate is held to discuss the signing of the agreement for the consent, while a recess is taken for consideration. After the debate, Spiritual Authorities share their words to find strength and unity among the community members present. Following the break, the Assembly of authorities continues to discuss other points and issues to be addressed as chiefs of the communities. There is also a proposal for those who will sign the Consent Act presented in the assembly. The Assembly held in PINDO POTY in October 2022 is ratified in its entirety. The mentioned proposal (document obtained) is attached to the consent presented in this assembly. The opening of a Dialogue Table on the matter of territory and land is requested. We clarify that during the Assembly held in Pindó Poty, the regularization of the communities' land was discussed. (Signatures of responsible authorities)

More information about this Phase can be found in the Summary of the REDD+ ECO2 Dialogue Table, available to the public once Phase 2 concludes.

§j. Communications and complaints mechanism of the Program

The Communications and Complaints Mechanism for REDD+ in the Province of Misiones (hereafter called the Complaints Mechanism) is the channel through which the general public, and particularly key stakeholders of REDD+, can provide suggestions, request environmental public information, and submit complaints related to all kinds of REDD+ activities in the Province. This mechanism has been operational



since the early stages of the Program's design, through the website of the ECO2 Dialogue Table⁴³, which later became the website of the SIS-REDD+ Misiones. The main design and operational aspects of the Complaints Mechanism are described below.

Objective and Scope

The objective of the Complaints Mechanism is to serve as a reliable and efficient communication channel for various actors directly or indirectly related to REDD+, who, for various reasons, wish to request information, complaints, or suggestions from the GPM related to the design or implementation of REDD+ in the Province of Misiones.

The scope of the mechanism is directed towards all types of REDD+ activities in the Province, from the design phase to implementation and monitoring. The Complaints Mechanism therefore operates in an integrated and systematic manner, facilitating access to information for various actors and aligned with the scope of the SIS-REDD+ Misiones. Within this framework, the types of actions that can be taken within the Complaints Mechanism are:

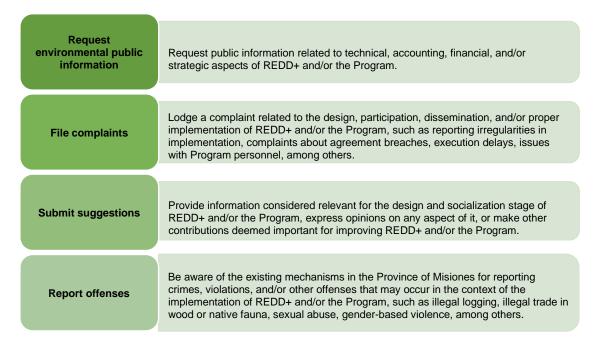


Figure 22: Types of Actions Permitted by the Complaints Mechanism

Considerations on the design of the Program's Communications and Complaints Mechanism

The design of the Complaints Mechanism was inspired by the following principles:

Confidentiality.

⁴³ See the Complaints Mechanism in: https://programajnr.misiones.gob.ar/salvaguardas/comunicacion-y-reclamos/



- Accessibility.
- Predictability.
- Transparency.
- Suitability.
- Impartiality.
- Cultural appropriateness.
- Up-to-date and continuous improvement.

For more information about the content of these principles and how they are reflected in the Program's Complaints Mechanism, please refer to Section 3.1 of this Design Document, which has been made available to the public since the beginning of Phase 1 of the Program's consultation, in line with the principles of accessibility, predictability, and transparency.

Operation

Access to the Complaints Mechanism (MCR+) is available through the following three channels:

✓ Virtual: Through the SIS-REDD+ Misiones website. The MCR+ can be accessed at:

https://programajnr.misiones.gob.ar/salvaguardas/comunicacion-y-reclamos/.

✓ Phone: Via the direct communication line of the MEyRNR, +54 3764-883555, a line also enabled for contact through SMS and WhatsApp. The web section for this is located at:

https://ecologia.misiones.gob.ar/ecologia-te-escucha/.

- ✓ In-person: Users can carry out the same actions in person, both at the MEyRNR offices and in the field with any of its operators or officials during their duties. The central offices are located at San Lorenzo 1538, Posadas, Misiones.
- ✓ Other key aspects of operation:
- ✓ In all cases, the Complaint can be submitted anonymously if the user wishes.
- ✓ Staff will refer all actions related to REDD+ in the Province to the Complaints Mechanism to ensure that the mechanism records and addresses the inquiries.
- ✓ MEyRNR staff will be trained to direct all actions received through various channels related to REDD+ in the Province to the Complaints Mechanism. This will ensure that the mechanism centralizes, records (assigns a case number), and resolves these inquiries in a coherent and integrated manner. This training process is planned to take place once the REDD+ ECO2 Program is registered with Verra.



The Communications and Complaints Mechanism has detailed operational rules that include aspects such as classification of complaints by severity level (priority), a registration system, a special protocol for sensitive issues, and a conflict resolution mechanism. All these aspects can be consulted in the Design Document of the SIS-REDD+ Misiones Communications and Complaints Mechanism, available to the public at the following link:

https://programajnr.misiones.gob.ar/salvaguardas/comunicacion-y-reclamos/.

Improvements to the Complaints Mechanism for the ECO2 Program

For the implementation stage of the REDD+ ECO2 Program, once registered, the Complaints Mechanism will be complemented with measures to enhance accessibility, particularly for indigenous inhabitants and other vulnerable sectors. Measures to be implemented include:

- 1. Increased dissemination of the Mechanism, its access channels, procedures, and purpose.
- 2. Strengthening in-person access channels tailored to the needs of indigenous peoples and local communities with technological or connectivity limitations, through methods such as physical mailboxes or other suitable means.
- 3. Considering the possibility of providing physical entry forms and responses in the native languages of indigenous peoples.
- 4. Conducting in-person workshops in the field about the operation of the Complaints Mechanism, providing verbal responses and establishing dialogue to bring parties closer in cases of dispute, primarily for complaints from indigenous communities.

National and subnational social and environmental safeguards requirements

In Argentina there currently is no requirement for a subnational SIS, nor is there anything similar at the provincial level. REDD+ nesting is an issue that has not yet been addressed by the national Government, so there are no requirements, guidelines or other types of requirements for nesting either

Still, Misiones understands the importance of aligning its SIS with the SIS-AR (the national SIS), and thus, the Program's SIS-REDD+ was designed based on the National Safeguards Interpretation, so that it would be easier to align the Program's reporting with the SIS-AR in terms of safeguards.

This aspect of alignment with the SIS-AR is specifically mentioned in the SIS-REDD+ Misiones Design Document section (public access), section 1.4.2. The "SIS-AR" and the first Safeguards information report (p. 13), section 2.2.2 "Interpretation of the "Cancún" Safeguards in the context of the Province of Misiones", section 2.3 "SIS-REDD+ Misiones -b) Alignment, coordination and complementarity with the national SIS-AR".



3. JURISDICTIONAL BASELINE DETAILS

3.1. Jurisdictional Baseline Start Date and Update Frequency

The historical reference period for the program's FREL is six years, from 2009 to 2014. The start date of the historical reference period is January 1, 2009, to allow for methodological consistency in satellite image interpretation and calculations based on calendar year intervals.

In 2009, the implementation of Law No. 26.331 on Native Forest Management, which was enacted in 2008, came into full force through Regulatory Decree 91/2009. Between 2009 and 2013, the provincial government did not authorize sustainable management plans or land-use change plans, as the regulations were being adapted during this period. Authorization of the plans resumed in 2013. During the period without plan authorizations, deforestation and degradation was observed to decrease, and then increase again when authorizations of forest management and land use change plans resumed.

All available images between 2009 and 2014 were used to estimate deforestation and post-deforestation regeneration. Images were subdivided by season. Factors that affect image interpretation, such as clouds or seasonal variations in crops, were eliminated. To calculate the FREL, changes between 2009 and 2014 were examined.

Degradation was estimated using a 'continuous degradation detection' algorithm. This considers the base spectral signal (structural characteristics of vegetation) and the temporal dynamics (phenology) of each patch of vegetation to characterize disturbances in terms of deviations between observed and modelled values.

The FREL will be updated every six years.

3.2. Previously Established Jurisdictional Baseline and/or Reduction Commitments

In 2019, Argentina voluntarily submitted a FREL to the UNFCCC, developed at national level, with a value of 101,141,848 tCO₂e. Argentina's FREL was constructed following the guidelines of UNFCCC decisions, particularly Decision 12/CP.17, and it was characterized by transparency and comprehensiveness.

The construction of the FREL was carried out by applying the 2006 IPCC Guidelines, using the most recently available National Inventory of GHG Emissions and Removals (INGEI) data for Argentina. In terms of scope, the initial FREL was developed at the sub-national scale, covering four of the country's seven forest regions. It encompassed gross CO₂ emissions from deforestation activities and included the aboveground and below-ground biomass carbon stocks of native forests. The historical reference period was from 2002 to 2013, allowing for reporting of results achieved in the period 2014-2016 for which a payment based on results was agreed with the GCF.

The construction of the FREL for the Misiones JNR Program is aligned with the methodology used for the determination of the Argentine FREL (based on the national GHG inventory). However, it has a different



baseline period starting from a different initial forest cover layer and emission reductions are net, i.e., it considers transitions from forest to non-forest categories.

Regarding GHG emissions commitments, the GPM has elaborated its Climate Change Response Plan, in accordance with the Minimum Budget Law 27520, Decree 1030/20 and Resolution 539/23 of the Federal Environmental Council and its Annex I. This Plan was developed jointly by different government agencies, academia and civil society and includes policies and actions to be carried out by the province up to 2030, in line with the commitments made by Argentina under the Paris Agreement. It is expected that the Plan will be updated in the future.

The Response Plan contains mitigation and adaptation measures to climate change and for their identification the provincial greenhouse gas inventory was used. Within the measures identified, the sector of native forests is considered. The measures relating REDD+ activities are those covered in this JNR Program, so are considered in the baseline. Moreover, the Jurisdictional REDD+ Program is one of the instruments proposed to tackle the emissions from the AFOLU Sector.

It is expected that the implementation of the Plan's measures will be financed by international lending institutions such as IDB, CAF, UNDP, Green Climate Fund, among others, and national funds. Furthermore, it is foreseen that part of the benefits received from the credits generated in the JNR Program will support the implementation of some of the measures, although it is well understood that they will not be able to finance all of the measures of the Response Plan.

3.3. REDD+ Activities and Drivers of Deforestation and/or Degradation

The REDD+ Jurisdictional Program includes activities aimed at cutting emissions from reduced deforestation.

Degradation is not included, since it represents less than 3,07% and is thus considered *de minimis* (less than 10%) and can be disregarded. On the other hand, its exclusion permits a better alignment with the National FREL. To assess the contribution of degradation, the CODED⁴⁴ algorithm (Continuous Degradation Detection) was used, considering time series of NDFI (Normalized Difference Fraction Index) provided by the Landsat sensor. The CODED algorithm identifies disturbances by considering the base spectral signal (structural characteristics of vegetation) and the temporal dynamics (phenology of each forest) of each vegetation patch. The total degraded area throughout the period 2009-2014 was found to be 3,205.8 hectares, with an average annual degradation rate of 606 hectares per year. Degradation occurs in small patches ranging from approximately one to 20 hectares, typically accompanied by a pattern of scattered pixels.

⁴⁴ Bullock, E. L., Woodcock, C. E., & Olofsson, P. Monitoring tropical forest degradation using spectral unmixing and Landsat time series analysis. Remote sensing of Environment, 238, 110968, 2020.



Carbon stocks enhancement is out of the scope of the Program, therefore removals of GHG emissions and potential leakage are not included in the baseline. However, in strategies, policies or measures that address deforestation, enhancement of carbon stocks is also promoted.

Drivers of Deforestation

In Argentina, the main causes of deforestation⁴⁵ are related to:

- ✓ Expansion of land use for agricultural purposes. This is driven by a competitive and short-term-profit agribusiness model that incorporates a variety of technologies (genetically modified organisms, no-till farming, precision harvesting, among others) and benefits from high agricultural commodity prices.
- ✓ Displacement of livestock from the Pampa region to forested regions.
- ✓ Lack of social and environmental value of forest services.
- ✓ Forest fires, both natural and human caused.
- ✓ The legal insecurity of land tenure, weak governance, and limited political and institutional capacity.
- ✓ Population growth from unplanned and uncontrolled urban expansion, and large-scale real estate development.

While these drivers of deforestation apply to all forest regions of the country, distinct patterns of deforestation exist in each region as a result of unique socio-economic, historical, and natural conditions. For the Paraná Forest region, which includes Misiones, the following causes of deforestation have been identified:

- Expansion of the agricultural frontier with implanted forest, perennial and annual crops.
- Livestock activity.
- Over-exploitation through illegal logging and selective logging.
- Subsistence agriculture.

To a lesser extent, fires are also a cause of deforestation and forest degradation in Misiones. Fires have become more frequent due to the increased incidence and severity of droughts, higher ambient temperatures, and the probability of human-induced ignition sources. Shrub and herbaceous communities that emerge after disturbances and forest degradation also contribute to fire propagation⁴⁶. Fire is not a driver itself but rather a means to clear the land for future agricultural and livestock activities.

⁴⁵ Causas e impactos de la deforestación de los bosques nativos de Argentina y propuestas de desarrollo alternativas, 2020. Dirección Nacional de Bosques, Ministerio de Ambiente y Desarrollo Sostenible; Instituto Nacional de Tecnología Agropecuaria (INTA); Asociación Ingenieros Forestales Chubut. Published by Ministerio de Ambiente y Desarrollo Sostenible, Argentina.
⁴⁶ PNAyMCC, 2022.



Expansion of the Agricultural Frontier (Forest Plantations and Industrial Crops)

Deforestation spiked in Misiones towards the end of the 19th century due to land subdivision for housing, agriculture, settling of immigrant colonies from various nationalities, and the building of roads. With the advent of paper companies in the mid-20th century, there was a notable replacement of native forests with large-scale plantations of fast-growing exotic species, which was promoted through various mechanisms, including tax incentives, direct subsidies for afforestation, and credit facilities. The mechanisms that promoted conversion of native forests to plantations essentially provided a subsidy for deforestation. The ramp up of agriculture, industry, urban settlement, and infrastructure had a significant impact on the remaining native forests, resulting in a significant reduction of their original area⁴⁷.

Since the 2000s, the provincial economy has continued to rely on activities related to forest exploitation and conversion. International companies have engaged in intensive farming in areas with the best soil quality, accompanied by a land concentration process. This resulted in the displacement of rural communities and further deforestation and degradation of native forests. This occurred despite the government's creation of protected areas, parks, and provincial reserves.

Currently, the most economically important land-based activities are forestry and industrial agricultural crops. Native forests are sometimes removed to take advantage of wood followed by replanting with non-native species for commercial timber purposes. Forest plantations are primarily comprised of exotic species (Pinus spp. and Eucalyptus spp.) and perennial crops like yerba mate (Ilex paraguariensis, (St.) Hill.) and tea (Camellia sinensis (L.) Kuntze). Forest plantations are primarily located near the Paraná River, while most yerba mate and tea plantations are found in the central and southern parts of the province. The main annual crops are corn and soybean.

Livestock activity

Livestock production was the third major practice leading to land use change (after forest plantations and industrial crops like yerba mate), between 2012 and 2022. The most common livestock in Misiones are cattle, pigs, poultry and sheep. Apiculture is common as well.

Overexploitation through illegal logging and selective logging

Forestry exploitation was the main economic activity in the Paraná Forest of Misiones from the beginning of the last century until the late 1950s. Intense selective extraction led to the overexploitation of the forests in the region, except for a few remnants of primary forest in less accessible areas. This exploitation was possible due to large areas of existing primary forest, abundant low-cost labour, and cost-effective transportation via the Paraná River. The exploitation pattern started from the areas near the rivers and extended gradually to the interior⁴⁸.

⁴⁷ Plan de Acción Nacional de Bosques y Cambio Climático (PANByCC). Buenos Aires: Secretaría de Ambiente y Desarrollo Sustentable de la Nación. Edition 2019.

⁴⁸ Primer Inventario Nacional de Bosques Nativos (PINBN): informe Selva Misionera. Buenos Aires: Secretaría de Ambiente y Desarrollo Sustentable de la Nación. Edition 2007.



Initially, the extraction focused on high-value timber species such as cedar, black parrot tree, incense, and lapacho. Later, additional species of interest began to be harvested, such as guatambú, cacheta, timbó, grapia, cañafístola, cancharana, anchico colorado, marmelero, laurel, and guaicá, among others. The increasing number of species that were exploited, along with important seed sources, led to significant depletion of the forest⁴⁹.

The lack of proper forest management planning meant that the species of interest were not able to recover stocking levels between harvests, resulting in structural changes to the forest ecosystem. Almost all forests have been logged for timber at some point, while others are secondary forests following deforestation. Therefore, forest fragments are typically found to be in different successional stages, with only a small area of forests not impacted by harvesting.

Subsistence Agriculture

In addition, more remote forest areas of Misiones have been subject to deforestation caused by settlements and small-scale agriculture activities from local communities, often immigrants, who lack land tenure security, and are forced to occupy lands that they do not own.

Itinerant farmers or 'squatters' convert small areas of forest for crops like tobacco, maize, beans, cassava, and vegetables. This shifting-agriculture practice typically involves forest clearing on unsuitable and highly erodible land⁵⁰ leading to rapid soil exhaustion and abandonment, thus requiring the conversion of more forest for crop cultivation, perpetuating a vicious cycle that threatens forest integrity⁵¹. While large-scale agriculture clearly had significant negative impacts on biodiversity, subsistence agriculture also contributed to forest fragmentation and degradation. This has led to fragmented forests composed of primary forests in varying states of degradation, a mosaic of different-aged secondary forests (capueras), and agricultural plots⁵².

Underlying Causes of Deforestation

Both deforestation and degradation of the Paraná Forest of Misiones are rooted in historical trends and activities related to the early development of this territory and public policies for territorial colonization since the late 19th century. Initially, extractive activities had limited impact, but with the organization and subdivision of the territory into large properties, native wood extraction increased due to demand from cities in the Pampas region⁵³.

⁴⁹ Plan de Acción Nacional de Bosques y Cambio Climático (PANByCC). Buenos Aires: Secretaría de Ambiente y Desarrollo Sustentable de la Nación. Edition 2019.

⁵⁰ Primer Inventario Nacional de Bosques Nativos (PINBN): informe Selva Misionera. Buenos Aires: Secretaría de Ambiente y Desarrollo Sustentable de la Nación. Edition 2007.

⁵¹ Plan de Acción Nacional de Bosques y Cambio Climático (PANByCC). Buenos Aires: Secretaría de Ambiente y Desarrollo Sustentable de la Nación. Edition 2019.

⁵² La Situación Ambiental Argentina, 2005.

⁵³ Plan de Acción Nacional de Bosques y Cambio Climático (PANByCC). Buenos Aires: Secretaría de Ambiente y Desarrollo Sustentable de la Nación. Edition 2019.



Historical land use practices can be distinguished into four main stages during the settlement process of Misiones. These stages explain the current condition of the different landscapes that are observed today across the province. The success of Misiones' settlement initially seems to have been linked to easy access to both public and private land, as well as the distance from public authorities. Although it occurred without proper soil suitability planning, this characteristic is not exclusive to this province⁵⁴.

Stage	Average duration	Type of housing	Crop combination	Deforested area
I	0-1 year	Shack	Deforestation: corn, beans, cassava	1-2 ha
II	2-15 years	Wooden house	Tobacco incorporation	2-15 ha
III	16-25 years	Cement house	Yerba mate	The majority
IV	26+ years	Small chalet	Diversification (tung, tea, oranges, vegetables, etc.)	The majority

Table 6: Main stages in the settlement process

Source: PINBN, 2007, DNB

Over-harvesting of impoverished forests due to their history of uncontrolled selective logging (resulting in low profitability of utilization and sustainable forest services), coupled with the growth of the illegal timber trade due to insufficient control and enforcement, have contributed to the lack of interest from forest resource owners. This is compounded by the absence of alternatives or incentives for proper forest management and the heavy tax burden, which, combined with the aforementioned factors, have led to the absence of forest resource owners in the area.

In the context of absent landowners and the lack of public land management policies and channels for addressing the demands of the rural poor population, intrusion became the only feasible option for marginalized farmers. Similarly, inadequate spatial planning has resulted in the abandonment of forests by local indigenous and rural communities, facilitating intrusion. It should be noted that private land ownership is the primary form of land tenure in the province of Misiones, with occupation prevailing over sharecropping or leasing arrangements. Likewise, urban growth and infrastructure construction have exerted pressures on the forests, resulting in the reduction of their original area and the degradation of the remaining zones.

Simultaneously, the low prices of illegal timber, the lack of mechanisms for promoting and developing value chains for forest resources and services, as well as difficulties encountered in the administration of forest management plans associated with Law No. 26.331, discourage producers who intend to extract resources in compliance with current regulations.

Finally, the implementation of intensive production models, difficulties in accessing sustainable production technology packages, the lack of applied knowledge and incentives for sustainable use of native forests,

⁵⁴ Primer Inventario Nacional de Bosques Nativos (PINBN): informe Selva Misionera. Buenos Aires: Secretaría de Ambiente y Desarrollo Sustentable de la Nación. Edition 2007.



and the limited environmental and social valuation of native forests by a significant portion of society and decision-makers, further exacerbates deforestation and degradation in the Misiones Rainforest⁵⁵.

Measures and Initiatives of the Province of Misiones regarding Native Forests

In 2008, the national government enacted the Law on Territorial Planning of Native Forests (Law No. 26.331), which establishes minimum environmental protection requirements for the enrichment, restoration, conservation, sustainable use, and management of native forests, as well as the environmental services they provide to society. This was the first step towards establishing or strengthening concrete actions, such as the National Monitoring System for Native Forests, the Early Warning System for Deforestation, the Forest Administration, Control, and Verification System (SACVeFor), among others.

On the other hand, the province of Misiones has institutionalized the management of native forests through numerous initiatives. These initiatives have brought about improvements in the management of native forests but have not yet reached the desired level of effectiveness to prevent deforestation and forest degradation or have only served as complementary measures. The main ones are described below:

Misiones Green Corridor

With the implementation of the "Green Corridor Law" in 1999 (Provincial Law No. 3631/99, currently Law XVI No. 60), an Integral Area for Conservation and Sustainable Development of 1.1 million hectares was created. The legislation aims to maintain the connection between Misiones' protected areas and envisions the establishment of a state fund to support conservation and sustainable development activities. The Green Corridor includes to the North, the Yacuí, Urugua-í Provincial Parks, and the Iguazu National Park; to the East, the Yabotí Biosphere Reserve and the Esmeralda and Moconá Provincial Parks; and to the South, the Salto Encantado and Valle del Cuña Pirú Provincial Parks. It encompasses a mosaic of landscapes that includes protected areas, privately owned properties with various land uses, agricultural colonies with diverse socio-economic situations, and indigenous communities. It involves 22 municipalities spread across eight departments of the provincial territory, covering 37% of the province (Figure 23 and Figure 24).

⁵⁵ Plan de Acción Nacional de Bosques y Cambio Climático (PANByCC). Buenos Aires: Secretaría de Ambiente y Desarrollo Sustentable de la Nación. Edition 2019.



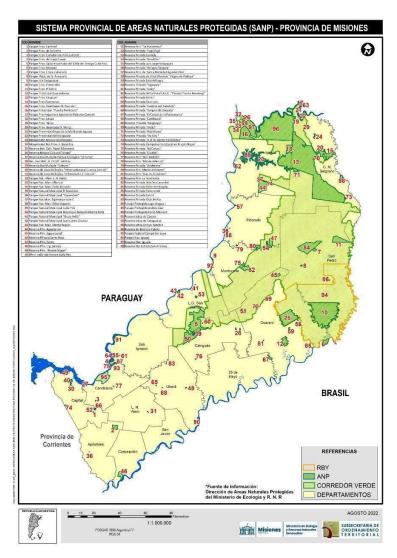


Figure 23: Map of the Protected Natural Areas System and the Green Corridor Source: Undersecretary of Territorial Planning of the Province of Misiones



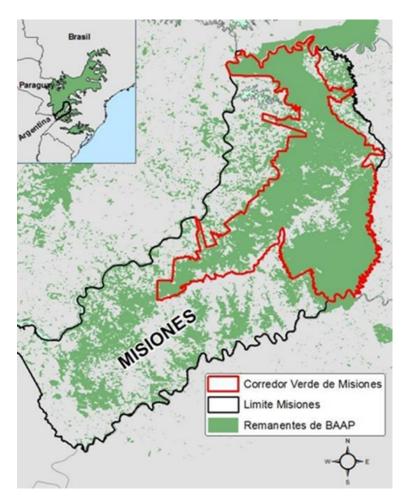


Figure 24: Map of the Upper Paraná Atlantic Forest in the Province of Misiones, Argentina, and the Green Corridor of Misiones⁵⁶

Renewable Dendroenergy Resources

Law No. 106 of the Regulatory Framework for Renewable Dendroenergy Resources established that feedstock for biomass powered wood dryers (used primarily to dry tea and yerba mate) or the use of wood for other industrial processes, must be sourced from wood and by-products, off-cuts and thinning from plantations instead of native forests. This Law regulates the use of renewable dendroenergy resources with the aim of reducing deforestation of native forests in Misiones, improving energy efficiency in agro-industrial processing, and providing livelihood benefits to small-scale woodcutters or charcoal producers.

⁵⁶ Cruz, Paula (2017) Distribución, requerimientos de hábitat e interacciones ecológicas de los felinos medianos y pequeños del Bosque Atlántico del Alto Paraná de la provincia de Misiones.

https://www.researchgate.net/publication/318351482 Distribucion requerimientos de habitat e interacciones ecologicas de los felinos medianos y pequenos del Bosque Atlantico del Alto Parana de la provincia de Misiones/citation/download



Furthermore, the Law established an action plan for the elimination of wood consumption from native forests by yerba mate and tea establishments (25% reduction in 2012, 50% in 2013, and 100% in 2015). The geographical scope of the law covers the entire province.

Payments for Environmental Services

In support of Law No. 26.331⁵⁷, Law XVI No. 103 established a system for requesting payments for environmental services for individuals, municipalities, and the Province of Misiones. This applies to publicly protected natural areas and to holders of Category I (red) and II (yellow) forests, as defined by Law N° 26.331. These holders must annually demonstrate their ownership, the area of land, conservation category, clean development mechanisms, and environmental services provided by the native or planted forest to the implementing authority. This law promotes forest conservation to prevent degradation (such as selective wood extraction and illegal logging), primarily focusing on Categories I and II, where land use change is not permitted.

Additionally, through Project GEF3623 "Incentives for the Conservation of Ecosystem Services of Global Importance" (UNDP ARG/10/G49-UNEP 4B85), ecosystem service payment schemes were tested within the framework of National Law N° 26.331 for Native Forests⁵⁸. The pilot site in Misiones, located in the Arroyo Ramón basin, provides drinking water for the Campo Ramón and Oberá localities. Here, a private ecosystem service payment scheme for water-related services was implemented, including compensation mechanisms between producers in the watershed and the Oberá Electric Cooperative, which manages water and electricity resources in the basin (on behalf of all water users). The Province and the Municipality of Campo Ramón are heavily involved to encourage necessary actions in line with their resource conservation policy for the entire basin and similar watersheds.

Protective Forests

Law XVI No. 53 on Protective Forests defines and designates protective forests and ecological strips and prohibits conversion to agricultural or livestock cultivation lands. Similarly, conversion to plantation forest is prohibited for ecological strips defined in Article 2 of this law and for protective forests defined in clauses a), b), c), d), e), i) of Article 1. The utilization of protective forests or ecological strips is authorized through the presentation of a Management Plan that must adhere to the law. According to Law XVI No. 7, protective forests are those that, due to their location and floristic characteristics, serve jointly or separately to a) protect soil, roads, riverbanks, reservoir shores, islands, canals, etc., and prevent erosion on sloping lands; b) protect watersheds and water regimes; c) ensure environmental health conditions; d) defend against natural elements, winds, and floods. This law addresses the causes of deforestation and degradation by establishing criteria for protective forests and ecological strips, prohibiting land use changes in certain areas, and specifying the types of activities permitted in these forests.

Fire Management

⁵⁷ Ley de Ordenamiento Territorial de los Bosques Nativos (Forest Land Use Law)

⁵⁸ https://www.argentina.gob.ar/sites/default/files/ar-nr-06-es.pdf



The Provincial Fire Management Plan outlined in Law XVI No. 65 covers rural and forest fires, prioritizing provincial parks, protected natural areas, and all matters related to fires. Depending on the fire's magnitude, the working team includes all Provincial entities such as Provincial Roads, Municipalities, Civil Defense, Army, Gendarmerie, Coast Guard, Public Health, and others. Operations and aerial bases with waterspraying planes (from Apóstoles and Eldorado) work in conjunction with volunteer firefighters and the police, as well as forestry consortia and private companies. All fires are immediately reported to the National authorities with corresponding coordinates, and their progress is tracked with GPS installed in planes and fire trucks⁵⁹. This law focuses on fire risk prevention, which can directly cause degradation or deforestation. The increase in fire extent, occurrence, and spread has been identified as a risk to ecosystem integrity. In this regard, other fire-related activities carried out in the Undersecretariat of Territorial Planning of the Ministry of Ecology of the province⁶⁰ include:

- ✓ Establishing a 2 km wide buffer zone around the Protected Natural Areas in the province of Misiones.
- ✓ Daily satellite monitoring to detect, determine the level of criticality, and automatically communicate the presence of hotspots within the limits of the buffer zone of the Protected Natural Areas, for the early activation of forest fire alerts.
- ✓ Compilation and dissemination of a three-day weather forecast daily at the Directorate General of Early Warning.

This department coordinates technical actions with the Directorate General of Early Warning, which functions as a monitoring and prevention centre for natural phenomena of meteorological and climatic origin⁶¹.

Relevant Additional Measures in Relation to the Jurisdictional Baseline

Actions aimed at strengthening the fulfilment of the objectives of Law No. 26.331 have been taken that demonstrate a continuity of efforts within a framework of continuous improvement and deepening native forest management. The following policies and measures to reduce GHG emissions associated with reduced deforestation and degradation – which demonstrate the program's additionality compared to the jurisdictional baseline scenario – are highlighted:

- National REDD+ Strategy and Participation in REDD+ Result-Based Payments Pilot Program.
- Update of the Provincial Land Use Plan (OTBN) of the Province of Misiones.
- Forest Administration, Control, and Verification System.
- Deforestation Early Warning System.
- Strategic Plan for Native Forests 2022-2032 Yabotí Basin.
- Provincial REDD+ Strategy.

^{59 &}lt;u>https://ecologia.misiones.gob.ar/plan-de-manejo-del-fuego/</u>

⁶⁰ https://ordenamientoterritorial.misiones.gob.ar/plan-provincial-de-manejo-del-fuego/

⁶¹ https://ordenamientoterritorial.misiones.gob.ar/dir-gral-alerta-temprana



• Provincial Climate Change Cabinet and Climate Action.

National REDD+ Strategy and REDD+ Result-Based Payments Pilot Program:

Regarding the REDD+ mechanism, a series of programs and projects contributed to supporting actions in the country, including the UN-REDD National Program of Argentina (2015-2019), Native Forest and Community Project (2015-2020), Cooperative Carbon Fund for Forests (2015-2020), and Support for the Implementation of the National Native Forest Protection Program (2012-2020). The National REDD+ Strategy was developed by the National Ministry of Environment and Sustainable Development as a public policy instrument and operational management tool with the overarching goal of implementing the REDD+ mechanism in the country.

In 2019, Argentina reported a reduction in gross GHG emissions due to reduced deforestation in forest regions including the Parque Chaqueño, Yungas, Selva Paranaense, and Espinal for the years 2014, 2015, and 2016, in comparison to the FREL. Based on these results and in compliance with all REDD+ mechanism requirements, the Ministry of Environment and Sustainable Development of the Nation (MAyDS), in collaboration with FAO as an accredited entity to the Green Climate Fund (GCF), requested REDD+ Result-Based Payments for the period 2014-2016 through a Financing Proposal (FP) under the REDD+ Result-Based Payments Pilot Program. The GCF approved a disbursement of \$82 million that the country will use to support the implementation of the National REDD+ Strategy (National Forest and Climate Change Action Plan) and the fulfillment of the Nationally Determined Contribution (NDC) of the Republic of Argentina. This strategy, published in 2019, provides the overarching framework for REDD+ implementation at the national level.

The REDD+ Result-Based Payments Pilot Program aims to support the implementation of selected axes of the National Forest and Climate Change Action Plan (National REDD+ Strategy), addressing direct and underlying causes of deforestation and degradation, as well as protecting and increasing forest carbon reserves through various management practices. The project primarily focuses on native forest areas classified under Category II (Yellow) according to the Land Use Plan. The REDD+ Result-Based Payments program has four components:

- Territorial Forest Management.
- Forest Management with Integrated Livestock (MBGI).
- Improvement in the capacity to respond to forest fires.
- Strengthened capacities of national and provincial government institutions to address deforestation, monitoring, and control causes.

The project seeks to address the causes of deforestation and degradation by strengthening economic and social opportunities (including livelihood diversification), enhancing control and surveillance capacities, and improving overall forest governance. The project prioritizes actions aimed at boosting regional economies, forest-dependent communities, micro and small industries, vulnerable communities, and the capacities of national and local governments.

Update of the Territorial Land Use Plan for Native Forests of Misiones Province



Under Law XVI No. 105 of Territorial Planning of Native Forests enacted in 2010, the territorial land use plan for native forests of Misiones Province was established. This plan was implemented the following year through Decree 67/2011. Subsequently, in 2017, an update of the territorial land use plan for native forests was regulated through Resolution 265/17 and finally accredited by Resolution 2/21.

Misiones is among the first five provinces to update its Territorial Land Use Plan. For this update, a more rigorous methodology was used than previously, which necessitated stricter compliance with national law requirements. Additionally, the zoning was redefined, allowing for more accurate spatial identification of forest areas based on the application of a smaller mapping scale. This methodological change has improved controls and monitoring of deforestation and degradation since then. Implementing parcel-based zoning for Categories I, II, and III posed a significant challenge for the province, making use of aerial photographs as a measurement basis.

A total of 54.1% of the province's total area falls under the following conservation categories, adapted from Law No. 26.331 according to Provincial Law XVI No. 105:

Category I (Red): Encompasses Protected Natural Areas, including Provincial Parks and Reserves. It also includes Protective Forests along Main Rivers and the Urugua-í Lake Perimeter within a 200-meter width. Private areas of special interest due to their biological, tourist, cultural, or other conservation value, as determined by the Executive Unit for Native Forest Land Use Planning, are also incorporated.

Category II (Yellow): Includes Native Forests on Private Properties, such as Multiple-Use Private Reserves and Private Properties within the Yabotí Biosphere Reserve. It also covers Protective Forests on slopes equal to or greater than 15%, measured in 100-metre sections along the steepest slope line, as well as protective forests along watercourses with a width on each side equal to triple the width of the watercourse, with each strip not being less than ten meters wide. Additionally, it encompasses Ecological Strips and areas of special interest that must be conserved due to their biological, tourist, cultural, or other value, as determined by the Executive Branch.

Category III (Green): Encompasses Areas with Native Forests that, due to soil suitability, can be used for sustainable productive activities. These activities must not affect areas inhabited by Indigenous Communities, biological corridors, and areas with protected species. They must comply with all provincial regulations prohibiting the clearing of protective forests along watercourses, springs, watershed divides, wetlands, and slopes equal to or greater than 15%. They must also respect Ecological Strips of native forests around cleared parcels.

In the provincial update of the Territorial Land Use Plan, the Sub-secretariat of Territorial Land Use (SOT) of the Ministry of Ecology and Renewable Natural Resources reported a total of 1,612,558 surveyed hectares⁶², of which 233,083 hectares are classified as Category I (Red) (7%), 901,617 hectares as Category II (Yellow) (85%), and 477,858 hectares as Category III (Green) (8%).

⁶² https://www.argentina.gob.ar/sites/default/files/21_tomo_ii_-_2021_fichas_prov._est._implementacion_ley_26331.pdf



Consequently, the province sustainably manages 1,379,475 hectares of native forest with varying degrees of use, allowing for the implementation of Sustainable Management Plans (SMPs), Conservation Plans (CPs), or Land Use Change Plans (LUCPs). Examples of each type of plan have been shared with the validation and verification body.

The types of plans that can access funds from the National Fund for Enrichment and Conservation of Native Forests (FNECBN) include CPs, which can be developed for forests categorized in any of the three conservation categories established in Law No. 26.331, provided that the objectives and proposed activities in the plan enable the maintenance and/or increase of conservation attributes, and that timber products are not used for commercial purposes. Additionally, SMPs can be submitted by forest owners for areas classified under Conservation Categories II (Yellow) or III (Green).

Objectives and activities proposed in SMPs must ensure that the forest is converted and that interventions are moderate enough for the forest to maintain, at a minimum, the conservation attributes of the category under which it was classified. In cases of intensive interventions affecting conservation attributes, it must be ensured that the system can recover, either naturally or artificially, with technical support for this premise.

SMPs can have different focuses: forest utilization (FU), non-timber forest products (NTFPS), recovery of productive potential (enrichment, restoration) (RP), or multiple (M). There is a wide range of interventions, uses, extraction permits for by-products, non-timber utilization permits, production of forest honey, production of forest fruit preserves, eco-tourism ventures, and more conducted in the native forest that can be eligible for FNECBN funds. SMPs with a focus on forest utilization include the enrichment of the native forest as a requirement for timber exploitation authorization. Any intervention in the native forest, whether subject to this fund or not, must comply with the Minimum Requirements established in Law No. 26.331 and Provincial Law XVI No. 105, as well as their respective regulatory decrees.

Based on the information provided, from the establishment of the Territorial Land Use Plan to 2017, a total of 185 funded plans and projects have been registered in Misiones Province⁶³. The area under SMPs and LUCPs in 2017 was20,350 ha.

To ensure effective monitoring of plans, especially following the 2017 update of the Provincial Land Use Plan (OTBN), the workforce of the Ministry of Ecology was strengthened, leading to improved institutionalization of ongoing processes. The analysis methodology was refined, involving initial parcel categorization by the Undersecretariat of Territorial Planning (SoT) based on the 2010 OTBN. In 2017, additional personnel were introduced for the evaluation of Forest Management Plans and Land Use Change Plans.

Authorization processes were shifted to a stand-based approach, guided by the principles of gradualness (approval for small stands each year, closed with field inspections and evaluations of results through verification, deviation identification, compliance with Environmental Impact Assessment (EIA), among

⁶³ Estado de implementación de la Ley n° 26,331 de Presupuestos Mínimos de Protección Ambiental de los Bosques Nativos. Ministerio de Ambiente y Desarrollo Sostenible. Edition 2021.



others) and proportionality (authorizing the smallest possible area, considering all relevant legislation, ecological strips, natural monuments, wetlands, protective forests, indigenous communities, jaguars, green corridors, etc. and encouraging the choice of management plans). This approach prevents the authorization of large-scale plans. Plans exceeding 100 hectares require an EIA and are approved through ministerial resolutions. The management of stands is authorized through disposals, which have been reinforced in recent years. The number of plans approved through stand-based authorizations in 2017 was significantly higher than in previous years, indicating improved performance by the Sustainable Management Directorate.

To grant authorizations for land use change and sustainable management plans, an EIA is mandatory for deforestation and sustainable management plans with potential significant environmental impacts, according to Article 22 of Law No. 26.331 and Article 20 of Provincial Law XVI No. 105. The Environmental Impact Studies (EsIA) are evaluated by the Technical Commission for EIA, composed of various technical areas within the Ministry of Ecology and Natural Resources Renewal.

Since 2017, institutional changes have fostered more effective law implementation and governance. Increased annual budget allocation to the Ministry of Ecology enabled the hiring of trained personnel, the acquisition of new equipment and software, improved violation analysis using tools like drones and GPS, enforcement of fines and plan suspensions, and digitized summaries. The list of monitored field elements was also enhanced (proximity to cultivated areas, landscape criteria, fauna adaptation to new habitats, impact on communities, soil type, slope, land planning, etc.).

The Control Directorate maintains an anonymous reporting channel, "Ecología te escucha," through WhatsApp, facilitating the detection of illegal activities. Requests and complaints related to Indigenous Peoples' issues are addressed, respecting their rights over territory and natural resources. Collaborations with security forces (Misiones Police, National Gendarmerie) ensure effective monitoring. Control systems in the field are reinforced through patrols, delegates, fixed posts, civilian participation, work agreements with police, coast guard, and gendarmerie, as well as the application of specific procedures.

These improvements in oversight capacity are closely related to the establishment and operation of the Forest Administration, Control, and Verification System (SACVeFor) in the province.

Forest Management, Control, and Verification System

The Forest Management, Control, and Verification System (SACVeFor) is one of the components of the National System for the Monitoring of Native Forests (SNMBN) in Argentina. Developed by the National Directorate of Forests (as part of the "Native Forests and Community" Project BIRF8493-AR - PNUD ARG/15/004) since 2016, SACVeFor aims to monitor compliance with Law No. 26.331 and provide updated information about the country's native forest resources. Primarily, this tool enhances the traceability of forest products through the management, control, and verification of various stages: extraction authorizations, movement planning, issuance of transport guides, transit control for each movement, and recipient reception. The issuance of Extraction Guides and Transport Slips allows for the legal possession and transportation of native forest materials.



Data recorded in the system serves as the basis for planning and executing forest control operations for authorized activities, as well as detecting illegal activities. Each issued guide follows a predefined procedure for issuing forest guides and slips within the system. SACVeFor was implemented in Misiones in 2020, enabling the digitization of permits for the use of native forests. Prior training of technical resources and the use of systems to enhance verification and control of plans led to Misiones having access to Sentinel satellite image analysis and a Geographic Information System. Since the digital guide system's implementation, cases of documentation tampering have been detected, leading to administrative actions resulting in penalties according to existing regulations. Through this measure, the province addresses illegal and selective logging of native forests.

At present, Misiones is one of the first five provinces most advanced in SACVeFor implementation⁶⁴. The testing phase of the second version of the system (SACVeFor 2) is underway. This version will include guides for industrialized products to ensure traceability and control over all products made from wood sourced from native forests. The new system version will also feature a self-management module for guides, providing authorized holders with greater efficiency in requesting and managing authorizations.

Early Warning System for Deforestation

The Early Warning System for Deforestation (SAT) is another component of the National System for Monitoring Native Forests of Argentina (SNMBN). SAT continuously monitors native forest loss through automated processes based on satellite images. Its purpose is to strengthen control and surveillance actions over provincial native forests, enabling provincial authorities to intervene in a timely manner to stop illegal deforestation, addressing land use conversion causes.

The system automatically processes satellite images every 15 days using change detection algorithms on the Google Earth Engine platform. All alerts are then validated and processed in a GIS environment, cross-referencing with related secondary information (Provincial Land Use Plans and plans approved by provinces and uploaded to the National Plan Registry). Ultimately, a report detailing the alerts and requesting information about the legality of each deforestation event is sent to each province. The report includes information on whether the event was authorized, the instrument authorizing deforestation, file numbers, and measures to take in case of illegal events, among other data.

The SAT, initiated in the Parque Chaqueño region in 2018, was expanded in 2022 to cover the province of Misiones, with the goal of national implementation. The bi-weekly alerts received are cross-referenced with information from Plans Loaded into the Integrated Forest Information System (SIIF) and authorizations uploaded to SACVeFor.

Provincial Strategic Plan for Native Forests

In mid-2022, Misiones presented the Provincial Strategic Plan for Native Forests (PEBN) 2022 - 2032, fulfilling the requirements to access the National Fund for the Enrichment and Conservation of Native

⁶⁴ https://www.argentina.gob.ar/sites/default/files/21 tomo i - 2021 informe est. implementacion ley 26331.pdf



Forests (FNECBN) for the year 2022, established by Law No. 26.331, and as agreed in the Federal Council of the Environment (COFEMA) assembly through Resolution 497/2021. Each year, the province is expected to submit its Annual Strategic Plan (PEA), outlining the goals for the year within the PEBN framework.

The planning of PEBN was based on the Technical Strategic Guidelines for the implementation of Law No. 26.331, agreed through COFEMA Resolution 360/18. These guidelines encompass the following strategic areas:

- 1. Sustainable Forest Management at the Forest Basin Level.
- 2. Forest Management with Integrated Livestock.
- 3. Restoration of Degraded Forests.
- 4. Sustainable Use of Biodiversity and Strengthening of Conservation Areas.
- 5. Prevention of Forest Fires.
- 6. Management in Urban-Forest Interface Zones.

For the first guideline, the province selected the Yabotí Biosphere Reserve as the Forest Basin. This reserve has its own legislation, governed by Law XVI N° 33 and regulated by Decree 2472 of 1993. The Yabotí Biosphere Reserve represents around 8% of the provincial territory and comprises 185,000 hectares of native forest under the yellow category, 48,359 hectares under the red category, and 2,034 hectares under other uses, hence uncategorized. The main productive activity in this basin is sustainable timber harvesting of native forests through Sustainable Forest Management (PMS). The Yabotí forest basin supplies wood to industries in four municipalities: San Pedro, El Soberbio, San Vicente, and Dos de Mayo.

The PEBN also addresses the guidelines originally included in the National Plan for the Restoration of Native Forests (Resolution 267/2019). In the priority areas identified for restoration in Misiones province, plans for sustainable management and conservation are promoted. Restoration efforts are supported by funds from Law N° 26.331.

Through funding from the National Program for the Protection of Native Forests, four restoration projects were conducted in Misiones province, with funds managed by various executing entities, involving both public and private areas and various stakeholders. These projects were carried out by organizations such as the Pro Eco San Miguel Foundation (2017), the Argentine Native Forests for Biodiversity Foundation (2019), the Wildlife Foundation (2019), and Huellas para un Futuro (2019)⁶⁵.

⁶⁵ https://www.argentina.gob.ar/sites/default/files/21 tomo i - 2021 informe est. implementacion ley 26331.pdf



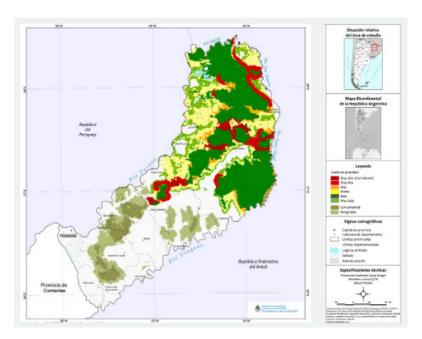


Figure 25: Map of the priority areas for restoration of native forests in Misiones

Source: National Native Forest Restoration Plan of the National Directorate of Forestry.

On the other hand, the PEBN will be implemented by foreseeing percentages of the FNECBN for each of the technical guidelines related to sustainable management, conservation, restoration, the production of timber and non-timber goods, and the maintenance of ecosystem services of native forests. Likewise, the established priority action axes were specified: comprehensive protection of the network of Protected Natural Areas, strategic management of the Green Corridor, strengthening of capacities for the prevention and combating of forest fires, development of sustainable management of native forests, integrated livestock activity in native forests, territorial planning, and special work in the urban-rural interface areas of municipalities.

Provincial Climate Change Cabinet and Climate Actions

The Ministry of Climate Change of Misiones was created on October 6, 2020, representing the first of its kind in all the Americas. Subsequently, Decree N° 157/21 created the Provincial Climate Change Cabinet (GPCC). The GPCC leads the implementation of the Climate Change Response Plan, as provided for in Article 20 of Law N° 27.520, and Sectoral Action Plans at the ministerial level for climate change mitigation and adaptation. Additionally, the GPCC is responsible for coordinating participatory and synergy processes among the different areas of the Provincial Government, as well as between the Provincial and Municipal Governments, institutions, non-governmental organizations, and citizen participation. It also integrates climate change mitigation and adaptation actions into the planning of various sectors and/or systems. The GPCC is assisted by the Provincial Climate Change Board, which convenes experts and representatives from various sectors of civil society with relevance to the subject matter, as well as an External Advisory Council, which is consultative and permanent in nature.



The Province is designing the Provincial Climate Change Response Plan within the framework of the National Adaptation and Mitigation to Climate Change Plan (PNAyMCC) executed by the MAyDS and the United Nations Development Programme (UNDP) in Argentina. The Misiones Climate Change Response Plan will serve as a tool to establish strategies, policies, and instruments related to adaptation and mitigation activities to climate change in the various areas that make up the provincial territory, including the forest sector. Furthermore, the EPREDD+ is a constitutive part of the Climate Change Response Plan in its native forest component.

Provincial REDD+ Strategy

In continuation of the mentioned additional measures, the province has developed a Provincial REDD+ Strategy (EPREDD+), which has the long-term objective of "contributing to the global fight against climate change and to the sectoral development of the province to achieve the well-being of the people of Misiones, with a focus on competitiveness, sustainability, integrated land management, food security, and social and gender equity." The EPREDD+ will also allow the province to contribute to the country's climate objectives stipulated in its nationally determined contributions (NDC) and the mitigation objectives established in the National REDD+ Strategy, through the reduction of emissions from reduced deforestation in native forests and sustainable management of native forests to prevent their degradation.

The scope of the Provincial REDD+ Strategy involves native forests throughout the provincial territory, within the competences of the General Directorate of Native Forests of the Ministry of Ecology and Renewable Natural Resources.

The EPREDD+ was designed to ensure alignment with the country's REDD+ strategy. In it, Structural Strategic Axes (EEE) and Operational Strategic Axes (EEO) are designed⁶⁶. EPREDD+ includes a system of financial incentives to compensate for the opportunity cost of owners to avoid deforestation and degradation, along with other measures aimed at assessing and proposing effective measures for reduced deforestation and degradation.

The EPREDD+ sets ambitious goals to achieve its objectives:

- 1. Reduce greenhouse gas emissions linked to agriculture, forestry, and other land uses (AFOLU) by 20% by 2030 and by 50% by 2050.
- 2. Maintain forest area around 50% (± 1%) of the provincial territory.
- 3. Reduce and maintain the deforestation and forest degradation rate at 0.30% annually.
- 4. Reduce illegal deforestation by 10% annually until 2030.
- 5. Strengthen the Provincial System of Protected Natural Areas.
- 6. Increase the area of productive forests with sustainable management plans to 80% by 2030.
- 7. Achieve sustainability and improve the efficiency of the forestry and agricultural sectors.
- 8. Mitigate and compensate for the possible negative consequences that future productive activities may have on forests.
- 9. Prevent forest fires and act on key contributing factors.

⁶⁶ Mesa de Diálogo ECO2. https://programajnr.misiones.gob.ar/salvaguardas/#



10. Implement an early warning system for deforestation that covers the entire province.

The Provincial REDD+ Strategy of the Province of Misiones is part of the provincial and national framework for combating climate change, which includes both climate change adaptation and mitigation of its effects. The implementation of the REDD+ process will be guided by principles of good governance: accountability, effectiveness, efficiency, equity, participation, and transparency, as well as the application of a multisectoral and territorial development approach. This implementation will be carried out by the Provincial REDD+ Program Committee, created by Decree (No. 1114/22), which will act as the governing entity and executive body. The EPREDD+ not only aligns with both the National Forest and Climate Change Action Plan and the Misiones Climate Change Response Plan, but it is also structured on the Strategic Plan for Native Forests 2022-2032.

To achieve its objectives, the province plans to develop REDD+ policies and measures structured into ten strategic axes, aligned with the national statements. Five of them are operational strategic axes, aiming to achieve sustainable productive development that, in turn, mitigates the direct causes of deforestation and forest degradation. The other five are transversal structural axes that address underlying causes, overcoming barriers and structural needs for strategy implementation. Each operational axis defines specific actions, which are associated with concrete mitigation measures. These measures have been considered in the National Contribution and in the Provincial Climate Change Response Plan for the AFOLU sector and are fully adopted by the Provincial Government and adapted to local conditions. The structural and operational strategic axes are listed below:

- EEE 1. Strengthening governance.
- EEE 2. Strengthening local communities.
- EEE 3. Strengthening management, control, and monitoring capacities.
- EEE 4. Recognizing the importance of native forests as assets for society.
- EEE 5. Knowledge management.

Operational Strategic Axes (EEO):

- EEO 6. Territorial planning.
- EEO 7. Sustainable management of native forests.
- EEO 8. Conservation in productive landscapes.
- EEO 9. Restoration and recovery.
- EEO 10. Forest fire prevention.

In parallel with the development of the EPREDD+, the province has made progress in preparing the other elements established in the Cancun Agreements⁶⁷, which establish the fundamental aspects for the future estimation of emissions and absorptions of GHGs through forest emissions reference levels (FREL); the

⁶⁷ Decision 1/CP.16



Provincial Forest Monitoring System (SPMB) for monitoring and reporting for REDD+ activities; and the Safeguards Information System (SIS) to report how safeguards are addressed and respected, adopting a gender-sensitive approach. Thus, the EPREDD+ covers all pillars that underpin the preparation phase of the REDD+ process.

To test the REDD+ intervention model, the province has integrated the key stakeholders of the social sector and governments in the development and validation of a benefit distribution model. Through the EPREDD+, the aim is to ensure inter-institutional coordination to redirect public policies, reduce incentives that promote deforestation and degradation, increase incentives for conservation, management, restoration, and sustainable use of forest resources. These incentives will be directed towards sustainable forest management as an additional boost to active forest management centred on the Development of a Protected Productive Forest Landscape, valuing and economically compensating forest goods and services, and reducing pressures on forest ecosystems arising from other activities and economic circumstances. All of this will be done using a rights-based approach and with the committed participation of multiple social actors and public institutions involved in territorial development.

To finance this strategy, the province proposes a mixed financial framework, with potential sources of funding including national and international, public and private resources.

The formulation of the EPREDD+ involved a consultation process with the most relevant stakeholders. The definition of actions and activities involved the participation of institutions with expertise in the sector, academia and research centres, NGOs, forest owners, indigenous communities, and society at large. Similarly, during its implementation, there will be a strong emphasis on stakeholder participation, taking account of social and gender equity.

The EPREDD+ reaffirms the commitment of the province and the country to a sustainable, climate-smart, and inclusive approach to managing its territory, enhancing forest and agricultural productivity, adding value and local development, as well as food sovereignty and community attachment. Through initiatives that aim to adopt and use improved productive practices, territorial planning, intersectoral coordination, and transparent and participatory governance, poverty, deforestation and forest degradation will be reduced, and contributions will be made to the fight against climate change.

In this sense, the EPREDD+ aspires to be a significant driver of green growth that transforms the native forest sector, guides various territorial activities, and helps achieve objectives related to sustainable development. This strategy aligns, therefore, with the strategic axes of the National Forest and Climate Change Action Plan, the Strategic Plan for Native Forests of the Province 2022-2032, the National and Provincial Laws on Native Forests. It also supports the 2030 Agenda for Sustainable Development, which presents the Sustainable Development Goals (SDGs) with their integrated and indivisible targets encompassing economic, social, and environmental spheres. Additionally, it aligns with the United Nations Strategic Plan for Forests 2017-2030⁶⁸, which serves as a global action framework for the sustainable management of all types of forests, aiming to end deforestation and forest degradation. This plan includes

⁶⁸ https://www.un.org/esa/forests/wp-content/uploads/2021/08/Global-Forest-Goals-Report-2021.pdf



six Global Forest Goals (GFGs) that directly support the SDGs and other international commitments: Reduce Forest Cover Loss (GFG 1), Improve Forest Benefits and Livelihoods (GFG 2), Protect Forests and Use Sustainable Forest Products (GFG 3), Mobilize New and Additional Financial Resources (GFG 4), Promote Inclusive Forest Governance (GFG 5), and Cooperate and Work across Sectors (GFG 6).

3.4. Leakage Management

The Program aims to address deforestation activities where they occur, without causing an increase in GHG emissions outside the jurisdictional area due to program activities (leakage).

For the identification and quantification of leakage risks, the program applied the VCS Jurisdictional and Nested REDD+ (JNR) Leakage Tool. Each program activity and leakage mitigation measure address one or more of the identified causes of deforestation.

As per the requirements set by Verra (JNR_Scenario_2_Requirements), the Program must consider the management of leakage to other adjacent jurisdictions within the same country. In the Province of Misiones, over 90% of its boundaries are international, bordering the Republic of Brazil to the North and East, and the Republic of Paraguay to the West. A small portion of its territory to the south borders the Province of Corrientes.

Table 7 provides a summary of the analysis of the causes of deforestation.

Factor	Agents	Risk of Leakage	Justification for the risk analysis
Over-exploitation through selective wood extraction and illegal logging	Local population, small-scale producers, local industries	Low	The province has regulations and mechanisms, such as SACVeFor, the Management Plans of the Native Forest Law, and particularly in the province, the Renewable Dendroenergetic Resources Law, which regulate forest extraction activities in the province. These actions also comply with national-level regulations or strategies.
Advancement of agricultural and livestock frontier (forest plantations, yerba mate, tea)	Companies and medium- large agricultural producers	Low	The province has regulations in place and adheres to national forest regulations, both regarding native forests (Law No. 26.331 which restricts land-use changes subject to the OTBN and authorization granting) and cultivated forests (Law No. 25.080 and its extension, which establishes environmental approval of ventures considering the OTBN). Additionally, there are different ecological and socio-productive characteristics between Misiones and Corrientes, with a higher proportion of Pinus sp. plantations in the former and Eucalyptus sp. in the latter. Similarly, the sub-tropical nature of yerba mate



			and tea crops, with high temperature and humidity requirements, reduces the likelihood of leaks associated with the expansion of these plantations beyond zoning. Furthermore, in the province of Misiones, the Early Warning System for Deforestation is currently operational, providing a continuous monitoring tool that, in turn, reduces risks of leakage.
Subsistence agriculture	Itinerant farmers, peasants, small-scale producers, communities	Low	Processes of migration or relocations of subsistence farming practices by the local population beyond the jurisdictional program boundaries are unlikely. The province has regulations and mechanisms that promote sustainable family farming in the territory, as well as marketing mechanisms for the products.
Livestock activity	Small-scale producers	Low	The province promotes, through the regulations and strategies it develops, forest management with integrated livestock activities as a way to integrate forestry activities with livestock farming, thereby offering productive alternatives within the territory.

Table 7: Identification of causes and agents of deforestation and forest degradation Source: Own elaboration

Global Market Products

The Jurisdictional Program can lead to leakage emissions associated with global market products if the program reduces the production of a commodity linked to international markets. In such cases, other countries may absorb the reduced supply, potentially leading to increased emissions elsewhere. According to the leakage tool, products are considered associated with the global market if 5% or more of the production of a specific commodity is exported. The following products are discussed:

Yerba Mate

Misiones is the main producing province, accounting for nearly 90% of national production and cultivated area of yerba mate (with the remaining 10% produced in the province of Corrientes). It also leads in terms of exports, even though 90% of the production is directed towards the domestic market⁶⁹. Domestic sales

⁶⁹ https://agro.misiones.gob.ar/wp-content/uploads/2022/10/Lineamientos-para-el-desarrollo-productivo-basado-en-el-conocimiento-la-biodiversidad-y-el-valor-agregado-agroindustrial-en-la-provincia-de-Misiones-1-1.pdf



amounted to 282,854,987 kg during the January-December 2021 period, while exports totalled 35,509,787 kg for that year⁷⁰ (11% of the total). Thus, yerba mate is classified in this analysis as a global commodity.

Tea

Nationally, Misiones accounts for 95% of the cultivation of *Camellia sinensis* and uses this plant to produce various types of tea (black, green, and red) that are marketed in bulk, tea bags, and leaves. Argentina has 39,800 hectares of tea cultivation, with almost 38,000 hectares (95%) located in the province of Misiones and approximately 1,800 hectares in the province of Corrientes (5%). Misiones has pioneered a unique characteristic: the mechanization of the entire production process. Currently, over 90% of Argentine tea production is destined for the international market^{71,72}. Thus, tea is classified in this analysis as a global commodity.

The Argentine tea sector is at the forefront globally in using technology for harvesting, transportation, and processing. Factories possess machinery where the entire production process, from withering, rolling, fermenting, drying, and grading, has been automated, ensuring the safety of the final product. All this production and packaging technology and machinery are manufactured within the country by small metallurgical companies. The development is such that these machines are exported to other tea-producing countries⁷³.

Cellulose and Paper

In 2017, paper and cardboard production amounted to 1,637,000 tons. The paper and cardboard products sector consists mainly of SMEs oriented towards the domestic market, and a significant portion of domestic consumption is covered through imports⁷⁴. In 2018, 90% of the forest product chain exports were concentrated in seven provinces. Misiones (34%) focuses its exports on pulp and wood. According to the 2021 cellulose and paper industry survey, 25% of produced cellulose was allocated for the international market, while 10% of paper and cardboard production was exported⁷⁵. Consequently, this product is considered part of the global market analysis of leakage risks.

Following the VT0004 JNR Leakage Tool V 1.0, the following *ex-ante* analysis has been made, which will be repeated for the FREL validity period as part of the *ex-post* leakage management:

⁷⁰ INYM; "Informe del Sector Yerbatero"; December 2021. It can be downloaded in the following link:

https://invm.org.ar/descargar/publicaciones/estadisticas/2021.html

⁷¹ https://agro.misiones.gob.ar/wp-content/uploads/2021/02/Informe-El-Te-argentino-tiene-a-Misiones-como-protagonista.pdf

^{72 &}lt;a href="https://agro.misiones.gob.ar/wp-content/uploads/2022/10/Lineamientos-para-el-desarrollo-productivo-basado-en-el-conocimiento-la-biodiversidad-y-el-valor-agregado-agroindustrial-en-la-provincia-de-Misiones-1-1.pdf">https://agro.misiones.gob.ar/wp-content/uploads/2022/10/Lineamientos-para-el-desarrollo-productivo-basado-en-el-conocimiento-la-biodiversidad-y-el-valor-agregado-agroindustrial-en-la-provincia-de-Misiones-1-1.pdf

⁷³ https://agro.misiones.gob.ar/wp-content/uploads/2021/02/Informe-El-Te-argentino-tiene-a-Misiones-como-protagonista.pdf

^{74 &}lt;a href="https://www.argentina.gob.ar/sites/default/files/sspmicro_cadenas_de_valor_forestal_papel_muebles.pdf">https://www.argentina.gob.ar/sites/default/files/sspmicro_cadenas_de_valor_forestal_papel_muebles.pdf

⁷⁵ https://www.magyp.gob.ar/sitio/areas/desarrollo-foresto-industrial/foresto-

<u>industria/ archivos//000001_Informes%20Anuales%20de%20la%20Industria/000002_2021/002021_Relevamiento%20de%20la%20Industria%20de%20la%20Celulosa%20y%20el%20Papel%202021.pdf</u>



	Global Commodity Leakage	
a)	The jurisdictional program affects the production of globally significant commodities.	3
	According to Table 1 of the VT0004 JNR Leakage Tool, the default factor for Argentina is 3.	
b)	<u>Mitigation</u> : The jurisdictional program incorporates and has implemented (or is implementing) strategies, policies, or measures that fully maintain production (considering the historical production trend, when applicable) of relevant global commodities within the jurisdiction.	-3
	According to VT0004 JNR Leakage Tool and due to the following explanation of the mitigation criterion, the default value is subtracted (-3).	
	Yerba mate Between 2009 and 2014, the average annual harvested yerba mate in the form of green leaves processed was 715,290,938.67 kg. Approximately 87% comes from Misiones, while the remaining comes from Corrientes, a proportion that remained constant between 2009 and 2014. In this context, the National Yerba Mate Institute (INYM) is an autonomous organization with the objectives of promoting, fostering, and strengthening the yerba mate industry's development. The measures considered in the Program does not forbid the expansion of particular production activities, but instead it proposes alternatives to take a different path when contributing to reduce deforestation in the province. Yerba mate production is expected to remain at similar levels (considering the historical production trend) in the province. Tracking of this will be done through a qualitative assessment of yerba mate production levels, through indicators that can be used such as: provincial participation in the total production; evolution of yerba mate production levels in terms of hectares or tons produced; existence of policies, strategies or agencies for the promotion of the yerba mate activity.	



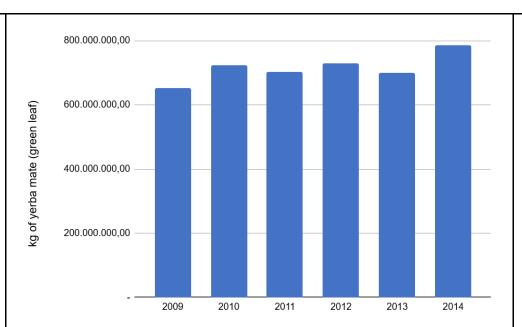


Figure 26: Evolution of yerba mate leaf production entered into the drying process Source: Reports from the Yerba Mate Sector of the INYM

Tea

Between 2009 and 2014, the average tea production was 387,551.67 tons ⁷⁶. Approximately 95% of the production comes from Misiones. Tea production is expected to remain at similar levels (considering the historical production trend) in the province. Tracking of this objective will be done through a qualitative assessment of tea production levels, through indicators that can be used such as: provincial participation in the total production; evolution of tea production levels in terms of hectares or tons produced; existence of policies, strategies or agencies for the promotion of the tea activity.

⁷⁶ https://datosestimaciones.magyp.gob.ar/reportes.php?reporte=Estimaciones



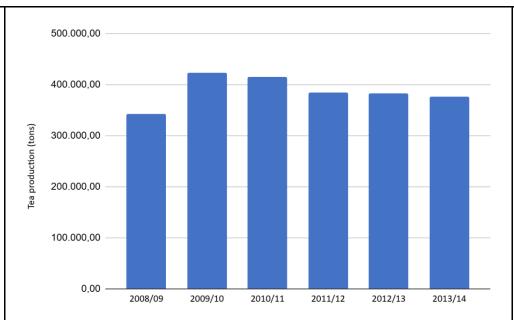


Figure 27: Evolution of tea production Source: Agricultural estimates, SAGyP

Forest Products

Almost all the raw material used for the country's pulp manufacturing comes from the Mesopotamian Region, mainly from the province of Misiones.

The province consumes a significant portion of the raw material for pulp production. In Misiones, forest product activity is comprised of a large number of diverse actors in the forest production chain, generating employment opportunities in the province. Corrientes, the only neighbouring province of Misiones, does not have similar quality conditions that would enable it to develop a forest industry to replace that provided by Misiones. Again, the Program does not forbid the development of the forest industry, but instead proposes alternative activities when native forests are at risk. Most of deforestation for commercial timber is illegal. Increasing the controls of these activities is therefore a joint effort to be carried out with the neighbouring provinces under the commitments assumed in the framework of Law 26,331.

Production of forest products is expected to remain at similar levels (considering the historical production trend) in the province. Tracking of this objective will be done through a qualitative assessment of forest products levels, through indicators that can be used such as: provincial participation in the total production; evolution of forest products in terms of cubic meters or tons produced; existence of policies, strategies or agencies for the promotion of the forest products chain.



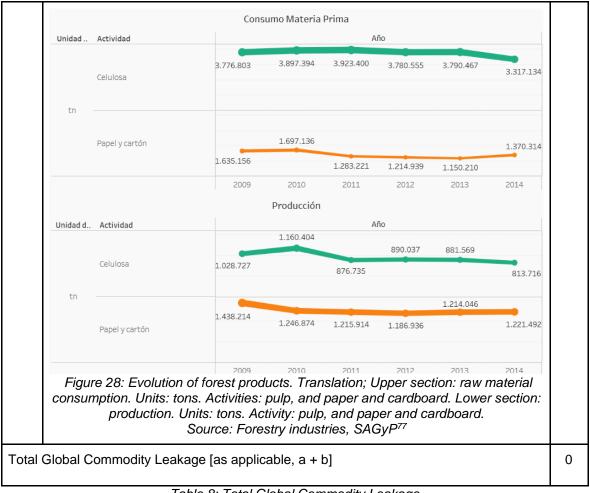


Table 8: Total Global Commodity Leakage

Domestic Market and Subsistence Leakage				
a)	The jurisdictional program impacts the production of relevant local commodities and/or subsistence activities. According to VT0004 JNR Leakage Tool, the default value is 15.	15		
b)	Mitigation: The jurisdictional program incorporates and has implemented (or is implementing) strategies, policies or measures that substantially maintain production of relevant domestic commodities within the jurisdiction; and/or the jurisdictional program does not affect the production of relevant domestic commodities.	-5		

⁷⁷ https://www.magyp.gob.ar/sitio/areas/desarrollo-foresto-industrial/foresto-industria/tablero.php



According to VT0004 JNR Leakage Tool and due to the following explanation, the mitigation criterion is met (-5).

Local trade forest products

Given the industrial consumption of firewood in the province and the pressure it exerts on native forests, Law XVI no 106 on Renewable Dendroenergy Resources has been enacted. This law aims to promote the substitution of the production, commercialization, and industrial consumption of firewood and charcoal from natural forests with firewood from cultivated forests⁷⁸. From the introduction of this regulation, since 2012, it has been mandated that drying establishments for verba mate and tea must reduce their use of firewood and charcoal from natural forests until completely replacing these inputs with alternatives (products derived from forest plantations).

Livestock

From 2009 to 2014, cattle production increased by 16% in the province and pig production by 22%. Forest management with integrated livestock activities are subsidized according to the plans included in the application of Law 26,331. Thus, legal expansion of livestock is regarded in the Program.

It is expected a continuity of policies for the promotion of relevant domestic commodities for local markets. To track this objective the following indicators can be used: qualitative analysis of strategies and measures for the promotion of local market forest products; evolution of heads of livestock (or any other domestic product) relevant to the local market.

c)

Mitigation: The jurisdictional program incorporates and is implementing strategies, policies, and measures that address the drivers of deforestation (and degradation) associated with subsistence activities and support the majority of actors engaged in such subsistence activities within the jurisdiction; and/or the jurisdictional program does not affect the drivers of deforestation associated with subsistence activities.

According to VT0004 JNR Leakage Tool and due to the following explanation, the mitigation criterion is met (-5).

In the context of implementing the Native Forest Law, and in accordance with the approved OTBN, the province promotes management and conservation plans that encompass various activities such as timber harvesting, non-timber forest product use, and services, forest management with integrated livestock, among others.

The approval of Law III n° 10 for the development, promotion, and support of the free fair and local market hub, Law XVII n° 71 for artisanal foods, and Law VIII n° 68 for the promotion of agroecological production in Misiones is unique to the province.

-5

⁷⁸ https://agro.misiones.gob.ar/programa-plan-lena/



	·	
	Policies that promote subsistence activities are expected to continue. To track this objective the following indicators can be used: qualitative analysis of strategies and measures for the support of subsistence activities and the stakeholders engaged in subsistence activities in Misiones.	
d)	Mitigation: The jurisdictional program is integrated, or is being integrated, into an overall plan for rural development or a green, low-emission economy, led by the government.	-4
	According to VT0004 JNR Leakage Tool and due to the following explanation, the mitigation criterion is met (-4).	
	The Jurisdictional Program aligns with the Provincial REDD+ Strategy, and both align with the National REDD+ Strategy, in the development of which Misiones actively participated through the different instances of the National Climate Change Cabinet. This Cabinet included all relevant stakeholders related to the definition and implementation of national climate change policy.	
	Furthermore, the actions and activities included in the Provincial REDD+ Strategy involved the participation of institutions working in the sector, academia and research centres, NGOs, forest owners, native communities and society in general. During its consultation process, the views of all stakeholders were taken into account. Interaction and dialogues were actively promoted in the decision-making process, and a mapping of stakeholders was prepared to ensure an inclusive participatory process.	
	Moreover, the measures related to REDD+ activities that were included in the Climate Change Response Plan of the Province are also covered in this JNR Program. Hence, the Jurisdictional REDD+ Program is one of the instruments proposed to tackle the emissions from the AFOLU Sector in the Province's GHG Inventory.	
	It should be noted that this Plan was developed jointly by different government agencies, academia and civil society through workshops established in Ministerial Resolution 67/23 and includes policies and actions to be carried out by the province up to 2030, in line with the commitments made by Argentina under the Paris Agreement.	
	The Climate Change Response Plan includes climate change mitigation and adaptation measures that include mitigation measures related to forests. Additionally, this Plan is an instrument that arises from the commitments of Law n° 27.520.	
	All the provincial government's climate change and native forest policies are expected to be directly linked to the JNR and REDD+ Strategy. To track this objective the following indicators can be used: qualitative analysis of JNR linkage with provincial and national development, climate and native forest policies, strategies or measures.	
e)	Mitigation: The jurisdictional program has developed, or is developing, its strategy to mitigate leakage in consultation with representatives of	-1



deforestation (and degradation).

According to VT0004 JNR Leakage Tool and due to the following explanation, the mitigation criterion is met (-1).

From the beginning, the GPM, through the MEyRNR, has been part of the consultation process of Law 26,331, including representatives of deforestation and degradation. The Directorate of Native Forest has two departments (Promotion of Native Forests and Sustainable Management of Native Forests) which maintain a communication channel with main actors in the province.

A participatory process of the Program was organized during the last quarter of 2022 and the first quarter of 2023 in three phases and in a "hybrid" format, combining in-person workshops in different areas of the province with virtual workshops and the establishment of a Dialogue Table. It included representatives from all sectors: public, private, technical-academic, civil society organizations, indigenous people, rural communities, and labor unions or labor organizations.

As part of the consultation process for the Program's Safeguard Information System (SIS), inputs were gathered from the different stakeholders consulted regarding the application of the Cancun Safeguards, since everything related to REDD+ and voluntary carbon markets is a topic that is not widely disseminated in society in general. This entire consultation process is specially documented in section 2 of the PD.

As part of the content of the Cancun Safeguards consulted, leakage risks for the VT0004 JNR Leakage Tool were addressed in the development of Safeguard G - Prevention of Leakage Risks:

The EPREDD+ aligns its actions with the Territorial Planning of Native Forests, respecting the regulations established in each conservation category, which will prevent the displacement of emissions.

However, it should be noted that given the novelty of the topic, in the various participatory events carried out, no relevant inputs were collected. Therefore, there were no comments received related to the risk of leakage that could have served as input for the development of the VT0004 JNR Leakage Tool mentioned above.

This essential risk for the environmental integrity of the Program was specially addressed by the safeguards experts in charge of the development of the SIS-REDD+ Misiones, including it as a specific risk within the Environmental and Social Management Plan (ESMP).

Leakage mitigation will continue to be a topic that is discussed during the ongoing consultation process. To track this objective the following indicators can be used: qualitative analysis of participation and consultation instances of the program related to leakage mitigation.



Total Domestic Market and Subsistence Leakage [as applicable, (a + b + c + d + e)] 0

Table 9: Total Domestic Market and Subsistence Leakage

Degradation caused by the displacement of deforestation reduction activities

To characterize the degradation of the native forests in the province of Misiones, an assessment was performed in the FREL period (see Section 3.6.3). As part of leakage management, the Jurisdictional Program is going to monitor degradation, with the same remote sensing techniques used for assessing the contribution of degradation to total disturbances in the province.

	Deforestation to Degradation Leakage	
a)	The jurisdictional program affects subsistence drivers of deforestation and there is a risk that such agents of deforestation will shift to forest degrading activities.	2
	According to VT0004 JNR Leakage Tool and given that the program addresses deforestation, it is not possible to disregard the likelihood of a shift to degradation.	
b)	The jurisdictional program affects commercial drivers of deforestation and there is a risk that such agents of deforestation will shift to forest degrading activities.	2
	According to VT0004 JNR Leakage Tool and given that the program addresses deforestation, it is not possible to disregard the likelihood of a shift to degradation.	
c)	<u>Mitigation</u> : The jurisdictional program incorporates and has implemented (or is implementing) strategies, policies or measures that address the risk of subsistence drivers of deforestation shifting to forest degradation activities and support the majority of the agents associated with such subsistence activities within the jurisdiction.	-2
	According to VT0004 JNR Leakage Tool and due to the following explanation, the mitigation criterion is met (-2).	
	In the context of implementing the Native Forest Law, and in accordance with the approved OTBN, the province promotes management and conservation plans that encompass various activities such as timber harvesting, non-timber forest product utilization, and services, forest management with integrated livestock, among others.	
	The approval of Law III n° 10 for the development, promotion, and support of the free fair and local market hub, Law XVII n° 71 for artisanal foods, and Law VIII n° 68 for the promotion of agroecological production in Misiones is unique to the province.	
	It is expected a continuity in strategies, policies or measures that address the risk of subsistence drivers of deforestation shifting to forest degradation activities and support the majority of the agents associated with such subsistence activities within the jurisdiction. To track this objective the following indicator can be used: qualitative analysis of those strategies, policies or measures.	



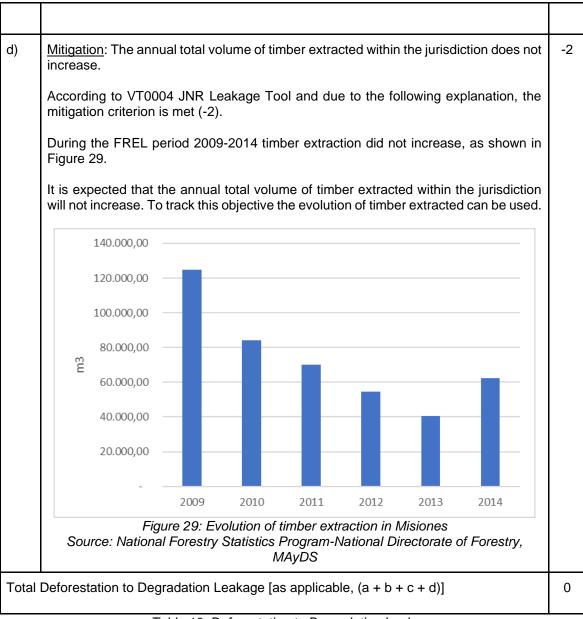


Table 10: Deforestation to Degradation Leakage

Requirements for nested projects

Nested projects will apply a leakage belt and apply the tools requested in project-type methodologies for leakage estimation and management within the province limits. To avoid considering leakage effects outside the jurisdictional boundary, project proponents shall demonstrate that their projects do not produce transboundary impacts. This kind of leakage, therefore, will only be accounted for at the jurisdictional level. Nested projects registered under VCS must meet the requirements specified in the JNR Requirements,



Scenario 2, the VCS Standard and applicable VCS methodologies. Moreover, nested projects will be registered in the corresponding registry. At the moment of validation, no nested project exists in Misiones.

3.5. Program Boundary

The relevant carbon pools and GHG emissions sources for both the jurisdictional baseline and program scenarios are identified following the table below:

Carbon pools/ sources	Gas	Included?	Justification/explanation
Above-ground tree or woody biomass	CO ₂	Yes	Carbon reservoir mostly affected by program activities.
Above-ground non-tree or non- woody biomass	CO ₂	Yes	As immediately above.
Below-ground biomass	CO ₂	Yes	As immediately above.
Litter	CO ₂	No	Given the type of humid sub-tropical forest, organic matter decomposes rapidly. Accordingly, the default factors from the IPCC 2019 Refinement show that together with deadwood, they represent, individually and collectively, less than 10% of total stock; therefore, it is considered <i>de minimis</i> . This justification also complies with section 3.12.5 of JNR Scenario 2 Requirements, allowing consistency with the data and methods used to account for forest related GHG emissions in the country's existing or emerging UNFCCC GHG inventory as well as the National Forest Reference Emission Level that states that "the magnitude of the litter deposit relative to above-ground and below-ground biomass is 1.82% to 4.12%, depending on the forest region (using IPCC 2006 default values for litter). The dead wood deposit has no IPCC 2006 default values to assess".
Dead wood	CO ₂	No	See immediately above.
Soil organic carbon (including	CO ₂	No	According to JNR Scenario 2 section 3.10 "Soil organic carbon is not included"
peat)	CH₄	No	According to JNR Scenario 2 section 3.10 "Soil organic carbon is not included"



Carbon pools/ sources	Gas	Included?	Justification/explanation	
Wood products	CO ₂	No	According to JNR Scenario 2 section 3.10 "HWP are always considered de minimis"	

3.6. Description of Jurisdictional Baseline Method

3.6.1 Accounting Method

The accounting method corresponds to an activity-based approach (avoided deforestation activity), compatible with land-based accounting approach also, due to the significant diversity and fragmentation of productive activities and relevant actors in the province.

The Program is based on 'reducing emissions from deforestation' activity, aligned with activity-based approach, that "consists of identifying specific activities occurring on the land that influence GHG fluxes and focusing on the project activities, allowing for differentiation between activities". As deforestation is the only activity accounted for in the Program, further disaggregation 'by activity' is not required. The disaggregation used takes into account the information of patches of deforestation to obtain the baseline and then calculate emissions.

On the other hand, the Program is consistent with a land-based approach, as it "proceeds from the classification of all the managed territory of a country into the IPCC land categories". It distinguishes forest land remaining forest land from forest land converted to other land uses. Moreover, it classifies forest land by Forest Land (TF) and Other Forested Land (OTF). The Program also classifies non forest land uses, and applies this information in the transitions to post-deforestation classes accounting to reflect a more comprehensive coverage

This approach is consistent with the data and methods used in the national GHG inventory, and also follows the land use categories of the IPCC.

In Misiones, the annual average of historical emissions during the FREL period is much lower than the total amount of emissions that could be caused by the loss of the remaining native forest in the province. Therefore, a downward adjustment factor or a decreasing linear extrapolation is not required (per section 3.12.8 of JNR Scenario 2).

The FREL includes all activities that lead to deforestation in each identified forest stratum and considers all land use transitions and post deforestation regeneration that occurred during the reference period.

Land use maps, the provincial OTBN (Territorial Planning of Native Forests), and management plans were cross-referenced. Since the management plans correspond to a small area with imprecise geographic coordinates, deforestation is treated as an unplanned activity. This assumption is conservative since the historical deforestation rate during the FREL period is lower than the rate for which clearing permits are granted.



The stratification used is the same as that in national inventories, and in the REDD+ Technical Annex used as a basis for results-based payments to the UNFCCC. Similarly, emission factors, both for forests and transitions, come from the same reports based on the first forest inventory of the Republic of Argentina.

Degradation emissions were calculated using the methods described below. However, as their contribution relative to total emissions was found to be within the *de minimis* threshold, they have been excluded. For this reason, all instances of forest degradation are excluded from both the FREL and the MRV.

Accuracy assessments were conducted separately for deforestation and degradation. An analysis of deforestation, regeneration and degradation of native forests in the province for 2009-2014 was conducted using official databases as well as remote sensing data captured by satellite sensors and systematized in Google Earth Engine (GEE). This methodology ensures transparency, traceability, replicability, and improvement of processes and results. The land use and land cover of the province were characterized into different classes. A detailed subset of vegetation class types was used and then aggregated to identify changes in land cover. Training samples were generated by interpreting high and medium spatial resolution satellite images and phenological signatures of the Normalized Difference Vegetation Index (NDVI). Seasonal differences were considered by defining an attribute space incorporating compounds from the visible and infrared spectra and spectral indices from different seasons, which reflect the temporal dynamics of vegetation and geomorphology. The identification of degradation (before its exclusion) was performed using temporal segmentation algorithms on time series of the Normalized Difference Fraction Index (NDFI). These algorithms were trained to model the temporal dynamics of forest function based on a previous training period and the algorithm derived values were then compared with those observed during the monitoring/FREL period.

The results were compared and integrated with official databases. The results show that there were 1,451,850.52 hectares of native forest in Misiones in 2009. The deforestation rate was 16,848.07 ha/year during the FREL period. Regeneration following deforestation of native forests partially counteracts the loss of forest, with an average rate of 5,812 ha/year over the FREL period. Degradation, while important, was not significant in the province, accounting for only 606 ha/year (and thus, was excluded). An analysis of the uncertainty of each of these estimates was conducted, which resulted in an overall accuracy of 98%.

The analysis included the identification of post deforestation vegetation and regeneration processes (i.e., transition from non-Forest to forest) and degradation of native forests, neither of which had been previously estimated in a spatially explicit manner. The results generated were systematized in the GEE application to enable the identification of spatial patterns within the different analysed processes, the visualization of time series of NDFI, and the incorporation of Landsat images for all available time points during the reference period.

3.6.2 Most Plausible or Conservative Jurisdictional Baseline Scenario

The FREL is calculated as the historical average of deforestation emissions, following the default approach proposed in section 3.12.6 of JNR Scenario 2 requirements, which specifies that the FREL should be calculated over a period of four to six years. FREL is calculated from the difference between the final and



initial points of a six-year interval, using the four-year allowable period between data points during the initial FREL. Furthermore, given that only the first and last year of the baseline was used to calculate it, it was not possible to use a historical trend baseline scenario. Moreover, there are no intermediate points available to elaborate a historical trend analysis. Thus, only an average value can be obtained for the first FREL period. Lastly, during the baseline period the area of forest significantly exceeded that of deforestation. Under this scenario the historical annual average is a better approach than a historical trend, which would be better under a scenario where there is little area of forest left, and therefore the only possible scenario.

3.6.3 Method for Quantification of Baseline and Program Emissions

To estimate avoided emissions from deforestation, the FREL for the province of Misiones was developed using definitions and assumptions compatible with the reports submitted to the UNFCCC.

As a first step, deforestation area was estimated using images. Given that the coverage available from some sources did not match in temporality and accuracy with Verra requirements, the analysis was based on the use of all LANDSAT 5 and 8 satellite images of 30m maximum resolution, available for the period 2009-2014. Moreover, images were reviewed before and after the reference period to ensure consistency in the data visualizations. More than 1000 images per year were analyzed, covering the four seasons of the year.

Deforestation area estimates during 2009-2014 were compared to the values reported by the Argentinian Forest Evaluation System Management Unit (UMSEF, in Spanish) (Figure 30).

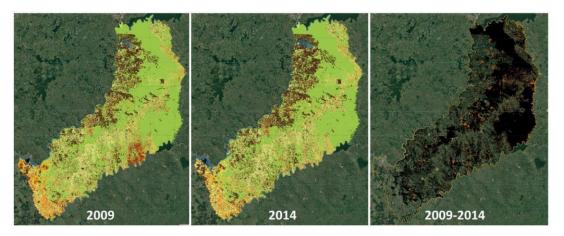


Figure 30: Land use and land cover classifications for 2009 and 2014 (green represents native forests, orange represents grasslands, brown represents annual croplands, cream represents perennial croplands, grey represents plantation forests). The image on the right displays the transitions during the period. Stable forest is shown in black, deforestation in orange, and post deforestation regeneration (observed outside of 2009 forest land) in blue.

Based on these classifications, the deforested area estimates did highlight differences with those reported by UMSEF for this period. Notably, these classifications enable the identification of a total post-



deforestation regeneration area (i.e., pixels identified as non-forest in 2009 and as forest in 2014) of 34,874 hectares, which is an average annual regeneration rate of 5,812 hectares per year.

As mentioned above, degradation was estimated but then excluded from accounting due to its insignificance. To estimate degradation, the CODED (Continuous Degradation Detection) algorithm was used to identify disturbances by considering the base spectral signal (structural characteristics of vegetation) and the temporal dynamics (phenology of each forest) of each vegetation patch. The algorithm observed the phenology and spectral levels of each forest during the training period and models the expected dynamics in the monitoring (FREL) phase. Modelled NDFI time series were compared to observed values, and breakpoints were detected when consecutive observations showed an anomalous signal. By comparing the average of anomalous values with what is expected from the model, the magnitude of the disturbance is calculated in terms of the deviation between observed and modelled values. This allowed for the determination of the specific spectral change magnitude in each situation, thus enabling the detection of disturbances in different scenarios.

The CODED algorithm was run between 2009 and 2014 using NDFI time series from Landsat sensors and was performed on the stable forest mask for this period. Samples taken for land use and land cover classification were reprocessed, modifying their conceptual resolution to forest and non-forest classifications. The script imports the land use and land cover samples generated for land use and land cover mapping, reclassifies them to reduce their conceptual resolution to the forest and non-forest classes, adds the label, land cover, and year to each set, and exports the processed samples to the asset: Samples_F-noFMisiones. A threshold of six consecutive observations was defined as the breakpoint detection threshold in the time series. The outputs were stored as a multi-band image in a GEE asset: CODED_Misiones_ForestChangeInfo_2009-2014.

The analysis was focused on two outputs of CODED: the magnitude and the date of the disturbance. Magnitude was analysed by interpreting spatial patterns and phenological signatures to determine the magnitude threshold beyond which a disturbance is considered to have occurred. For this, the script SalidaCODED-Proc_cSerieNDFI was used, which imports the CODED outputs hosted in the assets detailed in the previous section, processes them to display the bands of interest on the map, and shows the phenological NDFI signatures of the selected pixels on the map (onClick). Figure 31 shows examples of disturbance detection between 2009 and 2014 mapped with magnitude levels greater than 0.6. In these situations, it can be observed that disturbances with a magnitude greater than 0.6 exhibit aggregated spatial patterns, and their time series show easily identifiable breakpoints. In contrast, situations with a magnitude less than 0.6 generally did not show a clear temporal breakpoint in the series. Additionally, the mapped disturbances tend to be more widespread, suggesting false detections. Based on these criteria, a disturbance detection threshold of 0.6 was defined.



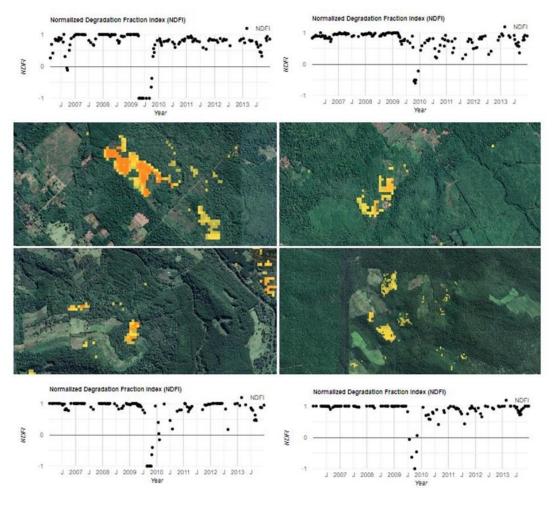


Figure 31: Examples of disturbance events during the 2009-2014 period identified with a magnitude threshold greater than or equal to 0.6. For each image, the phenological signature of NDFI for a representative pixel of the affected area is shown, clearly displaying a drop in the index close to –1.

Figure 31 shows the disturbed areas with an increasing gradient of magnitude for the orange colours. The central panels display examples of disturbances throughout the 2009-2014 period, along with the phenological NDFI signature of a representative pixel in the affected area. In addition to the spatial pattern visualized in the images, the signatures provide details of the temporal dynamics in which the exact moments of disturbance can be identified when NDFI values approach —1. Furthermore, it is possible to visualize the duration of the disturbance event and whether NDFI returns to its original temporal dynamics or not. The SalidaCODED-Proc_cSerieNDFI script allows the visualization of the outputs of the CODED algorithm for each sub-period and the exploration of the phenological signatures. In addition to the disturbance magnitude represented in Figure 31, the script enables mapping of the precise date when the disturbance occurred.



The characterization of degradation during the reference period revealed a heterogeneous pattern with disturbed areas distributed throughout the province, strongly associated with fragmented areas containing remnants of forest and their edges. In this regard, the two large unfragmented forest masses in the central-north and central-east of the province showed no degradation. The total degraded area over the entire period was found to be 3,205.8 hectares, with an average annual degradation rate of 606 hectares per year. Degradation occurs in small patches ranging from approximately one to 20 hectares, typically accompanied by a pattern of scattered pixels. This pattern, often associated with noise and detection errors in other ecosystem processes, makes sense in characterizing degradation, as it frequently occurs in small patches, such as in cases of selective logging, thinning, or firewood collection.

To estimate forest emissions, consistency with the emission factors (EF) used in the National GHG Inventory (INGEI) included in the BUR and the REDD+ Technical Annexes last reported by Argentina to the UNFCCC was ensured, especially for native forest and the Selva Paranaense region. The EF of native forest was based on INGEI data, complying with the national forest classification, according to the biomass in those strata, stratified in TF and OTF. Particularly for the transitions to different types of land use, an area-weighted average of all land use transitions was applied. The post-deforestation EF was constructed as a weighted average of all the different transitions that occurred in the NREF. For cultivated forest, EF was constructed based on the long-term average procedure indicated by Verra. The values of the EF can be found in section 4.1.

Equations used to calculate emissions from the baseline can be found in section 4.1, and equations used to calculate emissions reduction for the Program can be found in sections 4.2 and 4.4.

3.6.4 Land Cover Maps

Through the photointerpretation of Landsat images and phenological signatures of the NDVI, different land use and land cover classes were identified. Reference samples (also called training areas) were taken for each land use class to supply a supervised classification algorithm that assigns a specific class to each pixel in the Landsat images. Each reference sample corresponded to a manually digitized polygon of variable size, but not exceeding an area greater than 20 Landsat pixels (approximately two hectares). In total, 1,268 polygons were digitized, representing the following land use and land cover classes (the number of polygons per class is indicated in parentheses): Forest (224), Forest Plantations (150), Grassland (30), Pastures (153), Annual Agricultural Crops (77), Mosaic of Agriculture and Pasture (39), Areas without Vegetation (267), Bodies of Water (93), and Perennial Crops (235) (Figure 32).



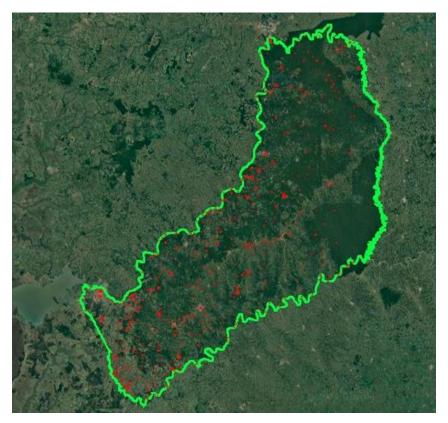


Figure 32: Spatial distribution of manually digitized samples through photointerpretation of Landsat images and the analysis of Normalized Difference Vegetation Index (NDVI) temporal signatures. In total, 1,268 polygons corresponding to nine land use and land cover classes were digitized.

To identify areas with native forest, an operational definition of forest was determined, considering the percentage of woody vegetation cover and the minimum mapping unit. In this operational definition, tree height was excluded, as it was not possible to incorporate this variable in a spatially continuous manner with the required resolution using the methods and databases used in this study. Additionally, definitions of forests by the Federal Council for the Environment (COFEMA) and the Global Forest Resources Assessment (FRA, FAO 2020) adapted to Argentina and used by the country in the reports submitted to the UNFCCC were considered in developing this definition. The adopted definition is that native forest is any land that constitutes a natural ecosystem and has a tree cover of native species greater than or equal to 20% with a minimum continuous area of 0.5 hectares.

For the construction of the land cover map, surface reflectance images from Collection 2 between January and December were used, provided by the Landsat-5 and Landsat-8 satellites, respectively. The images were quality-filtered, excluding pixels with clouds and/or shadows using the CloudMaskC2 function, and the appropriate scaling factors were applied. Seasonal composites were created for three-month periods for summer, autumn, winter, and spring (Figure 33). The composites represent the pixel with the median value of the frequency distribution of all good-quality observations for each period. In general, the quarterly composites had data for all pixels covering the province of Misiones, but with small portions of missing data



in certain areas due to frequent cloud presence and/or highly reflective surfaces (bare soil or cities). In these areas, an ad-hoc algorithm was applied sequentially to fill in missing data with the average of observations from the preceding and subsequent months in successive time windows up to a maximum period of 12 months. Thus, in cases where it was necessary, four-time windows of one, two, and three months, and one year were evaluated.

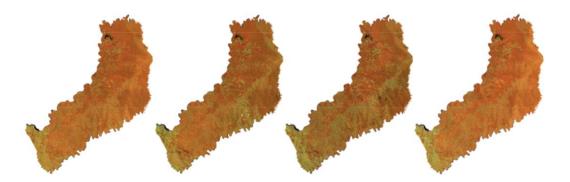


Figure 33: False-colour composite (RGB: NIR-SWIR1-RED bands) constructed from three-month seasonal composites for winter, spring, summer, and autumn in 2009, considering the median value of the frequency distribution of all good-quality observations for each period.

On the quarterly composites, four spectral indices related to vegetation, soil, fire events, and water were calculated: NDVI, SAVI, NBR, and NDWI (four seasons x four spectral indices). The temporal dynamics of vegetation were characterized using functional attributes associated with the spectral indices. This involved calculating the mean, maximum, minimum, and standard deviation for each of the four indices (four metrics x four indices). Additionally, a digital elevation model was included to derive elevation above sea level, slope, and aspect. This was done using the Shuttle Radar Topography Mission (SRTM) digital elevation model available in GEE, provided by NASA. With SRTM digital elevation data, digital elevation models were obtained at an almost global scale with a spatial resolution of 30 meters⁷⁹. Thus, the classified attribute space consisted of 59 bands of information: the reflectance of the six visible and infrared bands and the four spectral indices in the four seasons (ten x four), the functional attributes (four x four), and the geomorphological attributes derived from the digital elevation model (three).

Supervised classifications were carried out using the attribute space for each period, training samples, and the Random Forest classification algorithm⁸⁰. According to the operational definition of forest, a minimum mapping unit of 0.5 hectares was classified. A GEE script was created in which a spatial filter was applied to the forest class in each of the classifications. This filter assessed the connectivity of forest pixels, calculated patch sizes, and filtered out those smaller than six pixels (0.45 hectares). Thus, the forest class was adjusted by eliminating patches smaller than the minimum mapping unit, and a layer with forest

⁷⁹ Farr, T. G., Rosen, P. A., Caro, E., Crippen, R., Duren, R., Hensley, S., & Alsdorf, D. (2007). The shuttle radar topography mission. Reviews of geophysics, 45(2).

⁸⁰ Ho, Tin Kam (1995). Random Decision Forests. Proceedings of the 3rd International Conference on Document Analysis and Recognition, Montreal, QC, 14–16 August 1995.



fragments smaller than 0.45 hectares was also generated. In this way, the forest class was first removed from the classification, then the forest fragments smaller than 0.45 hectares were integrated, and they were reclassified using a mode filter and a three-by-three pixel moving window that assigned the most prevalent surrounding cover class to the forest fragments. Finally, the forest class with patches larger than 0.45 hectares was integrated with the original classification and its reclassified forest fragments.

Regarding gaps in LULC maps, small portions of missing data in certain areas due to frequent cloud presence and/or highly reflective surfaces (bare soil or cities) were detected in the seasonal composites created for three-month periods. In these areas, an ad-hoc algorithm was applied sequentially to fill in missing data with the average of observations from the preceding and subsequent months in successive time windows up to a maximum period of 12 months. Thus, in cases where it was necessary, four-time windows of one, two, and three months, and one year were evaluated. In this way, the presence of gaps in LULC maps was avoided and there was no forest area systematically excluded from LULC maps.

The legend classes used for the construction of the land cover and land use map that were obtained are Native Forest, Forest Plantations, Grasslands, Pastures, Crops, Mosaics of Agriculture-Pasture, Areas without Vegetation, Water, and Perennial Crops (e.g., yerba mate, among others; not including forest plantations).

The base cartography from 2006 derived from the First National Inventory of Native Forests (ms_spa_2006_2020_cg4326.shp) was considered to stratify the native forest area into Forested Lands (TF) and Other Forested Lands (OTF). In areas where both characterizations indicated the presence of forest, the mapping from 2006 was simply integrated, assigning the class TF or OTF as it appeared on the base map. In forested areas identified but not mapped in 2006, a supervised classification was performed to differentiate the forest into TF and OTF using a Random Forest algorithm. To train the algorithm, 2,000 randomly selected points were balanced within the TF and OTF classes in areas where the two maps coincided. The trained algorithm was applied to forests identified outside the base cartography to assign them the TF or OTF class based on their spectral similarity to these classes (Figure 34). The attribute space used to stratify the native forest was the same as that used for the overall classification.



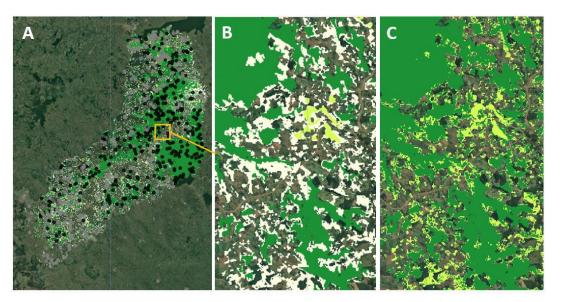


Figure 34: Stratification of native forest into TF and OTF. Panel A: Randomized points on TF (black) and OTF (grey). B: Native Forest mask with TF and OTF strata from the first forest inventory and the native forest area stratified through supervised classification (in dark green, light green, and white, respectively).

C: Final map with the entire forested area stratified.

The supervised classifications for the years 2009 and 2014, obtained after applying the spatial filter, were reclassified into Forest and Non-Forest, and then transitions were identified as Stable Forest (Bo-Bo), Stable Non-Forest (NoB-NoB), Deforestation (conversion from Forest to Non-Forest), and Regeneration (conversion from Non-Forest to Forest). The spatial minimum mapping unit filter was applied to the areas identified as deforestation and regeneration to identify only transitions larger than 0.5 hectares. Additionally, a temporal stability filter was applied to discard illogical transitions associated with cartography errors from each year, considering the preliminary classifications conducted for the monitoring period, which included the years 2017 and 2018. Thus, joint transitions were evaluated for the periods 2009-2014-2017-2018, identifying real transitions (e.g., Bo-Bo-NoB-NoB, NoB-Bo-Bo-Bo, Bo-Bo-Bo, etc.) and transitions resulting from classification artifacts (e.g., Bo-NoB-Bo-NoB, NoB-Bo-Bo-NoB, NoB-B-NoB-NoB, NoB-B-NoB-NoB, etc.). By applying the temporal filter, 114,680 hectares of illogical transitions, corresponding to events with an area greater than 2,000 hectares, were discarded. Furthermore, a mask with the Stable Forest class was generated for the 2009-2014 period (i.e., with the forest that was not transformed between 2009 and 2014), which was used in a subsequent stage to identify degraded forest areas.

The generated maps and identified transitions were integrated with pre-existing databases. Initially, the land use/land cover map from 2009 was compared with the base map from 2006 derived from the First National Inventory of Native Forests (ms_spa_2006_2020_cg4326.shp). The comparison was performed with low conceptual resolution at the level of Forest and Non-Forest. To carry out the comparison, the maps were updated to the year 2009, incorporating deforestation reported by UMSEF and forest plantations. Thus, in each of the classifications made in 2009 and 2014, deforestation reported by UMSEF, and forest plantations were incorporated. The polygons of deforestation identified by UMSEF between 2006 and 2009 and between 2006 and 2014 were selected and deducted from the forest cover identified in each



classification. Similarly, forest plantations up to the year 2009 and 2014, respectively, were considered, as present in the national databases (provided by the Directorate of Forest-Industrial Development of the Ministry of Agriculture, Livestock, and Fisheries) and provincial databases (provided by the Undersecretariat of Forest Development of the Ministry of Agriculture and Production). This decision was made because a qualitative evaluation of the deforestation and forest plantation databases showed that while there are omission errors for both coverages, they generally have very low commission errors. In other words, whenever they indicate activities of deforestation or afforestation, these activities exist, but there are also afforestation and deforestation that are not indicated in the databases.

3.6.5 Excluded Forest Loss in Historical Reference Period

No cases of forest loss are identified in the historical reference period that should be excluded from the calculation of deforestation rates and associated GHG emissions in the baseline.

3.6.6 Large Unavoidable Infrastructure Projects

Large infrastructure projects included in the historical reference period are beyond the control of the provincial government, and thus, unavoidable, as they are linked to national-level development policies.

Between 2009 and 2011, the Yacyretá dam's elevation was raised from 76 meters to 83 meters above sea level, which increased the flooded area to less than 400 hectares. There is no large-scale infrastructure projects planned at the national level during the validity period of the FREL.

3.6.7 Large-Scale Commercial Deforestation

No large-scale commercial deforestation processes exceeding collectively 10% of historical deforestation in the historical reference period were identified.

3.6.8 Carbon Loss

In the first place, the attribute space is created, generating scripts that incorporate Landsat-8 Collection 2 surface reflectance images from January to December. Images are quality-filtered to remove clouds and shadows using the CloudMaskC2 function. Seasonal 3-month composites are created using median pixel values. Missing data are filled using temporal averages up to 12 months.

Scripts with spectral indices calculate vegetation, soil, fire, and water indices (NDVI, SAVI, NBR, NDWI) and compute annual metrics, while geomorphological script derives elevation, slope, and aspect from NASA's SRTM model. The data set includes 59 attribute bands.

Secondly, a supervised land use and land cover classification script integrates all images generated by previous scripts into a variable called "Attribute Space", consisting of 59 information bands. It includes reflectance from visible and infrared bands, spectral indices, functional attributes, and geomorphological features. Reference polygons for various land uses in Misiones province, such as forests, plantations,



pastures, and water bodies, are included. Using the Random Forest algorithm, a supervised classification is performed. The results are integrated with national and provincial forestry plantation databases for improved land use mapping.

In the third step, temporal filters are used for the land use transitions. The set of scripts (i) integrates supervised classifications over multiple years, calculates transitions (e.g., stable forest, deforestation, regeneration), and removes classification errors using a moving window filter; (ii) applies spatial filters, removing patches smaller than 0.5 ha and applying a mode filter; (iii) calculates transitions and applies spatial filtering; imports deforestation data, rasterizes it by event year, and exports the result; and integrates deforestation polygons, calculates transition areas, and prints results by class.

Finally, to calculate error, estimate unbiased area, and obtain confidence intervals for identified transitions, random samples are generated using another script for stratified samples by forest categories and adjusted for balance. Validation scripts process samples for forest degradation and forest-to-non-forest transitions, including revegetation. The final validation points are compiled and exported as a .CSV file for accuracy analysis using a contingency matrix.

The carbon stocks for the native forest of Misiones were estimated using the activity data obtained from the analysis of images describes in the sections above and the emissions factors that can be found in section 4.1. A summary of the emissions factors is presented in the following table.

Land use	Emission Factor (tCO ₂ /ha)	Uncertainty
Forest Land	554.19	62%
Other Forest Land	108.24	60%
Cultivated Forest	301.53	49%
Grassland	27.75	75%
Annual Cropland	17.23	75%
Perennial Cropland	47.74	40%
Clean Land	0	-
Revegetation	77.63	8%

Table 11: Resulting Emission Factors and Uncertainties

The EF calculated as weighted average coming from each initial forest stratum are:



Transitions during FREL (2009-2014)	EF (tCO ₂ /ha)	
TF – NF	409.75	
OTF – NF	-8.62	

Table 12: FREL emission factors

Rationale and justification of each of the equations to calculate emissions from the FREL and emission reductions of the Program can be found in section 4. However, a summary of the equations is presented below (see section 5.2). Baseline emissions were calculated as follows:

$$JBE_{y}\left(\frac{tCO_{2}e}{yr}\right) = \sum_{j} AD_{BL}^{j}\left(\frac{ha}{yr}\right) \times EF_{f}^{j}\left(\frac{tCO_{e}e}{ha}\right)$$

Equation 1: Jurisdictional baseline emissions

Program emissions were calculated using the following equation:

$$JPE_{y}\left(\frac{tCO_{2}e}{yr}\right) = \sum\nolimits_{i} AD_{PJ}^{j}\left(\frac{ha}{yr}\right) \times EF_{f}^{j}\left(\frac{tCO_{e}e}{ha}\right)$$

Equation 2: Jurisdictional program emissions during the monitoring period.

Leakage emissions were calculated according to:

$$JLE_{y}\left(\frac{tCO_{2}e}{vr}\right) = JBE_{y,def}\left(\frac{tCO_{2}e}{vr}\right) - JPE_{y,def}\left(\frac{tCO_{2}e}{vr}\right) \times LD_{y,def}$$

Equation 3: Jurisdictional leakage emissions

4. QUANTIFICATION OF GHG EMISSION REDUCTIONS AND/OR REMOVALS

4.1. Baseline Emissions

Land use definitions

Consistent with the definitions and the methodology used at the national level, forested lands are divided into Native Forest and Cultivated Forest.



In the development of the Misiones FREL, the above-ground and below-ground carbon in Native Forests was stratified into Forest Land (TF) and Other Forest Land (OTF).

As it was mentioned in section 3, for the estimation of deforestation area, analysis was carried out with images of LANDSAT 5 and 8 of 30m maximum resolution, available for the period 2009-2014, covering the four seasons of the year. Based on this, an overlap was made identifying 4 types of transitions from grouped categories of forest and non-forest: stable forest, stable non-forest, deforestation, and regeneration. Transitions from native forest to cultivated forest, annual crops, perennial crops, pastures and rangelands, and clean areas without change of use were evaluated. After spatial and temporal filters, a confusion matrix was performed to analyze the accuracy of the classifications, make a bias correction of the area originally derived from the sum of pixels of a class, and thus obtain a confidence interval of the population value of the different coverages. The methodology of Oloffson (2014) was used to perform an unbiased estimation of the area.

Biomass and carbon content

For the selection of emission factors, compatibility was ensured with the INGEI reported in BUR and the REDD+ Technical Annexes reported by Argentina to the UNFCCC, especially for native forest and the Selva Paranaense region. The EF of native forest was based on INGEI data, complying with the national forest classification, according to the biomass contained in those strata, stratified in TF and OTF.

The biomass values for Native Forest used to generate the EF were estimated based on plot-based field data collected between 1998-2006 in the PINBN (First National Native Forest Inventory). These values also align with the data reported in the FRA (Forest Resource Assessment) and INGEI (National Inventory of Greenhouse Gases of Argentina).

The PINBN is based on a systematic grid-based sampling system, with different vertex separations ranging from 50 km to 2.5 km between each point. This grid was used to locate the Primary Sampling Units (UPM). Each UPM was analysed to determine if they were located within areas of forest that are appropriate for inclusion in an inventory t (only in forested lands). This determination was based on the interpretation of satellite images.

Each UPM with inventoriable forest consists of plots systematically located contiguously along a linear transect or established in an inverted L shape, starting from the selected grid point. Measurements of diameter and height were taken, and the species and health status were identified for all trees in each plot with a DBH (diameter at breast height) equal to or greater than 30 cm. In addition, additional subplots were established to collect information on trees with a DBH between 10 and 29.9 cm. In Misiones, 108 UPM had been considered. The criterion for selecting the number of UPMs was to achieve a 10% sampling error for gross volume with bark expressed in m3/ha, with an 85% confidence level.



Characteristics	Paranaense Forest		
UPM	108		
Date	1999-2000		
Grid	10 (5 – 2,5) km		
Sampling	Stratified systematic		

Table 13: UPMs established in the PINBN for the Paranaense Forest

In the Paranaense Forest, for each UPM, five continuous plots of 1,000 m² were established at equidistant intervals separated by 100 m, each with two subplots of 100 m² each (Figure 35), to capture their characteristics (density, structure, condition, and volume).

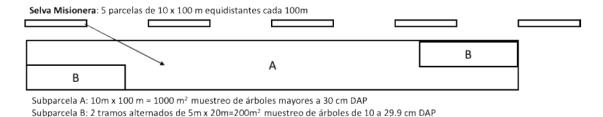


Figure 35: Shape and distribution of the plots and sub-plots that make up each UPM in the Misionera Jungle.

Source: National Directorate of Forests (MAyDS)

Based on the diameter, height, and species data collected in the PINBN, the average total wood volume value was estimated, and above-ground biomass and carbon were calculated. The estimates of the average total volume value correspond to the gross volume of individuals equal to or greater than 10 cm DBH with bark.

The methodology suggested by Brown (1997) was used to estimate above-ground biomass. The stem biomass of each UPM was estimated by multiplying the total volume by the average wood density of that UPM, a method consistent with the INGEI. The average density is a weighted average based on the plot volume, so species with a greater proportion of volume within the plot have a greater relative weight in density. The density is the mass of oven-dried wood per unit volume. These data are sourced from a database of the National Institute of Industrial Technology (INTI) - Centre for Research and Development in Materials Science and Technology (CITEMA) (Atencia, 2003). Total above-ground biomass is obtained by multiplying Stem Biomass by a biomass expansion factor (Brown, 1997).



Below-ground biomass is estimated as a fraction of above-ground biomass, and together with the carbon content are assigned according to FRA (2015) values. For the Paranaense Forest, a value of 0.24 and 0.47 are, applied, respectively.

Biomass Content (tDM/ha)	Native Forest Class			
	Forest Land	Other Forest Land		
Above-ground Biomass	259.34	47.58		
Below-ground Biomass	62.24	15.23		
Total Biomass	321.58	62.81		

Table 14: Biomass content of Paranaense Jungle by native forest class

Source: National Inventory Report of the 4th BUR of Argentina (Table 526) and FRA 2015

For Grassland, default biomass and carbon fraction values from the IPCC 2006 Guidelines were used. For Native Forests, default IPCC carbon fraction values were used. For Cultivated Forest, perennial croplands and post-deforestation revegetation, values of above-ground and below-ground carbon per hectare were obtained using species growth rates and harvest cycle and regeneration rates from BUR 4 (based on Secretariat of Agriculture for forest plantations and the Third National Communication for revegetation) and 2019 IPCC Guidelines for perennial crops. This is in accordance with the Verra standard, version 4.6, for long-term average carbon content, paragraph 3.2.28-3.2.30.

For Annual and Perennial Croplands (i.e., tea), default total carbon content values from the IPCC 2019 Refinement were used.

For the estimation of degradation emissions from "Degraded Forest Land" a local value of above-ground carbon content was used. It can be found in the document "Study of forest degradation using Lidar GEDI in the Province of Misiones", which determines a methodology for the assessment and mapping of degradation in the Yabotí Biosphere Reserve⁸¹. The below-ground carbon was calculated using a ratio of the above-ground carbon content. Since there is no data regarding carbon of "Degraded Other Forest Land", a value of zero is used as a conservative assumption.

Table 15 shows the applied values of biomass and carbon content, and the calculated emission factors.

Above- ground ground Biomass Biomass (tDM/ha) (tDM/ha)	Carbon fraction (tC/tDM) CF	Above- ground Carbon (tC/ha)	Below- ground Carbon (tC/ha)	Emission Factor (tCO ₂ /ha)	Uncertainty
--------------------------------------------------------	--------------------------------------	---------------------------------------	---------------------------------------	----------------------------------------------	-------------

⁸¹ Leszczuk, A., Korth, S., Ritter, L. and Martínez, M. Estudio de la degradación de bosques mediante Lidar GEDI en la Provincia de Misiones, Technical Report, 2022.



Forest Land	АС _{тғ} 259.34	BG _{⊤F} 62.24	0.47***	-	-	554.19	62%
Other Forest Land	AG _{OTF} 47.58	BG _{OTF} 15.23	0.47	-	-	108.24	60%
Cultivated Forest	-	-	-	AGC _{CF} 68.53 ⁺	BGC _{CF} 13.71 ⁺	301.53	49%
Grassland	TE 16.		0.47			27.75	75%
Annual Cropland	-	-	-	TC _{AC} 4.70 ⁺⁺		17.23	75%
Perennial Cropland	-	-	-	AGC _{PC} 10.85 ⁺⁺⁺	BGC _{PC} 2.17***	47.74	40%
Degraded Forest Land	-	-	-	89.90×	17.98×	395.56	31%
Degraded Other Forest Land	-	-	-	0	0	0	-
Clean Land	-	-	-	0	0	0	-
Revegetation	RV 45.05**	-	0.47	-	-	77.63	8%

Table 15: Resulting Emission Factors and Uncertainties

Source: * Vol 4, Chap 6, Table 6.4, 2006 IPCC Guidelines / values adopted in BUR 4 & 2nd REDD+ Annex of Argentina; ** Based on calculations as explained below; *** Informe Nacional de Inventario del IBA4 de la República Argentina (Table 527) /extracted from FRA 2015; * Based on calculations as explained below; ** Vol 4, Chap 5, Table 5.9, 2019 IPCC Refinement; *** Based on calculations as explained below; * Informe Técnico "Estados de la degradación de los bosques de la selva misionera" (Sept 2024).

Parameters RV, AGC_j and BGC_j are obtained using the long-term average carbon stock over time according to the LA GHG benefits of the VCS Standard (version 4.7).

$$LA_{RV} = \sum\nolimits_{y=0}^{TR} GR_y$$

$$LA_f = \sum\nolimits_{y=0}^{HR} I_{f,y}$$



Where:

TR is the renewal rate of native forest

GR_v is the biomass regrowth rate of native forest

HR is the harvest rotation of cultivated forest or the maturity cycle of perennial crops

 $I_{f,y}$ is the growth rate of specie f (CF or PC)

Variables determining emission factors are combined as follows:

$$EF_{j}\left(\frac{tCO_{2}e}{ha}\right) = \left(AG_{j} + BG_{j}\right)\left(\frac{tDM}{ha}\right) \times CF\left(\frac{tC}{tDM}\right) \times \frac{44}{12}\left(\frac{tCO_{2}e}{tC}\right)$$

$$EF_f\left(\frac{tCO_2e}{ha}\right) = \binom{AGC_f + BGC_f}{TC_f}\left(\frac{tC}{ha}\right) \times \frac{44}{12}\left(\frac{tCO_2e}{tC}\right)$$

$$EF_f\left(\frac{tCO_2e}{ha}\right) = {TB_f\choose RV}\left(\frac{tDM}{ha}\right) \times CF\left(\frac{tC}{tDM}\right) \times \frac{44}{12}\left(\frac{tCO_2e}{tC}\right)$$

Where:

*EF*_i is the CO₂ stock corresponding to stratum *j* (TF, OTF)

 EF_f is the CO₂ stock corresponding to the final land use f (CF, G, AC, PC, RV)

 AG_i and BG_i are the aboveground and belowground biomass of stratum j (TF, OTF)

AGC_i and BGC_i are the aboveground and belowground carbon content of stratum j (TF, OTF)

TC_f is the carbon content of AC

TB_f is the biomass stock of G

RV is the biomass stock of RV

CF is the carbon fraction in dry biomass (=0.47 tC/tDM)

44/12 is the stoichiometric relation between C and CO₂

It is important to note that neither litter nor deadwood are considered, since they are expected to be *de minimis*. The resulting emission factors in tCO₂/ha are obtained adding above and belowground biomass per hectare (converted to carbon content per hectare with the 0.47 factor) or carbon content per hectare factors and multiplying them by 44/12. Uncertainty is obtained through error propagation.

The emission factors corresponding to the different uses after the transition from forest strata to non-forest strata are obtained as area-weighted average stocks of all post-deforestation land use classes as considered in module VMD0055, version 1.0, Sect 5.3.2.3, Estimation of Non-Forest Carbon Stocks (page 18), one corresponding to the transition from TF to all TF-related final uses and one corresponding to the transition from OTF to all OTF-related final uses.



Specifically, the area-weighted emission factors are obtained as:

$$EF_f^{TF}\left(\frac{tCO_2}{ha}\right) = \frac{\sum_i AD_{BL,i}^{TF}(ha) \times EF_i\left(\frac{tCO_2}{ha}\right)}{\sum_i AD_{BL,i}^{TF}(ha)}$$

$$EF_f^{OTF}\left(\frac{tCO_2}{ha}\right) = \frac{\sum_i AD_{BL,i}^{OTF}(ha) \times EF_i\left(\frac{tCO_2}{ha}\right)}{\sum_i AD_{BL,i}^{OTF}(ha)}$$

Where:

 EF_t^{TF} is the area-weighted average post-deforestation emission factor for the transition from TF $AD_{BL,i}^{TF}$ is the area corresponding to the post-deforestation land use class i coming from TF in the baseline EF_t^{OTF} is the area-weighted average post-deforestation emission factor for the transition from OTF $AD_{BL,i}^{OTF}$ is the area corresponding to the post-deforestation land use class i coming from OTF in the baseline

 EF_i is the emission factor of land use class i

Under the condition:

$$\sum_{i} AD_{BL,i}^{TF}(ha) = AD_{BL}^{TF}$$

$$\sum_{i} AD_{BL,i}^{OTF}(ha) = AD_{BL}^{OTF}$$

Where:

 AD_{BL}^{TF} is the TF deforested area in the baseline AD_{BL}^{OTF} is the OTF deforested area in the baseline

Emission factors associated to the transition from forest to area-weighted average final land use /deforestation) are calculated as:

$$EF_j^{def}\left(\frac{tCO_2e}{ha}\right) = EF_j\left(\frac{tCO_2e}{ha}\right) - EF_f^j\left(\frac{tCO_2e}{ha}\right)$$

Where:

 EF_j is the carbon stock of stratum j (TF or OTF)



 EF_i is the area-weighted average of final land uses (CF, PC, AC and G) coming from stratum i (TF or OTF)

Baseline emissions

Baseline emissions were calculated as follows:

$$JBE_{y}\left(\frac{tCO_{2}e}{yr}\right) = \sum_{j} \frac{AD_{BL}^{j}(ha)}{6 \ yr} \times EF_{f}^{j}\left(\frac{tCO_{e}e}{ha}\right)$$

Equation 4: Jurisdictional baseline emissions

Source: JNR Requirements Scenario 2 (section 3.12)

Where:

JBE_v = Jurisdictional baseline emissions in year y (tCO₂/year)

 AD_{BL}^{j} = Baseline activity data: area corresponding to transition from initial stratum j to final stratum (ha/year)

 EF_i^j = Emission factor corresponding to transition from initial stratum j to final average stratum f (tCO₂e/ha) j = Initial stratum (TF or OTF)

6 yr is used for having an annual value of the FREL (period 2009-2014)

Table 16 shows the transitions estimated from 2009 to 2014.

Transitions (ha)	From Forest Land	From Other Forest Land	
To Cultivated Forest	23,930.59	11,363.54	
To Grassland	3,707.04	3,007.09	
To Annual Cropland	1,972.41	1,250.44	
To Perennial Cropland	31,152.90	23,710.59	
To Bare Land	422.02	571.75	

Table 16: Resulting Transitions in hectares

Figure 36 shows an example of activity data giving rise to the results of Table 16.



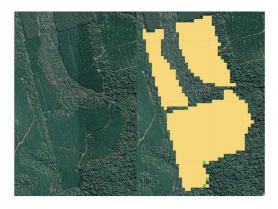








Figure 37: Examples of land use changes identified in the period 2009-2014, which include the conversion of forest-to-forest plantations, annual agricultural crops, perennial agricultural crops and pastures (from top left to bottom right).

To obtain emission factors in units of tCO₂e/ha previous steps are given to convert emission factors expressed in tDM/ha or tC/ha using conversion factors, such as 0.47 tC/tDM, taken form the Fourth Biennial Update Report of Argentina submitted to the UNFCCC, and 44/12 tCO₂/tC as the stoichiometric conversion from carbon units to carbon dioxide units.

Based on activity data in Table 16 and emission factors calculated from the monitored data in Tables 16, the following results are obtained for the FREL:

Transition	AD (ha)	EF (tCO₂e/ha)	Emissions (tCO ₂ e)
From TF	61.,84.96	409.72	25,068,415.00
From OTF	39,903.41	-8.62	- 344,083.00
Total			24,724,332.00
Annual			4,120,722.00

Table 17: FREL emissions

Degradation was excluded from the FREL. Total degradation was estimated at 3,205.80 ha representing 3.07% of deforested lands and 1.78% of emissions. Even if degradation is not considered in the emissions calculation, some parameters were estimated to determine *de minimis* criterion and for crosscheck purposes in the determination of leakage.



Emission factors associated to final land uses of cultivated forests, perennial croplands and revegetation are estimated taking into consideration the long-term average carbon stocks over time after deforestation based on the GHG benefits established in the VCS Standard as per the requirements of the JNR Scenario 2 (paragraph 3.12.18-2 and -3).

For cultivated forests the annual growth rate and rotation period of main species cultivated in Misiones (35.00 m³/ha with 19.00 years for eucalyptus, 30.00 m³/ha with 11.50 years for coniferous and 16,55 m³/ha with 20.15 years for other species as considered in the National Inventory Report (NIR) corresponding to the Fourth Biennial Update Report submitted to the UNFCCC, Table 500). The conversion from cubic meters (m³) to tonnes of dry matter (tDM) is based on 2006 IPCC Guidelines, Vol. 4, Chap. 4, Table 4.5 (values also used in the NIR; 0.54 tDM/m³ for coniferous and 0.66 tDM/m³ for eucalyptus and other species).

The value used for the emission factor is the area weighted average of all species mentioned above. Areas of cultivation are obtained as the difference between 2014 and 2008 values of extension of each specie, extracted from the calculation file used for obtaining the NIR results (provided, under request, by the former Ministry of Environment and Sustainable Development; spreadsheet provided to the VVB).

In the case of perennial crops, growth rate (0.7 tC/ha/yr) and the harvest/maturity cycle (30 yr) are taken from 2019 Refinement of the 2006 IPCC Guidelines, Vol. 4, Chap. 5, Table 5.3 for Camelia simensis.

The relation between aboveground and belowground biomass (0.20) for both, cultivated forests and perennial crops, is taken from the 2006 IPCC Guidelines, Vol. 4, Chap.4, Table 4.3.

Uncertainty analysis of Baseline Emissions

To estimate the precision and the area corresponding to each of the land use and land cover transitions, the good practices suggested by Olofsson et al. were followed (2014). Overall accuracy (also called overall precision), user (complement of commission error), and producer (complement of omission error) accuracy were determined using confusion matrix analysis. The confusion matrix consists of a double-entry table, which compares the observed or interpreted values with the classification results. The data in the columns correspond to the observed values and those in the rows to those predicted by the classification. A correctly classified pixel will be located on the diagonal of this matrix, while in any of the other locations within the matrix it will be assignment errors (Paruelo, 2014). This is the most frequently used method to validate this type of classification (Foody, 2002). The overall precision indicates the relationship between the correctly classified pixels or samples and the total. The commission error indicates the overestimation of the pixels that should really belong to a class, while the omission error indicates the underestimation of the pixels that should really belong to a class.

In turn, an unbiased estimate of the area of each of the transitions was carried out, that is, the adjustment of the estimated area by pixel counting of the generated maps, according to the classification accuracy of each of the transition classes considered. This is the most used method to validate this type of classification (Foody, 2002). The overall precision indicates the relationship between the correctly classified pixels or samples and the total. The commission error indicates the overestimation of the pixels that should really



belong to a class, while the omission error indicates the underestimation of the pixels that should really belong to a class.

		A	В	C	D	Σ	
	A	n _A A	цав	nac	nad	n _A +	
dichos	В	n _{BA}	n _{BB}	nbc	nbd	n _{B+}	
Valores predichos	C	nca	ncb	ncc	ncd	nC+	
Valor	D	n _{DA}	n _{DB}	n _{DC}	n _{DD}	n _{D+}	
	Σ	n+A	n+B	п+с	n+D	n	

Valores reales

Precisión general (%) =
$$\frac{\sum_{i=1}^{q} n_{ii}}{n} \times 100$$

Error de comisión (%) =
$$\left(1 - \frac{n_{ii}}{n_{i+}}\right) \times 100$$

Error de omisión (%) =
$$\left(1 - \frac{n_{ii}}{n_{+i}}\right) \times 100$$

Figure 38: Example of a confusion matrix with q total number of classes and n total number of pixels or samples in the q classes. The elements n_{ii} highlighted represent the main diagonal of the matrix where the values predicted in the classification match the observed or interpreted values, while the off-diagonal elements correspond to pixel assignment errors. The calculations of the precision indices used that derive from it are also indicated.

The area of each transition was estimated with the following equation:

$$\hat{A}_k = Ax\hat{p}_{.k}$$

where A_k is the area of each class obtained by pixel counting, and $p'_{.k}$ is the unbiased accuracy of the class, which is obtained as follows:

$$\hat{p}_{.k} = W_i \frac{n_{ik}}{n_{i.}}$$

Whereas the proportion of the mapped area that was occupied by class i, n_{ik} is the number of samples (pixels) assigned to class k and that were classified as class i, divided by the total samples (pixels) classified as class i.

Uncertainty in estimates of the area of transitions was estimated using a 90% confidence interval. This confidence interval was calculated by multiplying the standard error (SE) by the Z-value corresponding to alpha = 0.05. This Z value is 1.65 and is interpreted as the number of standard deviations of a normal



distribution necessary to accumulate 90% of the area under the curve. Therefore, by multiplying the *EE* by 1.65 and –1.65, the extremes of an interval of values are obtained in which, with a 90% probability, the true value of the estimated parameter is found. The *EE* corresponding to the area estimate of each transition was quantified using the formula provided by Olofsson et al. (2014):

$$EE(\hat{A}_k) = AxEE(\hat{p}_{.k})$$

where A is the total mapped area (that is, the 2,978,598 ha corresponding to the surface of the province of Misiones) and $EE(\hat{p}_{.k})$ is the standard error of the estimator of the proportion of the total area occupied by class k obtained from of stratified sampling (according to the surface of each class derived from the maps) and random. Following the good practices suggested by Olofsson et al. (2014), the $EE(\hat{p}_{.k})$ was calculated as follows:

$$EE(\hat{p}_{.k}) = \sqrt{\sum_{i} \frac{W_{i} \hat{p}_{ik} - \hat{p}_{ik}^{2}}{n_{i.} - 1}}$$

where W_i is the proportion of the mapped area that was occupied by class i, $p'_{.k}$ is equal to $W_i^* n_{ij}/n_i$, i.e., the rate between the number of samples (pixels) assigned to class j and that were classified as class i, divided by the total samples (pixels) classified as class i weighted by W_i .

The classification of land use and land cover transitions for the period 2009-2014 showed very good precision, being 88.1% (*Table 18*). User accuracy (complement of commission error) for all classes was greater than 75%, with some classes (such as No Forest Stable, TF Stable, OTF Stable, and OTF Degraded) showing user accuracy values greater than 90%. This indicates that the commission errors were very low; that is, that the transition map did not include different land uses and covers within these classes. The producer's accuracy (complement to the error of omission) presented high precision values. Thus, all classes presented values above 86.4%. This indicates that the errors of omission were very low, that is, that the transition map identified a large part of these transitions, leaving very few situations unidentified as such. In fact, producer accuracy for TF and OTF deforestation was 100%, as was regeneration.

Class	User Accuracy	Producer Accuracy	Overall accuracy
	(%)	(%)	(%)
TF Deforestation	79.7	100.0	
OTF Deforestation	76.6	100.0	
No stable forest	94.7	77.2	
Regeneration (outside)	75.4	100.0	88.2
Stable TF	100.0	85.7	
stable OTF	97.2	81.4	
TF degraded	85.3	100.0	



Degraded OTF 93.8 100.0

Table 18: Accuracy values of the user (complement to the commission error), of the producer (complement of the error of omission) and the general accuracy of the map of land use and cover transitions for the period 2009-2014

The native forest covers the greatest area in the province, with a total estimated area for the period 2009-2014 of 1,532,649.5 ha, distributed between Forest Lands (1,189,117.4 ha ±42,475.4 ha) and Other. Forest Lands (343,532.1 ha ±43,578 ha). Deforestation in the same period represented 101,088.4 ha, of which 61,185 ha (±5,760.6) was in Forest Land and 39,903.4 ha (±4,589.6 ha) in Other Forest Land. This is equivalent to an annual deforestation rate of 16,848.1 ha/year, corresponding to 10,197.5 ha ±960.1 ha/year of Forest Land and 6,650.56 ha/year ±764.93 ha of Other Forest Lands (Table 19). Regeneration outside the initial 2008/2009 forest cover, represented 26,297.4 ha (±3,198.8 ha), that is, an average annual regeneration rate of 4,382.9 ha ±533.13 ha. The area of native forest degradation was estimated at 3,205.8 ha, with 2030.2 ha ±143.6 ha of Forest Land and 1,175.6 ha ±63.1 ha. This represents an average annual rate of 338.4 ha ±23.93 ha and 195.9 ha ±10.51 ha, respectively.

Class	Area (ha)	±90% CI	Upper limit	Lower limit
TF Deforestation	61,184.96	5,760.64	55,424.30	66,945.60
OTF Deforestation	39,903.41	4,589.56	35,313.80	44,493.00
No stable forest	1,318,774.90	60,019.50	1,258,755.30	1,378,794.40
Regeneration	26,297.40	3,198.80	23,098.60	29,496.20
Stable TF	1,189,117.40	42,475.40	1,146,642.00	1,231,592.70
stable OTF	343,532.10	43,578.00	299,954.10	387,110.10
TF degraded	2,030.20	143.60	1,886.60	2,173.90
Degraded OTF	1,175.60	63.10	1,112.50	1,238.70

Table 19: Point estimate and 90% confidence interval estimate of the different classes of land use and land cover transitions for the period 2009-2014

Error estimates can be summarized as follows:

Losses	Mean	±90% CI	Error (%)
Deforestation TF	61,184.96	5,760.64	9%
Deforestation OTF	39,903.41	4,589.56	12%
Degradation TF	2,030.20	143.60	7%
Degradation OTF	1,175.60	63.10	5%
Transitions	TF	OTF	Error (%)
Transitions Cultivated forests	TF 23,930.59	OTF 11,363.54	Error (%) 30%
	= -	9	
Cultivated forests	23,930.59	11,363.54	30%
Cultivated forests Grasslands	23,930.59 3,707.04	11,363.54 3,007.09	30% 30%



Table 20: Activity data error values

The error considered for land transitions, based on cartography, includes a t 50% margin with respect to the one used in the BUR 4 (spreadsheet provided to the VVB), to be conservative.

For emission factors, the errors were taken from the 2006 IPCC Guidelines (Vol 4, Chap 6, Table 6.4 for above and belowground biomass and Vol 4, Chap 4, Table 4.3 for carbon content), 2019 IPCC Refinement (Vol 4, Chap 5, Table 5.9 for above and below carbon) and BUR 4 (spreadsheet provided to the VVB).

Error propagation was applied, following 2006 IPCC Guidelines, Vol 3, Chap 3, Eqs (3.1) and (3.2):

$$U(x_1 \times ... \times x_n) = \sqrt{U_1^2 + \cdots + U_n^2}$$

$$U(x_1 + \dots + x_n) = \frac{\sqrt{(x_1 \times U_1)^2 + \dots + (x_n \times U_n)^2}}{|x_1 + \dots + x_n|}$$

where U_i are the uncertainties associated to the quantities x_i ((half the 95 percent confidence intervals $S(x_i)$ divided by x_i and expressed as a percentage).

By applying these equations for any sum and product in the calculation, the total error for the FREL results 40.58% (Table 21).

Transition	Error AD	Error EF	Combined
From TF	9.42%	38.89%	40.01%
From OTF	11.50%	65.05%	66.05%
Total			40.58%

Table 21: FREL total error

4.2. Program Emissions

Program emissions will be calculated using the same method used for baseline emissions.

$$JPE_{y}\left(\frac{tCO_{2}e}{yr}\right) = \sum_{j} AD_{PJ,y}^{j}\left(\frac{ha}{yr}\right) \times EF_{f}^{j}\left(\frac{tCO_{e}e}{ha}\right)$$

Equation 5: Jurisdictional program emissions

Where:



 JPE_y = Jurisdictional program emissions in year y (tCO₂/year)

 $AD_{PJ,j}$ = Program activity data: area corresponding to transition from initial stratum j to final stratum in year y (ha/year)

 EF_i^j = Emission factor corresponding to transition from initial stratum j to final average stratum f (tCO₂e/ha) j = Initial stratum (TF or OTF)

The emission factors are the same as those calculated in the baseline.

The calculation of buffer credits is estimated using the JNR Non-Permanence Risk Tool and the JNR Non-Permanence Risk Report Template, which is included as a separate document. According to the results of the JNR Non-Permanence Risk Tool, the risk rating that will be applied is 10%.

4.3. Leakage

Table 23 summarizes the preliminary analysis of leakage based on assessments of leakage from global commodity leakage, internal market leakage, subsistence-related leakage, as well as deforestation leakage to degradation of Section 3.4. For the identification and quantification of leakage risks, the program applied the VCS Jurisdictional and Nested REDD+ (JNR) Leakage Tool:

Leakage category	Leakage deduction
a) Global Market Products	0
b) Domestic Market Products and Subsistence Activities	0
c) Deforestation to Degradation Leakage	0
Overall leakage deduction	0

Table 22: Leakage risk category

No leakage has occurred in the FREL. For the monitoring period, same methods and procedures as for this instance will be used. The JNR Leakage Tool will be applied for the assessment of leakage from global commodity leakage, internal market leakage, subsistence-related leakage, as well as deforestation leakage to degradation. Any resulting leakage will be subtracted from the total jurisdictional GHG emission reductions achieved by the jurisdictional program during the monitoring period. To determine the leakage deduction for the jurisdictional program, the overall leakage deduction will be converted to a percentage. The percentage will be multiplied by the jurisdictional GHG emission reductions or removals achieved by the jurisdictional program for the relevant activity (i.e., reducing deforestation or reducing degradation) to determine leakage for the jurisdictional program.



$$JLE_{y}\left(\frac{tCO_{2}e}{yr}\right) = JBE_{y,def}\left(\frac{tCO_{2}e}{yr}\right) - JPE_{y,def}\left(\frac{tCO_{2}e}{yr}\right) \times LD_{y,def}$$

Equation 6: Leakage emissions.

Where:

 JLE_y = Leakage emissions in year y (tCO₂e/yr)

JBE_{y,def} = Jurisdictional baseline emissions and/or removals from deforestation in year y (tCO₂e/yr)

JPE_{y,def} = Jurisdictional program emissions and/or removals from deforestation in year y (tCO₂e/yr)

 $LD_{y,def}$ = Leakage deduction for deforestation in year y (percent)

The overall leakage deduction percentage will be calculated for each year in the monitoring period and applied to the GHG emission reductions and removals in the relevant year.

4.4. Total GHG Emission Reductions and/or Removals

Net GHG emission reductions and/or removals will be calculated as follows:

$$NER_{y}\left(\frac{tCO_{2}e}{yr}\right) = JBE_{y}\left(\frac{tCO_{2}e}{yr}\right) - JPE_{y}\left(\frac{tCO_{2}e}{yr}\right) - JLE_{y}\left(\frac{tCO_{2}e}{yr}\right)$$

Equation 7: Net GHG emission reductions and/or removals

Where:

 $NER_v = Net GHG emission reductions and/or removals in year y (tCO₂e/yr)$

 JBE_v = Jurisdictional baseline emissions in year y (tCO₂e/yr)

 $JPE_v = Jurisdictional program emissions in year y (tCO₂e/yr)$

 $JLE_V =$ Jurisdictional leakage emissions in year y (tCO₂e/yr)

The total GHG emission reductions and/or removals attributed to the jurisdiction will be calculated as follows:

$$X_{y}\left(\frac{tCO_{2}e}{yr}\right) = NER_{y}\left(\frac{tCO_{2}e}{yr}\right) - OP_{y}\left(\frac{tCO_{2}e}{yr}\right) - NF_{y}\left(\frac{tCO_{2}e}{yr}\right) - NA_{y}\left(\frac{tCO_{2}e}{yr}\right)$$

Equation 8: Total GHG emission reductions and/or removals

Where:

 X_y = Total GHG emission reductions and/or removals attributed to the jurisdiction in year y, not including nested lower-level jurisdictions or projects (tCO₂e/year)

 $NER_v = Net GHG emission reductions and/or removals in year y (tCO₂e/year)$

 OP_y = GHG emission reductions and/or removals by other programs or non-VCS projects in year y (tCO₂e/year)

 NF_{v} = GHG emission reductions and/or removals by non-Forestry activities in year y (tCO₂e/year)



 NA_y = Nested activity (lower-level jurisdictions and project) GHG emission reductions and/or removals, and GHG emission reductions from opt out areas, in year y (tCO₂e/year).

Year	Estimated NER _Y (tCO ₂ e)	Estimated OP ⁷ (tCO ₂ e)	Estimated NF _Y (tCO ₂ e)	Estimated NA ^v (tCO ₂ e)	Estimated X _Y (tCO ₂ e)
2017					
2018					
2019					
2020					
2021					
2022					
Total					

5. MONITORING

5.1. Monitoring Data Reconciliation

The Provincial Government is responsible for data monitoring and reporting. If there are future Nested projects, they will need to demonstrate their own authority to monitor and report to Verra, and they will need to coordinate with the province to ensure alignment. The provincial technical team will review that the methodology and data used are consistent with those used in this program and will also record the results.

5.2. Data and Parameters Available at Validation

Data / Parameter	CF
Data unit	tC/tDM
Description	Fraction of carbon in dry biomass of native forest and other land uses.
Source of data	Native forests: FRA 2015, Country Report (2015). Global Forest Resources Assessment 2015. National Report. Argentina Other land uses: IPCC 2006 Guidelines. Vol 4, Ch 4, Table 4.3.
Value applied	0.47
Justification of choice of data or description of	Information source is compatible with the one used at the national level for reporting to the UNFCCC and in compliance with the IPCC 2006 Guidelines. Value applied in BUR 4.



measurement methods and procedures applied	The parameter corresponding to the Paraná Forest region, Annual and Perennial Crops, Forage, and Natural Grassland was selected.
Purpose of data	Baseline and program emissions calculation
Comments	Default value

Data / Parameter	AG _i
Data unit	tDM/ha
Description	Above-ground biomass of initial forest stratum
Source of data	FRA 2015: Country Report (2015). Global Forest Resources Assessment 2015. National Report. Argentina.
Value applied	Forest Land: 259.34
	Other Forest Land: 47.58
Justification of choice of data or description of measurement methods	Information source compatible with the one used at the national level for reporting to the UNFCCC and in compliance with the IPCC 2006 Guidelines. Values applied in BUR 4.
and procedures applied	The parameter corresponding to the Paraná Forest region was selected.
Purpose of data	Baseline and program emissions calculation
Comments	The parameter is fixed for the first FREL validity period.

Data / Parameter	BG _i
Data unit	tDM/ha
Description	Below-ground biomass of initial forest stratum
Source of data	FRA 2015: Country Report (2015). Global Forest Resources Assessment 2015. National Report. Argentina.
Value applied	Forest Land: 62.24
	Other Forest Land: 15.23
Justification of choice of data or description of measurement methods	Information source compatible with the one used at the national level for reporting to the UNFCCC and in compliance with the IPCC 2006 Guidelines. Values applied in BUR 4.
and procedures applied	The parameter corresponding to the Paraná Forest region was selected.



Purpose of data	Baseline and program emissions calculation
Comments	The parameter is fixed for the first FREL validity period.

Data / Parameter	HR
Data unit	Years
Description	Harvest rotation of cultivated forests: Planned number of years that occurs between the establishment or regeneration of a stand and the timing of its final harvest in plantation forests. Maturity cycle: Perennial crops
Source of data	Cultivated forests: DNDFI - Harvest Rotation for Forest Species, Second Report from Argentina to the Montreal Process, and Expert Opinion, as reported in the National Inventory Report of the Fourth Biennial Update Report of the Argentine Republic to the UNFCCC.
	Perennial crops: IPCC 2019 Guidelines. Vol 4, Ch 5, Table 5.3 (for tea - Camelia sinensis).
Value applied	Conifers: 19.00 Eucalyptus: 11.50 Other forest species: 20.15 Perennial crop: 30.00
Justification of choice of data or description of measurement methods and procedures applied	Information source compatible with the one used at the national level for reporting to the UNFCCC and in compliance with the IPCC 2006 Guidelines for cultivated forests. Values applied in BUR 4. The parameter corresponding to the predominant forest species groups in Misiones was selected.
Purpose of data	Baseline and program emissions calculation
Comments	The parameter is used in the application of the long-term average carbon of cultivated trees and perennial crops, according to the VCS Standard.

Data / Parameter	Ісь,у
Data unit	m ³ /ha/year
Description	Average annual net biomass increase (growth rate) for a specific vegetation type in cultivated forests.



Source of data	Yield of the Main Planted Species in Argentina. Reference Professionals by Region - Ana Lupi. Second Report from Argentina to the Montreal Process. Preliminary Adjustment of a Yield Model for Eucalyptus globulus Labill in Stands in the Southeastern Province of Buenos Aires. Technical Sheet <i>Grevillea robusta A. Cunn. Family Proteaceae</i> . Expert Opinion.
Value applied	Conifers: 30.00 Eucalyptus: 35.00 Other species: 16.55
Justification of choice of data or description of measurement methods and procedures applied	Information source compatible with the one used at the national level for reporting to the UNFCCC and in compliance with the IPCC 2006 Guidelines. Values applied in BUR 4. The parameter corresponding to the predominant species groups in Misiones was selected.
Purpose of data	Baseline and program emissions calculation
Comments	The parameter is used in the application of the long-term average carbon content of cultivated trees, according to the VCS Standard.

Data / Parameter	І РС,у
Data unit	tC/ha/year
Description	Average annual carbon net increase (growth rate) for tea.
Source of data	IPCC 2019 Guidelines. Vol 4, Ch 5, Table 5.3 (for tea - Camelia sinensis)
Value applied	30.00
Justification of choice of data or description of measurement methods and procedures applied	Tea and yerba mate are the predominant perennial crops in Misiones. Yerba mate production is similar to tea.
Purpose of data	Baseline and program emissions calculation
Comments	The parameter is used in the application of the long-term average carbon content of perennial crops, according to the VCS Standard.



Data / Parameter	AGC _f
Data unit	tC/ha
Description	Above-ground carbon of final cultivated forest and perennial cropland stratum
Source of data	Cultivated forest: Secretariat of Agriculture, Livestock, and Fisheries of the Ministry of Economy Perennial cropland: IPCC 2019 Guidelines. Vol 4, Ch 5, Table 5.3 (for tea)
Value applied	Cultivated forest: 68.53 Perennial cropland: 10.85
Justification of choice of data or description of measurement methods and procedures applied	Information source compatible with the one used at the national level for reporting to the UNFCCC. Values applied in BUR 4. The parameter corresponding to the Paraná Forest region was selected.
Purpose of data	Baseline and program emissions calculation
Comments	Parameter calculated using the long-term average caron content according to the VCS Standard, based on information of Paranaense species (conifers, eucalyptus, and others) and tea average growth rates, <i>ly</i> and <i>HR</i> .

Data / Parameter	BGC _f
Data unit	tC/ha
Description	Below-ground carbon of final cultivated forest and perennial cropland stratum
Source of data	Cultivated forest: Secretariat of Agriculture, Livestock, and Fisheries of the Ministry of Economy Perennial cropland: IPCC 2019 Guidelines. Vol 4, Ch 5, Table 5.3 (for tea - Camelia sinensis)
Value applied	Cultivated forest: 13.71 Perennial cropland: 2.17
Justification of choice of data or description of measurement methods and procedures applied	Information source compatible with the one used at the national level for reporting to the UNFCCC. Value applied in BUR 4. The parameter corresponding to the Paraná Forest region was selected.
Purpose of data	Baseline and program emissions calculation



Comments	Parameter calculated using the long-term average caron content
	according to the VCS Standard, based on information of
	Paranaense species (conifers, eucalyptus, and others) and tea
	average growth rates, <i>ly</i> and <i>HR</i> .

Data / Parameter	TB _f
Data unit	tDM/ha
Description	Total biomass of forage/grasslands of the final stratum
Source of data	IPCC 2006 Guidelines. Vol 4, Ch 6, Table 6.4
Value applied	16.10
Justification of choice of data or description of measurement methods and procedures applied	Information source compatible with the one used at the national level for reporting to the UNFCCC and in compliance with the IPCC Guidelines. Value applied in BUR 4. The parameter corresponding to the Humid Sub-tropical climate type was selected.
Purpose of data	Baseline and program emissions calculation
Comments	-

Data / Parameter	TC _f
Data unit	tC/ha
Description	Total carbon of annual croplands of the final stratum
Source of data	IPCC 2019 Guidelines. Vol 4, Ch 5, Table 5.9
Value applied	4.70
Justification of choice of data or description of measurement methods and procedures applied	Information source compatible with the one used at the national level for reporting to the UNFCCC and in compliance with the IPCC Guidelines. Value applied in BUR 4. The parameter corresponding to the Humid Sub-tropical climate type was selected.
Purpose of data	Baseline and program emissions calculation
Comments	-



Data / Parameter	GR _y
Data unit	tDM/ha/yr
Description	Regrowth rate of native forest biomass
Source of data	SAyDS 2015. Third National Communication on Climate Change of the Argentine Republic to the UNFCCC
Value applied	2.73
Justification of choice of data or description of measurement methods and procedures applied	Information source compatible with the one used at the national level for reporting to the UNFCCC and in compliance with the IPCC 2006 Guidelines. Value applied in BUR 4. The parameter corresponding to the Misiones jungle was selected.
Purpose of data	Baseline and program emissions calculation
Comments	The parameter is used in the application of the long-term average carbon content of tree revegetation, according to the VCS Standard.

Data / Parameter	TR
Data unit	Years
Description	Renewal rate of native forest
Source of data	SAyDS 2015. Third National Communication on Climate Change of the Argentine Republic to the UNFCCC
Value applied	32
Justification of choice of data or description of measurement methods and procedures applied	Information source compatible with the one used at the national level for reporting to the UNFCCC and in compliance with the IPCC 2006 Guidelines. Value applied in BUR 4. The parameter corresponding to the Misiones jungle was selected.
Purpose of data	Baseline and program emissions calculation
Comments	The parameter is used in the application of the long-term average carbon content of revegetated trees, according to the VCS Standard.

Data / Parameter	RV
Data unit	tDM/ha
Description	Total carbon of revegetated trees



Source of data	Third National Communication of Argentina to the UNFCCC
Value applied	45.05 (calculated)
Justification of choice of data or description of measurement methods and procedures applied	Information source compatible with the one used at the national level for reporting to the UNFCCC. Value applied in BUR 4. The parameter corresponding to the Misiones jungle was selected.
Purpose of data	Baseline and program emissions calculation
Comments	Parameter calculated using the long-term average carbon content according to the VCS Standard, based on information of Paranaense species average growth rate, <i>GR</i> and <i>TR</i> .

Data / Parameter	$AD_{BL,i}^{j,def}$
Data unit	ha/yr
Description	Baseline activity data: area corresponding to transition from initial stratum (TF or OTF) to final stratum (cultivated forest, annual crop, perennial crop, clean surface, grass, revegetation)
Source of data	Own elaboration
Value applied	TF to cultivated forest: 23,930.60
	TF to grassland: 3,707.05
	TF to annual crop: 1,972.41
	TF to perennial crop: 31,152.92
	TF to clean land: 422.01
	TF to degraded land: 2,030.20 (only for estimating the contribution of degradation)
	OTF to cultivated forest: 11,363.53
	OTF to grassland: 3,007,09
	OTF to annual crop: 1.250.43
	OTF to perennial crop: 23,710.58
	OTF to clean land: 571.76
	OTF to degraded land: 1,175.60 (only for estimating the
	contribution of degradation)
Justification of choice of	Processed data from remote sensing plus intelligent algorithms
data or description of	
measurement methods	
and procedures applied	
Purpose of data	Baseline emissions calculation



Comments	The values determine the basis for the FREL. No revegetation was
	observed in the FREL period.

Data / Parameter	AD _{BL,i} i,deg
Data unit	ha/yr
Description	Baseline activity data: area corresponding to transition from initial stratum (TF or OTF) to final degraded stratum
Source of data	Own elaboration
Value applied	TF to degraded land: 2,030.20 OTF to degraded land: 1,175.60
Justification of choice of data or description of measurement methods and procedures applied	Processed data from remote sensing plus intelligent algorithms
Purpose of data	Leakage emissions calculation
Comments	Degradation is not included in the Program accounting.

Data / Parameter	$AD_BL{}^j_{,y}$
Data unit	ha/yr
Description	Baseline activity data in year <i>y</i> : area corresponding to transition from initial stratum (<i>j</i> : TF or OTF) to all final post-deforestation land use classes coming from initial stratum <i>j</i> (cultivated forest, annual crop, perennial crop, grassland, clean surface)
Source of data	Own elaboration
Value applied	TF to post-deforestation land use: 10,197.50 OTF to post-deforestation land use: 6,650.57
Justification of choice of data or description of measurement methods and procedures applied	Processed data from remote sensing plus application of intelligent algorithms



Purpose of data	Baseline emissions calculation
Comments	The values determine the basis for the FREL. No revegetation was observed during the FREL period.

Data / Parameter	EF _{Bj} ^{def}
Data unit	tCO₂/ha
Description	Baseline emission factor: emission factor corresponding to transition from initial stratum (j : TF or OTF) to final post-deforestation as an area weighted average from all land use classes (cultivated forest, annual crop, perennial crop, clean surface, grassland) coming from initial stratum j
Source of data	Own elaboration
Value applied	TF to post-deforestation land use class: 409.72 OTF to post-deforestation land use class: -8.62 Revegetation: 77.63
Justification of choice of data or description of measurement methods and procedures applied	See Section 5.1
Purpose of data	Baseline and program emissions calculation
Comments	The values determine the basis for the FREL. No revegetation was observed in the FREL period.

Data / Parameter	EF _{rRVv}
Data unit	tCO₂/ha



Description	Revegetation emission factor: emission factor corresponding to revegetation
Source of data	Own elaboration
Value applied	Revegetation: 77,63
Justification of choice of data or description of measurement methods and procedures applied	See Section 5.1
Purpose of data	Program emissions calculation
Comments	

5.3. Data and Parameters Monitored

Data / Parameter	$AD_{PJ,y^{j}}$				
Data unit	ha/yr				
Description	Program activity data: annual coverage of native forest within the jurisdictional area converted to non-forest coverage during the FREL validity period (2017-2022)				
Source of data	Measurements through remote sensing source by Google Earth Engine (see Section 3.6.4).				
Description of measurement methods and procedures to be applied:	See Section 3.6.3 and 3.6.4. For the accuracy of the measurements see Section 4.1. Data to be monitored by the technical team of the DGBN annually. During the first FREL validity period the processing will be done by the Coralia Environmental team.				
Frequency of monitoring/recording	Annual				
Value applied					
	Transition 2017 2018 2019 2020 2021 2022 TF to post-deforestation				



	land use class OTF to post-deforestation land use class		
Monitoring equipment	Geographic Information System Software		
QA/QC procedures to be applied	See Section 3.6.3 and 3.6.4.		
Purpose of data	Program emissions calculation		
Calculation method	See Section 4.1.		
Comments	-		

Data / Parameter	AD _{PJ.rv,y} ^{RV}						
Data unit	ha/yr						
Description	Program activity data for revegetation in year y: annual coverage of native forest within the jurisdictional area from revegetation during the monitoring period (2017-2022)						
Source of data	Measureme	Measurements (see Section 3.4)					
Description of measurement methods and procedures to be applied:	See Section	3.4					
Frequency of monitoring/recording	Annual						
Value monitored		ı	1				
	Transition	2017	2018	2019	2020	2021	2022
	Revegetation						
Monitoring equipment	Geographic Information System Software						
QA/QC procedures to be applied	See Section	3.4					



Purpose of data	Program emissions calculation
Calculation method	See Section 5.1
Comments	-

Data / Parameter	Yerba mate production levels
Data unit	Not applicable
Description	Evolution of yerba mate production levels to assess leakage due to global market products.
Source of data	"Informes del Sector Yerbatero" of the National Institute of Yerba Mate (INYM,) and/or official public agriculture statistics of Secretariat of Agriculture, Livestock and Fisheries (SAGyP), jurisdictional statistics.
Description of measurement methods and procedures to be applied:	Analysis of statistics and information publicly available from the Web. Proxys to track the objectives are: provincial participation in the total production; evolution of yerba mate production levels in terms of hectares or tons produced; existence of policies, strategies or agencies for the promotion of the yerba mate activity. Data to be monitored by the technical team of the DGBN annually. During the first FREL validity period the analysis will be done by Coralia Environmental team.
Frequency of monitoring/recording	Annual
Value applied	-
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Not applicable
Purpose of data	Leakage emissions calculation
Calculation method	Qualitative and/or quantitative analysis of statistics and information publicly available from official web sources
Comments	-

Data / Parameter	Tea production levels
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Data unit	Not applicable
Description	Evolution of tea production levels to assess leakage risks due to global market products
Source of data	Official public agriculture statistics of Secretariat of Agriculture, Livestock and Fisheries (SAGyP), jurisdictional statistics
Description of measurement methods and procedures to be applied:	Analysis of statistics and information publicly available from the Web. Proxys to track the objectives are: provincial participation in the total production; evolution of tea production levels in terms of hectares or tons produced; existence of policies, strategies or agencies for the promotion of the tea activity. Data to be monitored by the technical team of the DGBN annually. During the first FREL validity period the analysis will be done by Coralia Environmental team.
Frequency of monitoring/recording	Annual
Value applied	-
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Not applicable
Purpose of data	Leakage emissions calculation
Calculation method	Qualitative and/or quantitative analysis of statistics and information publicly available from official web sources
Comments	-

Data / Parameter	Forest products level
Data unit	Not applicable
Description	Evolution of forest products (boards, pulp and paper) level to assess leakage risks due to global market products
Source of data	Official public forestry statistics of Secretariat of Agriculture, Livestock and Fisheries (SAGyP), jurisdictional statistics
Description of measurement methods and procedures to be applied:	Analysis of statistics and information publicly available from the Web. Proxys to track the objectives are: provincial participation in the total production; evolution of forest products levels in terms of tons or cubic meters produced; existence of policies, strategies or agencies for the promotion of forest products activity.



	Data to be monitored by the technical team of the DGBN annually. During the first FREL validity period the analysis will be done by Coralia Environmental team.
Frequency of monitoring/recording	Annual
Value applied	-
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Not applicable
Purpose of data	Leakage emissions calculation
Calculation method	Not applicable
Comments	-

Data / Parameter	Continuity of promotion of local market forestry products
Data unit	Not applicable
Description	Evolution of promotion of local market forestry products to assess leakage risks due to domestic market products
Source of data	National, and provincial statistics, documents and legislation; official GPM documents and records; implementation reports; official information systems, tools for dissemination and communication produced and disseminated; or others deemed appropriate.
Description of measurement methods and procedures to be applied:	Qualitative and/or quantitative analysis of strategies/measures for the promotion of local market forest products. Data to be monitored by the technical team of the DGBN annually. During the first FREL validity period the analysis will be done by Coralia Environmental team.
Frequency of monitoring/recording	Annual
Value applied	-
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Not applicable
Purpose of data	Leakage emissions calculation



Calculation method	Qualitative and/or quantitative analysis of statistics and information publicly available from official web sources
Comments	-

Data / Parameter	Continuity of promotion of local market livestock
Data unit	Not applicable
Description	Evolution of promotion of local market livestock to assess leakage risks due to domestic market products
Source of data	Official public livestock statistics of Secretariat of Agriculture, Livestock and Fisheries (SAGyP), jurisdictional statistics. National, and provincial statistics, documents and legislation; official GPM documents and records; implementation reports; official information systems, tools for dissemination and communication produced and disseminated; or others deemed appropriate.
Description of measurement methods and procedures to be applied:	Qualitative and/or quantitative analysis strategies/measures for the promotion of local market livestock products, including livestock evolution. Data to be monitored by the technical team of the DGBN annually. During the first FREL validity period the analysis will be done by Coralia Environmental team.
Frequency of monitoring/recording	Annual
Value applied	-
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Not applicable
Purpose of data	Leakage emissions calculation
Calculation method	Qualitative and/or quantitative analysis of statistics and information publicly available from official web sources
Comments	-

Data / Parameter	Continuity of promotion of subsistence activities
Data unit	Not applicable



Description	Evolution of promotion and support of local subsistence activities to assess subsistence leakage
Source of data	National, and provincial statistics, documents and legislation; official GPM documents and records; implementation reports; official information systems, tools for dissemination and communication produced and disseminated; or others deemed appropriate.
Description of measurement methods and procedures to be applied:	Qualitative and/or quantitative analysis strategies/measures for the promotion and support of subsistence activities. Data to be monitored by the technical team of the DGBN annually. During the first FREL validity period the analysis will be done by Coralia Environmental team.
Frequency of monitoring/recording	Annual
Value applied	-
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Not applicable
Purpose of data	Leakage emissions calculation
Calculation method	Qualitative and/or quantitative analysis of statistics and information publicly available from official web sources
Comments	-

Data / Parameter	Continuity of promotion of participation and consultation processes
Data unit	Not applicable
Description	Evolution of promotion of participation and consultation processes to assess domestic markets and subsistence leakage
Source of data	National, and provincial statistics, documents and legislation; official GPM documents and records; implementation reports; official information systems, tools for dissemination and communication produced and disseminated; or others deemed appropriate and applied in the framework of environmental safeguards.
Description of measurement methods	Qualitative and/or quantitative analysis strategies/measures for the promotion of participation and consultation processes.



and procedures to be applied:	Data to be monitored by the technical team of the DGBN annually. During the first FREL validity period the analysis will be done by Coralia Environmental team.
Frequency of monitoring/recording	Annual
Value applied	-
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Not applicable
Purpose of data	Leakage emissions calculation
Calculation method	Qualitative and/or quantitative analysis of statistics and information publicly available from official web sources
Comments	-

Data / Parameter	Continuity of promotion of measures against forest degradation processes
Data unit	Not applicable
Description	Evolution of promotion of measures against forest degradation processes to assess leakage related to displacement of deforestation to degradation processes
Source of data	National, and provincial statistics, documents and legislation; official GPM documents and records; implementation reports; official information systems, tools for dissemination and communication produced and disseminated; or others deemed appropriate and applied in the framework of environmental safeguards.
Description of measurement methods and procedures to be applied:	Qualitative and/or quantitative analysis strategies/measures for the promotion of measures against forest degradation. Data to be monitored by the technical team of the DGBN annually. During the first FREL validity period the analysis will be done by Coralia Environmental team.
Frequency of monitoring/recording	Annual
Value applied	-
Monitoring equipment	Not applicable



QA/QC procedures to be applied	Not applicable
Purpose of data	Leakage emissions calculation
Calculation method	Qualitative and/or quantitative analysis of statistics and information publicly available from official web sources
Comments	-

Data / Parameter	Level of timber extraction
Data unit	Not applicable
Description	Evolution of timber extraction to assess leakage related to displacement of deforestation to degradation processes
Source of data	Official public timber statistics of National Directorate of Native Forests, or Secretariat of Agriculture, Livestock and Fisheries (SAGyP), jurisdictional statistics
Description of measurement methods and procedures to be	Analysis of statistics and information publicly available to track the objective through the evolution of timber extraction levels in terms of tons or cubic meters.
applied:	Data to be monitored by the technical team of the DGBN annually. During the first FREL validity period the analysis will be done by Coralia Environmental team.
Frequency of monitoring/recording	Annual
Value applied	-
Monitoring equipment	Not applicable
QA/QC procedures to be applied	Not applicable
Purpose of data	Leakage emissions calculation
Calculation method	Qualitative and/or quantitative analysis of statistics and information publicly available from official web sources
Comments	-



5.4. Description of the Monitoring Plan

The monitoring plan aims to track the evolution of the data and parameters indicated in Section 5.2 and Section 5.3, as well as verify and report the results obtained.

The province has a Monitoring, Reporting, and Verification (MRV) System for REDD+ through which information will be obtained to carry out the monitoring plan. Different systems make up and provide information to the MRV System for REDD+, including the Native Forest Monitoring System, the Early Warning System for Deforestation, the Forest Management, Control, and Verification System, and the Early Warning System for Fires. These systems are a central element to monitor the implementation of Law n° 26,331. This Law creates the National Program for the Protection of Native Forests that among its objective it has to maintain the information on the area covered by native forests and their conservation status up to date and to provide the Enforcement Authorities of the different jurisdictions with the technical capacities to formulate, monitor, supervise and evaluate the Sustainable Management Plans of the Native Forests existing in their territory. Hence, the systems mentioned above are part of the operation of the National Program then the monitoring activities are overseen by the National Program.

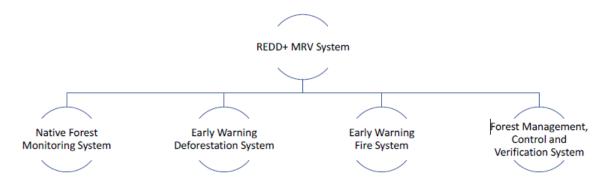


Figure 39: Structure of the MRV System for REDD+

Source: own elaboration

The operation of the MRV System for REDD+ and the implementation of the monitoring plan for the Program will be the responsibility of the General Directorate of Native Forests (DGBN), which is part of the Ministry of Ecology and Renewable Natural Resources (MEyRNR).

DGBN consists of two directorates, the Directorate of Forest Control and the Directorate of Sustainable Management. The Forest Control Department and the Guides and Archives Department operate under the Directorate of Forest Control. This Directorate's main function is to carry out control and oversight of compliance with current regulations regarding native forests in the province. It is responsible for the Forest Management, Control, and Verification System.



The Directorate of Sustainable Management oversees the Departments of Native Forest Management and Promotion, as well as the Department of Records and Inspections. Its primary function is to receive and oversee sustainable forest management plans and land-use change plans, in addition to planning, coordinating, and implementing actions for the conservation and sustainable management of the province's native forests. This Directorate is responsible for the Native Forest Monitoring System and the Early Warning System for Deforestation. Additionally, the General Directorate of Early Warning is responsible for the Early Warning System for Fires. Changes in the roles and responsibilities of each area may be modified without affecting the objectives of the REDD+ MRV System.

DGBN will be responsible for monitoring the data and parameters in Section 5.3. The information used at the national level to report to the UNFCCC will be reviewed annually to maintain consistency with national approaches and submissions. Values will only be modified if the national definition changes. In addition, the information in Section 5.3 will also be monitored by the technical team of the DGBN annually. During the first FREL validity period the processing will be done by the same Coralia Environmental team that has developed the FREL. The methodology detailed in Sections 3.6.3 "Methods for quantification of Baseline and Program Emissions" and 3.6.4 "Land Cover Maps" will be replicated for data processing. The quality assurance and quality control actions will be as follows⁸²:

Quality of Data from Landsat Mission Satellite Images Landsat: Collection 1 consisted of Level 1 data products since 1972 generated from Landsat 8 Operational Land Imager (OLI)/Thermal Infrared Sensor (TIRS), Landsat 7 Enhanced Thematic Mapper Plus (ETM+), Landsat 4-5 Thematic Mapper (TM)*, and Landsat 1-5 Multispectral Scanner (MSS) instruments. The implementation of Collections represents a significant change in the management of the Landsat Archive by ensuring consistent quality over time and across all instruments, along with additional changes such as metadata and file naming. Landsat Collection levels serve as the inventory structure for Level 1 data products and are based on data quality and processing level. The purpose of level definition is to support easier identification of scenes suitable for pixel-level time series analysis and to provide temporally processed data for immediate downstream distribution in emergency response situations with limited calibration.

A key feature of Collection 2 is the substantial improvement in the absolute geolocation accuracy of the global ground reference dataset, enhancing the Landsat archive's interoperability over time. Collection 2 also includes updated sources of global digital elevation modelling and calibration and validation updates. Collection 2 contains Landsat Level 1 data for all sensors since 1972. Level 2 surface reflectance and surface temperature global scene-based products are available for Landsat data from 1982 to the present. Landsat Analysis Ready Data (ARD) mosaic products for the contiguous United States are available from 1982 to the present.

Level 1 (L1): Landsat scenes with the highest quality data available are classified as Level 1 and are considered suitable for time series analysis. Level 1 includes Level 1 Terrain Corrected (L1TP) data that have well-characterized radiometry and are cross calibrated among different Landsat instruments. Geo-

⁸² The integration of maps and transitions with different existing databases will be done as the information from these databases becomes available.



registration of Level 1 scenes is consistent and within prescribed image-to-image tolerances of a root mean square error (RMSE) ≤ 12 meters.

Highlights of Collection 2:

Improved Geometric Accuracy: The registration of Landsat 8 OLI Ground Control Points (GCP) to the European Space Agency Copernicus Sentinel-2 Global Reference Image (GRI) enhances the spatial and temporal interoperability of the global Landsat archive. Phase 4 - Collection 2 from January 2020 on the Landsat Ground Control Points page provides more information. A 2019 publication demonstrates improved ground control accuracy by implementing a continent-wide triangulation method.

Enhanced Digital Elevation Modelling: Various sources of digital elevation models are used in the processing of Collection 2 Landsat Level 1 data. These sources, based on specific geographical regions, contribute to higher vertical accuracy in Collection 2 compared to past processed data. Together, these sources are known as the Collection 2 Landsat Digital Elevation Model (DEM). Collection 2 Landsat uses 3-arc-second DEM sources shown on the map below. More information about the Collection 2 Landsat DEM is available on the Collection 2 Landsat Digital Elevation Model page.

Improved Radiometric Calibration: Collection 2 Landsat includes several improvements in radiometric calibration for Landsat 5 Thematic Mapper (TM) and Landsat 8 Operational Land Imager (OLI) data, including a correction for the TIRS striping effect (See: Improvements in Radiometric Accuracy).

Global Level 2 Scientific Products and Atmospheric Ancillary Data: New to Collection 2 is the processing and distribution of Level 2 surface reflectance and surface temperature scientific products for Landsat 4-5 TM, Landsat 7 ETM+, and Landsat 8 OLI/TIRS. Level 2 products are generated from Collection 2 Level 1 inputs that meet the Solar Zenith Angle <76-degree restriction and include the necessary ancillary data to produce scientifically viable products. (Note that Level 2 surface reflectance products for Landsat 1-5 will only be available when an operational atmospheric compensation algorithm meeting the USGS Landsat program requirements is developed). The Collection 2 Landsat Atmospheric Ancillary Data used in the processing of Collection 2 Level 2 products are available for download for users who wish to generate custom Level 2 products using the Collection 2 surface reflectance and surface temperature algorithms.

Consistent Quality Evaluation Bands: Collection 2 Landsat Level 1 products are delivered with a Quality Assessment Band (QA_Pixel) and a Radiometric Saturation and Terrain Occlusion Quality Assessment Band (QA_RADSAT). Collection 2 Level 2 products will include the Level 1 Quality Assessment bands as well as a Surface Reflectance Aerosol Quality Assessment Band (SR_QA_AEROSOL) and a Surface Temperature Quality Assessment Band (ST_QA) to provide consistent quality information across products. The Collection 2 Landsat Quality Assessment Bands page provides more information on the quality assessment bands. In February 2021, an issue with the 'clear' bit (bit 6) of the Pixel QA for Landsat 4-7 scenes over water was discovered. Further details on this issue are available on the Known Issues page for Collection 2 Landsat.

Updated and Consistent Metadata: There are several improvements and changes between the Level 1 metadata of Collection 1 and Collection 2. New in Collection 2 data is the addition of Extensible Markup



Language (XML) to the Material Library File (MTL) format file (based on the Object Description Language) already offered. Metadata files facilitate consistency, machine-to-machine scripting, and quick querying of USGS Landsat files. There are also changes in metadata fields visible in EarthExplorer and its associated applications. The Collection 2 Landsat Metadata page describes the changes in each and provides files showing the changes.

File Format Optimized for the Cloud: Collection 2 Landsat Level 1 data and Level 2 products are delivered in a Cloud-Optimized Georeferenced File Format (COG) Tagged Image File Format. COGs are an extension of the current GeoTIFF file format that enhances access to geospatial datasets in a cloud-based environment by allowing users to request only the bands they need. For additional information on the COG file format, review the Landsat Cloud Optimized GeoTIFF (COG) Data Format Control Manual.

Image Processing, Quality Filtering, and Temporal Composite Construction: As already mentioned in section 3.6.4 regarding the construction of the Land Cover maps, surface reflectance images from Collection 2 provided by Landsat-5 and Landsat-8 satellites will be used between January and December, respectively. The images will be quality-filtered, discarding pixels with clouds and/or shadows using the CloudMaskC2 function, and the corresponding scale factors will be applied. Seasonal composites of three months will be constructed for summer, autumn, winter, and spring. The composites consider the pixel with the median value of the frequency distribution of all good-quality observations for each period. Generally, the quarterly composites have data in all pixels covering the province of Misiones, but with small portions of missing data in certain areas due to frequent cloud presence and/or highly reflective surfaces (bare soil or cities). In these areas, a sequentially developed ad hoc algorithm will be applied to fill in the missing data with the average of observations from the previous and subsequent months within successive temporal windows up to a maximum period of 12 months. Thus, in cases where necessary, four temporal windows of one, two, three months, and one year will be evaluated.

Analysis of Uncertainty in Deforestation, Regeneration (and Degradation Detection if included in the future): To estimate the accuracy of each transition, a set of validation samples of 500 points will be generated. These samples will correspond to randomly stratified pixels based on the mapped area of each transition. Each validation sample will be assigned, based on visual interpretation of high-resolution images and analysis of time series of different spectral indices, a land use and land cover class for each year. For this, a validation protocol was generated using a tool (script) to analyse the samples through photo interpretation by trained technicians. The script presents cases to the technician one by one along with Landsat images from the beginning and end of the period, high-resolution images provided by Google Earth, and phenological signatures of NDVI and NDFI. With this information, the technician interprets the initial and final situation of the period, identifying if it is stable forest, stable non-Forest, deforestation, regeneration, or degraded forest. The interpreted samples will be exported for subsequent processing and analysis. For emission reductions calculations, the spreadsheets used will have cross-checks and automatic controls to avoid errors in formulas and data entry. Additionally, parameter values in the spreadsheets will be inputted into formulas using automatic functions to prevent transcription errors.



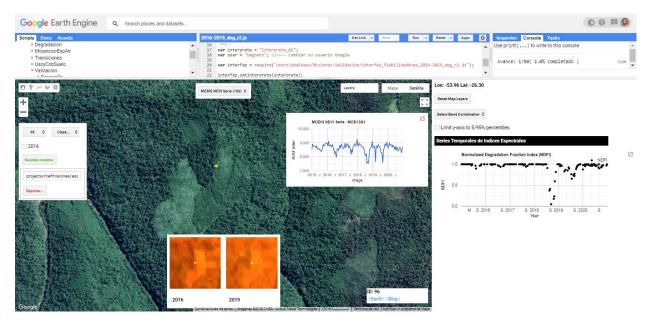


Figure 40: Tool developed in GEE for the interpretation of samples and validation of identified transitions. The randomized sample (yellow point) can be seen on the high-resolution image, the lower panels display the Landsat images at the beginning and end of the evaluated period, the NDVI phenological signature in the central panel, and the NDFI phenological signature in the side panel, where a disturbance event in 2018 associated with a process of native forest degradation can be observed.

On receiving data on deforested and degraded areas and land-use transitions, checks will be made that no data is missing, and that the data series do not contain errors. Once the surface data is loaded into the spreadsheet, it will be reviewed to ensure that no values are missing, and that the total of values inputted matches the spreadsheet sent by the team responsible for image processing. The spreadsheet will also be reviewed to ensure that the formula parameters are still valid and do not need to be modified. If changes are necessary, the justification for the change and the new source will be documented. Finally, once the estimates are made, graphs will be created to identify outliers visually and ensure the consistency of the time series data. The analysis of the results obtained will be documented, and then the DGBN will prepare monitoring reports.

DGBN will ensure that the information is properly collected, processed, archived, and reported in the monitoring reports. Documentation related to the program's monitoring will be archived on the MEyRNR's servers, and an electronic copy will be stored on MEyRNR's computers. It will be checked that all information is correctly stored once a year. The information used for monitoring, validation, verification, reporting, and certification will be archived throughout the entire program and will be kept for at least five years after the program concludes. The information will be provided to auditors when required.



The monitoring report, as well as the information used to prepare the document, will be available on the ECO2 Program's website⁸³. Any non-conformities will be addressed through the REDD+ Communication and Grievance Mechanism. Deviations of the methods employed in subsequent monitoring periods and discrepancies with those described for the validated monitoring plan will be justified in the corresponding monitoring reports and, if applicable, updated in the subsequent FREL updates.

A back up of the information generated will be made and kept until two years after the end of the crediting period in information systems of the MEyRNR.

6. SAFEGUARD INFORMATION SYSTEM

This section describes the design, structure, and operation of the Safeguard Information System (SIS) for REDD+ in Misiones (referred to as "SIS-REDD+ Misiones"). SIS-REDD+ Misiones integrates the efforts of the GPM to apply environmental and social safeguards to all REDD+ activities carried out in the provincial territory, from the general framework of its EPREDD+ to the REDD+ ECO2 Program. Therefore, SIS-REDD+ Misiones reports to the following REDD+ approaches in the province:



Figure 41: SIS-REDD+ Misiones Reporting Levels

This ensures that the safeguard information system framework (SIS) is implemented within the context of the REDD+ safeguard approach, which must align with the requirements that may be established in the future by the national SIS⁸⁴.

Environmental and Social Management Plan (ESMP) for the REDD+ ECO2 Program

With the aim of monitoring and reporting compliance with the Cancun Safeguards during Program implementation, consultations, dialogues and information were collected on possible negative impacts that the Program could cause. These were collected throughout the different stages of the participatory process for Program design. Likewise, existing capacities and practises in the province of Misiones were analysed,

⁸³ https://programajnr.misiones.gob.ar/

⁸⁴ Currently, there are no provisions in the national REDD+ framework regarding this matter.



to identify adequate mitigation measures to avoid or reduce the aforementioned environmental and social risks.

As a result, the first version of the Environmental and Social Management Plan (ESMP) for the REDD+ ECO2 Program was developed, which includes:

- Ten risks: five environmental and five social.
- 13 potential impacts.
- 14 mitigation measures.
- 14 indicators, detailed in sections 6.1 and 6.2 below.

To ensure the effective implementation of the ESMP, the Program Safeguards Unit is responsible for promoting and monitoring the implementation of the mitigation measures identified for each risk. This task is carried out each year in summary form and in full by submitting the various Monitoring Reports.

For further information, this section will be complemented by the following document available for the VVB at validation: Environmental and Social Plan (ESMP) for the REDD+ ECO2 Program.

6.1. Data and Parameters Available at Validation

In this section, four indicators are identified, constructed from publicly available information that has been generated since the enactment of Law 26.331 in 2009, along with other directly related regulations. Together, these indicators enable an assessment of how the REDD+ activities of the Program have been implemented since then, in alignment with key aspects of the Cancun Safeguards.

This section identifies existing indicators as of the Program's validation date. At times, therefore, one indicator may pertain to various safeguards. This is not the case in the following Section (6.2), where specific indicators were designed to address the central aspects of each safeguard. In the comments section on each indicator below, the specific aspect of each safeguard it pertains to is specified.

Indicator 1

Data / Parameter (Indicator):	The GPM has implemented policies, programs, and plans to address the causes of deforestation in the province, aligned with national and international forest and climate change regulations
Data unit:	Not applicable.
Description:	Qualitative analysis of the degree of alignment of policies, programs, and/or institutional strengthening plans implemented by the province to address the causes of deforestation, with the international, national, and provincial legal framework on the subject. To do this, legislation, regulations, strategies, financing initiatives, and any other instrument aimed at strengthening



	institutional capacity that has contributed to strengthening the policy of restoration, conservation, and sustainable management of native forests in the province is reviewed.	
Source of data:	 National and provincial strategic legislation and policies: laws, decrees, regulations, national and provincial policies and programs that have served to strengthen forest policy in the province. Official GPM documents and records: official sources of information on the implementation of policies, programs, and/or institutional strengthening plans for forest governance in the province. Implementation reports: periodic reports, monitoring and/or progress reports on the implementation of Law 26.331 and/or other policies, programs, and projects to strengthen forest governance in the Province. 	
	(iii) Consistent (iii) Partially consistent (iii) Inconsistent	X
Justification of choice of data or description of measurement/asses sment methods and procedures applied:	The indicator allows for the assessment of the degree of alignment of the regulatory and institutional framework and the efforts deployed by the GPM to strengthen forest governance, with the guidelines established in the international and national legal framework. The sources of information used for measuring this indicator are a combination of regulations and instruments at international, national, and provincial levels, mainly related to the implementation of the framework of Law 26.331. This ensures the objectivity of data, as it is complemented/verified with data generated by another jurisdiction. Measurement methodology of the indicator While this indicator draws on information generated before the development of the Program, it was not reported in a structured manner based on a predetermined evaluation process. For this reason, to allow for an efficient qualitative analysis consistent with the indicators of 6.2, the following procedure will be carried out to evaluate the indicator: 1. Approach analysis: Review of relevant and current international, national, and provincial regulations during the reporting period.	



- 2. <u>Evaluation of effective implementation</u>: Examination of official GPM documents and records, periodic reports, monitoring and/or progress reports on the implementation of Law 26.331, among others, with official information on the implementation of policies, programs, and/or institutional strengthening plans related to the analysed framework in the previous step.
- 3. <u>Qualitative evaluation</u>: Use of criteria of consistency, adequacy, and coherence. The analysis will be expressed in the following three categories: (i) "consistent", (ii) "partially consistent", or (iii) "not consistent", with the respective justification.

Approach analysis

Argentina, and specifically the Province of Misiones, has an established and robust legal, institutional, and policy framework to address the causes of deforestation and forest degradation. Nationally, this framework is led by Law 26,331 (the forest law), which mandates the conservation and sustainable management of native forests across Argentina. This law serves as the core of Argentina's forest policy, guiding all provincial forest management strategies. This law incorporates foundational principles from the General Environmental Law, including citizen participation, information access, land-use planning, and environmental impact assessments.

The Forest Law was formalized under Decree 91/2009 which requires each province to conduct native forest land-use planning (OTBN), according to Article 33. National guidelines for OTBN were further clarified through COFEMA Resolutions 230 of 2012, 236 of 2013, 350 of 2017, and 267 of 2019, which provide criteria for evaluating and mapping native forests within each jurisdiction.

Locally, Misiones has adapted these requirements through its Native Forest Land Use Planning Law (Law XVI–105). This law establishes OTBN guidelines and details conservation actions and sustainable management incentives within the province, with oversight provided by the Ministry of Ecology and Renewable Natural Resources (MEyRNR). Notably, Misiones has implemented sustainable forest management legislation since 1977, predating the national law by a decade. In 1997, Misiones also introduced the Protective Forests and Ecological Belts Law (Law XVI-53), which safeguards forests that protect soil, watersheds, ecological connectivity, and basic ecological integrity.

For a comprehensive approach to forest preservation, the legal framework integrates with other environmental and biodiversity conservation regulations.



Argentina is a party to the Convention on Biological Diversity (CBD), ratified by Law 24,375, which provides a constitutional mandate to preserve the nation's "natural and cultural heritage" under Article 41. Argentina's commitment to biodiversity extends through the General Environmental Law, National Forest Law, Climate Change Adaptation and Mitigation Law, Minimum Environmental Standards for Controlled Burning Activities, and Minimum Standards for Forest and Rural Fires, among others. At the provincial level, Law 3337/96 governs conservation and sustainable use of biological diversity, while Law XVI-103/10 pioneers a Payment for Ecosystem Services framework that supports native forests and reforestation.

Protected areas legislation further strengthens forest policy through the National Parks Law (22,351), among the first environmental regulations in Argentina, which established protected areas for biodiversity conservation. This framework is supported at the provincial level by Misiones' Protected Natural Areas System Law (Law XVI-29, 1992), aligned with national protected areas standards.

Relevant to forest policy are additional environmental agreements, such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES, Law 22,344) and the RAMSAR Wetlands Convention (Law 23,919). Argentina also participates in the United Nations Convention to Combat Desertification (UNCCD, Law 24,701), which promotes global response strategies to desertification and drought.

Provincial laws in Misiones reflect alignment with national and international commitments. Notable examples include: I) Law XVI-37, establishing a Soil Conservation Program to safeguard soil productivity, II) Law XVI-31 on agrochemical regulation and Law XVI-124, which prohibits glyphosate use in sensitive areas, and III) Law XVI-146 (2022), which outlines regulatory measures for the preservation, conservation, and sustainable development of wetlands.

This regulatory alignment in Misiones demonstrates a proactive approach to address deforestation drivers, conservation, and sustainable forest management, in line with national and international standards.

Evaluation of effective implementation

Argentina and the Province of Misiones have developed a comprehensive legal, policy, and institutional framework to effectively implement forest and other sectoral environmental policies. This is consistent with the Federal System of Government established by Argentina's 1994 constitutional reform. According



to this system, the Environmental Minimum Standards Law ensures that the Nation regulates minimum standards for natural resource protection (including forests), while provinces may establish complementary regulations with equal or higher conservation standards. This framework guarantees a minimum level of environmental protection nationwide.

The effective enforcement of forest protection policies, and therefore the fight against deforestation, is a responsibility of public authorities across all levels of administrative decentralization, forming part of the broader right to a "healthy environment" and biodiversity conservation, among other constitutional rights enshrined in Article 41 of Argentina's Constitution. The Provincial Constitution in Misiones aligns with this by stipulating that "the forest will be protected to ensure its rational use and social benefit" (Article 56), and that provincial laws must address "the conservation and improvement of soil, flora, and fauna" (Article 57).

To coordinate environmental governance within the federal system, the General Environmental Law established the Federal Environment Council (COFEMA), which includes participation from the Nation, the Autonomous City of Buenos Aires, and all 23 provinces. COFEMA aims to establish and update required environmental quality levels and conduct comparative studies to standardize monitoring methodologies for environmental resources across the country. The council acts as the primary federal coordination body in environmental matters, with a General Assembly of high-level environmental authorities and various thematic commissions.

Of particular relevance to the ECO2 REDD+ Program are the Native Forests Commission and the Climate Change Commission within COFEMA. These commissions have played a crucial role in developing climate strategies, recommending technical definitions for native forest policies adopted by COFEMA Assembly Resolutions, and enhancing the uniform application of Law 26,331 across all jurisdictions.

The Forest and Climate Change Action Plan is the backbone of the mitigation actions in the native forest sector in the country.

Related to Safeguards, the following key analyses were accomplished:

• The National Safeguards Interpretation. This is a technical, legal and institutional analysis on the approach for respecting the REDD+ safeguards in the context of the implementation of the National Action Plan for Forests and Climate Change. This was prepared with the following objectives:



- to specify how the principles of the REDD+ safeguards of the UNFCCC are understood and addressed in the country's regulatory and institutional framework;
- to evaluate how the actions of the PANByCC are aligned with and promote addressing and respecting REDD+ safeguards;
- to identify potential gaps or areas of improvement to address and respect safeguards in the implementation of REDD+ initiatives in the country.

This interpretation was the product of an extensive dialogue process with key actors from the government, social and environmental organizations, the private sector and the academic sector. The national interpretation of each of the safeguards was defined during this process, including the applicable regulatory and institutional frameworks, the alignment of safeguards with the PANByCC and the social and environmental benefits and risks of the plan's actions.

These definitions are used to report the approach and respect of safeguards in the Argentine Safeguards Information System (SIS-AR) and to prepare the Safeguards Information Summary.

- a. First Summary of Safeguards Information 2014 2019.
- b. The "Safeguards Toolkit", which aims to provide practical tools to address and respect UNFCCC safeguards in REDD+ initiatives.
- c. Safeguards Information System, supported by existing information, aims to provide information on the approach and respect of the REDD+ safeguards and the implementation of the National Action Plan for Forests and Climate Change. Its scope includes all native forests in Argentina under the authority of the National Forestry Directorate.

For biodiversity conservation, the national regulatory framework is implemented through the Secretariat of Environmental Policy in Natural Resources. Argentina's National Biodiversity Strategy outline key actions for raising awareness and valuing shared resources and ecosystem services. Implementation of this strategy is institutionalized through the National Advisory Commission for the Conservation and Sustainable Use of Biological Diversity (CONADIBIO), a multi-stakeholder biodiversity policy forum established by Decree 1347/1997.

Consistent with this framework, Misiones enforces biodiversity conservation through the Misiones Biodiversity Institute (IMiBio), created by Law XVI–No. 122. A major biodiversity policy related to native forests is Law XVI–No. 60,



	which established the "Green Corridor of Misiones," connecting major blocks of Protected Natural Areas to safeguard biodiversity connectivity, including that associated with the province's native forests. For protected areas, national and provincial laws support the conservation of forests within these territories, including wildfire prevention and control. The Federal System of Protected Areas (SiFAP) coordinates national and provincial efforts to implement protected area policies, fostering the planning of ecoregional protected area systems to ensure connectivity and the establishment of provincial systems. Qualitative evaluation According to the review and analysis of the regulatory and institutional framework at the national and provincial levels, it can be determined that they are well aligned with the international safeguards standards of the UNFCCC for REDD+, as well as the relevant international legal agreements and measures related to REDD+.
Comments:	The indicator reports how certain aspects of the following Cancun Safeguards are respected: A: Alignment of the Program with national and international forest policies. Analysis of this indicator will be the responsibility of the SIS-REDD+ Misiones Unit. Preliminary results will be shared with the Multisectoral Program Monitoring Forum and published in the Annual Report of the SIS-REDD+ Misiones, according to the established procedure.

Indicator 2

Data / Parameter (Indicator):	The GPM has strengthened key institutions for the proper implementation of Law 26.331 on Native Forests and associated provincial regulations.
Data unit:	Not applicable.
Description:	Qualitative analysis of the level of effective implementation of Law 26.331 at the provincial level during the reporting period, which includes the review and evaluation of forest monitoring systems, fire prevention systems, information systems on plans framed within Law 26.331 (management and conservation



	plans), plan control systems, traceability in production and marketing, among others.	
Source of data:	 Official GPM documents and records: official sources of information on the implementation of policies, programs, and/or institutional strengthening plans for forest governance in the province. Implementation reports: periodic reports, monitoring and/or progress reports on the implementation of Law 26.331 and/or other policies, programs, and projects to strengthen forest governance in the province. Official information systems: SNMBN, National Fire Management System, and other provincial systems related. 	
Value:	(iii) Consistent X (iii) Partially consistent (iii) Inconsistent	
Justification of choice of data or description of measurement/asses sment methods and procedures applied:	The indicator allows for the evaluation of various actions, mechanisms, and systems deployed by the GPM to properly implement the Law on Native Forests 26.331 and other associated regulations. The goal is to explore the effective implementation of measures to strengthen institutional capacity to improve its capacity for prevention and response to irregular changes in land use. For this purpose, various sources of information are used, which provide insight into efforts to strengthen the implementation of the Forest Law (number of plans, recipients, allocated funds, prioritized areas, etc.), actions for early fire prevention, early deforestation alert systems, satellite monitoring of native forests, Territorial Planning of Native Forest (OTBN) in Misiones, etc. Additionally, the indicator will be particularly enriched by information generated by the existing provincial and national system to date. Measurement methodology of the indicator While this indicator draws on information generated before the development of the Program, it was not reported in a structured manner based on a predetermined evaluation process. For this reason, to allow for an efficient qualitative analysis that is consistent with the indicators of 6.2, the following procedure will be carried out to evaluate the indicator:	



- 1. <u>Approach analysis</u>: Review of relevant and current international, national, and provincial regulations during the reporting period.
- 2. <u>Evaluation of effective implementation</u>: Examination of official GPM documents and records, periodic reports, monitoring and/or progress reports on the implementation of Law 26.331, among others, with official information on the implementation of policies, programs, and/or institutional strengthening plans related to the analysed framework in the previous step.
- 3. <u>Qualitative evaluation</u>: Use of criteria of consistency, adequacy, and coherence. The analysis will be expressed in the following three categories: (i) "adequate", (ii) "partially adequate", or (iii) "not adequate", with the respective justification.

Analysis approach

The National Native Forest Law (26,331) is Argentina's most relevant law pertaining to the conservation and management of native forests. It establishes the minimum standards for environmental protection that all the provinces must enforce by either meeting or exceeding them.

The Forest Law was regulated by Decree 91 of 2009. The Law establishes the obligation for the provinces to carry out their OTBN, following article 33 of Law No. 26,331. Through Resolution 230 of 2012 and 236 of 2013 of COFEMA, the Guidelines for the consideration, identification and mapping of native forests in the Land Use Planning of Native Forests. Through Resolution 350/2017 and Resolution 267 / 2019 the National Forest Law Enforcement Authority established guidelines for the accreditation of OTBNs.

Misiones has Law XVI–No. 7 that established a regulatory framework for both private and public native forests and Law XVI–No. 105 of 2010 established the provincial OTBN in compliance with the criteria and standards set by the national government.

The Forest Law and its regulatory decree created the National Fund for the Enrichment and Conservation of Native Forests (FNCBN), which has the objective of rewarding provinces that conserve native forests for the environmental services they provide. Resolution 277/2014 stipulates the distribution of funds. Subsequently, the National Budget Law 27,431 created the Trust Fund for the protection of Native Forests, within the scope of the former MAyDS, with the aim of managing the FNCBN, to promote measures related to the protection of forests as was stated in Argentina's NDC.



To prevent reversal risks at the national level, there are multiple institutional frameworks and tools to prevent and combat deforestation and fires.

Safeguard G is addressed by two key regulatory frameworks at the national level: the Law on Minimum Environmental Protection Budgets for the Control of Burning Activities (Law 26,562) and Law 26,815 that creates the Federal Fire Management System.

The first establishes a regulatory system for burning activities through seasonal and regional climatic parameters; soil, flora and fauna preservation parameters; requirements to prevent the risk of fire spread; and requirements to protect public health and safety.

The second provides for the prevention, suppression and combat of forest fires in native forests and other ecosystems. The National Fire Management System is implemented by the National Fire Management Service, responsible for coordinating resources and actions related to the prevention and combating of forest fires in Argentina.

Evaluation of effective implementation

The GPM has developed different strategies and tools to strengthen the implementation of the forest Law in Misiones, and has successfully reduced emissions for deforestation. These actions demonstrate clear adherence to Safeguard B.

At the national level, there the National Forest Monitoring System (SNMB[1]) includes ongoing forest monitoring through a national scale inventory, includes an early warning system for deforestation, compiles forest data, and oversees the forest administration and control system (SACVeFor).

It is SNMB was strengthened during the monitoring period, through financing from REDD+ readiness programs (UN REDD and the Forest Carbon Preparedness Cooperative Fund Project). The information of the SNMB⁸⁵ is linked to the Environmental Information Center (CIAM) of MAyDS, which compiles and disseminates environmental data and information.

Forest governance in Misiones is administered by the General Directorate of Native Forests (DGBN) of the MEyRNR, and is responsible for the implementation of the National Law of Native Forests, Law XVI-No. 7, the

^{85 &}lt;a href="https://www.argentina.gob.ar/ambiente/bosques/monitoreo-bosques-nativos">https://www.argentina.gob.ar/ambiente/bosques/monitoreo-bosques-nativos



formulation, management and conservation plans, the OTBN provided by Law XVI 105, control, monitoring, and sanctions.

Seventy percent (70%) of this fund is earmarked to compensate holders of management or conservation plans with a non-refundable contribution, which is paid annually per hectare.

The Forest Administration, Control and Verification System (SACVeFOR), created by the former MAyDS, is a key tool to improve the monitoring and control of forest products across provinces and standardize transportation guidelines for forest products across the country.

The MEyRNR also implements the Geographic Information System which provides information that contributes to the analysis and use of natural resources and infrastructure including: watersheds, agriculture, ecology, mining, tourism, education, health, security, architecture and equipment. It allows for the transparent compilation of provincial information and data about the environment and natural resources and for tracking public policies.

Regarding the implementation of Law 26,815 (relevant for reversal risks), there is a system of Daily Reports of Fires, to keep authorities and the public informed about fire occurrences in Argentina and to enable preventative actions. This also allows for fighting forest fires and evaluation of subsequent damage and restoration actions. Additionally, at the national level there is the Space Commission for Space Activities (CONAE), which carries out the environmental emergency management program by leveraging satellite imagery and data.

Misiones also has Law XVI–No. 65 that creates the Provincial Fire Management Plan (PPMF) whose purpose is to prevent, suppress and combat forest fires in order to protect forests in the Province. This is implemented through the Directorate of Fire Management and Environmental Emergencies, under the Undersecretary of Land Use Planning of the MEyRNR. Misiones also has the "Contingency Plan for Forest Fires" which provides an inventory of available tools and equipment, as well as information on landing strips for fire-fighting aircraft.

As for the Risk of Leakage (safeguard G of the UNFCCC), two key legal and institutional tools to mitigate it: the already mentioned SNMB and the Deforestation Early Warning System (SAT).

The SNMB is a system that compiles information on forest loss and analyzes impacts on biodiversity, ecosystem services, and other environmental aspects, while monitoring reversals and leakage risks. The data is shared with the provinces before it is disseminated to ensure broad participation and



information sharing across local organizations. Also, Misiones has the Provincial Forest Monitoring System (SPMB) for monitoring in the forest which is implemented by the MEyRNR.

The SAT consists of a national system that allows monitoring the loss of native forest continuously, through automated processes based on satellite images. It is a tool with free and public access and allows strengthening control and surveillance actions on native forests by provincial authorities by reporting periodic alerts.

Another key public policy instrument to address leakage during the monitoring period is the OTBN. Established by Law 26,331, the OTBN organizes the country's native forests into three conservation categories: Category I (red); Category II (yellow) and Category III (green). Each category is subject to a set of different conservation criteria and requirements. Misiones established its OTBN through Law XVI-No. 105, which mandates the use and conservation of the forest according to environmental and social sustainability criteria established at the national level. This regulation prevents leakage of deforestation to other categories of forests. Misiones also compliance with OTBN a requirement in order to access promotion funds established by National Law 25,080 (extended by Law 27,487). This Law also includes the possibility of paying non-refundable economic support due to the development of "native forest enrichment." Currently, Misiones has 1,612,558 hectares of Native Forests, of which 14% are under Category I; 56% under Category II and 30% under Category III.

Misiones also has characteristics that inherently mitigate leakage. For example, there are more pine plantations in Misiones, while in Corrientes there are more eucalyptus plantations. Similarly, both yerba mate and tea require the subtropical climate of Misiones, thus making leakage of these agricultural activities to Corrientes unlikely, Furthermore, in Misiones, the Early Warning System for Deforestation is currently operational, providing a continuous monitoring tool that, in turn, reduces risks of leakage.

In addition, the province has regulations and mechanisms that promote sustainable family farming in the Province, as well as marketing mechanisms for the products, which reduces activity shifting leakage, or migration.

Qualitative evaluation

Based on the analysis of the national and provincial regulatory framework, the Province of Misiones stands out as a pioneering jurisdiction in Argentina's environmental policy, particularly concerning forest governance and



biodiversity conservation. Misiones has demonstrated a robust institutional capacity through the successful implementation of the Forest Administration, Control, and Verification System (SACVeFOR), a key tool that enables the transparent, standardized tracking and monitoring of forest product transport. This system, along with the Geographic Information System (GIS) and the Provincial Forest Monitoring System (SPMB), underscores the Province's commitment to advanced forest governance. These tools ensure effective oversight, compliance, and access to forest data, further supporting Misiones in reducing deforestation and promoting sustainable forest management.

Moreover, Misiones' notably low deforestation rate compared to neighbouring provinces and bordering countries is a testament to its strong enforcement of Law 26.331, its associated regulations, and its proactive management of forest resources through the MEyRNR. The Province has also strengthened fire prevention measures and established a comprehensive network of protected areas that reinforce the conservation of native forests and mitigate risks of deforestation and forest degradation. Additionally, Misiones continues to support family farming practices that align with conservation goals, thus reducing risks of emissions displacement and reinforcing its leadership in sustainable forest management.

In conclusion, the evaluation rates this indicator as "consistent" due to Misiones' established framework, which has not only met but exceeded national environmental protection standards through its policies, programs, and institutional support mechanisms. The Province's alignment with both national and international forest management standards underpins its successful implementation of Law 26.331, ensuring an enduring, sustainable approach to forest conservation and biodiversity protection

Comments:

The indicator reports how certain aspects of the following Cancun Safeguards are respected:

- B: Effective forest governance.
- F: Risk of reversal.
- G: Risk of leakage.

Analysis of this indicator will be the responsibility of the SIS-REDD+ Misiones Unit. Preliminary results will be shared with the Multisectoral Program Monitoring Forum and published in the Annual Report of the SIS-REDD+ Misiones, according to the established procedure.

Indicator 3



Data / Parameter (Indicator):	The GPM has promoted the participation and access to environmental public information by various stakeholders interested in the management of native forests, by strengthening the implementation of the regulatory framework, forest and climate change policies, plans, and programs.	
Data unit:	Not applicable.	
Description:	Qualitative analysis of the international, national, and provincial regulatory framework related to the right of participation and access to environmental public information for various actors directly and indirectly related to the framework of Law 26.331 and related regulations. Additionally, a qualitative evaluation of the degree of implementation of this approach framework will be conducted. This will be complemented by a qualitative analysis of the efforts deployed by the GPM, including the implementation of policies, programs, and plans implemented in the province, directly and indirectly related to participation and/or access to information within the provincial forest policy.	
Source of data:	 International, national, and provincial documents and legislation: international instruments, laws, decrees, regulations, and national and provincial policies related to participation and access to environmental public information. Official GPM documents and records: official sources of information on participation and access to information within the implementation of policies, programs, and/or plans for forest governance in the province. Implementation reports: periodic reports, monitoring and/or progress reports of Law 26.331 and/or other policies, programs, and projects to strengthen forest governance in the province. Official information systems: related provincial systems. Tools for dissemination and communication produced and disseminated: informative pieces, brochures, web sections, social media posts, emails, and other inputs produced and disseminated to inform various aspects of the Program, in line with different stakeholders; workshop and event minutes or other dissemination and outreach spaces conducted by the Program. Others deemed appropriate. 	
Value:		



Appropriate	Х
Partially appropriate	
Not appropriate	

Justification of choice of data or description of measurement/assessment methods and procedures applied: The management, conservation, and PIC plans framework of Law 26.331 and other related national and provincial regulations have a series of requirements regarding participation and access to information, which have been implemented, monitored, and strengthened mainly by the MEyRNR since the enforcement of said national law.

Therefore, the analysis of the indicator will allow the identification, based on selected official data sources at the national and provincial levels, of both the degree of addressing these aspects of safeguards B and D, as well as the effective efforts carried out by the GPM to respect them.

Measurement methodology of the indicator

While this indicator draws on information generated before the development of the Program, it was not reported in a structured manner based on a predetermined evaluation process. For this reason, to allow for an efficient qualitative analysis that is consistent with the indicators of 6.2, the following procedure will be carried out to evaluate the indicator:

- 1. <u>Approach analysis</u>: Review of relevant and current international, national, and provincial regulations during the reporting period.
- 2. <u>Evaluation of effective implementation</u>: Examination of official GPM documents and records, periodic reports, monitoring and/or progress reports on the implementation of Law 26.331, among others, with official information on the implementation of policies, programs, and/or institutional strengthening plans related to the analysed framework in the previous step.
- 3. <u>Qualitative evaluation</u>: Use of criteria of consistency, adequacy, and coherence. The analysis will be expressed in the following three categories: (i) "adequate", (ii) "partially adequate", or (iii) "not adequate", with the respective justification.

Analysis approach



In general terms, the country has a robust legal framework related to transparency, access to public information, anti-corruptions and related legal framework. Thus, effectively approaching the core aspects of safeguards B and C on the matter.

Firstly, a key component of transparent and effective governance is the existence of anti-corruption policies. Argentina has ratified international instruments that impose transparency standards such as the UN Convention against Corruption (ratified by National Law 26,097) and the Inter-American Convention against Corruption (ratified by National Law 24,759).

The National Forest Law ensures that provinces are accountable (described in the previous indicator), which guarantees transparency and avoids corruption.

Another key aspect of this governance is labor rights. REDD+ actions must not violate workers' rights. In this regard, Argentina is a Party to international human rights treaties, through which the rights and safety of workers are protected. These treaties include: Economic, Social and Cultural Rights; the San Salvador Protocol (Law 24,658); Agreements 155 (Law 26,693) and 187 (Law 26,694) of the International Labor Organization (ILO) relevant to the matter.

Specifically, it also seeks to prevent and combat child labor. Argentina has adopted the International Convention on Children's rights (Law 23,849); ILO Convention 182 on the Worst Forms of Child Labor (Law 24,650); ILO Convention 138 on the Minimum Age for Admission to Employment (Law 25,255). Law No. 26,390 prohibits child labor and protection of adolescent work in Argentina, as well as Law No. 26,061 that establishes Comprehensive Protection of the Rights of Girls, Boys and Adolescents. The Argentine Penal Code itself punishes violations of child labor laws with prison sentences.

In matters of Safety and Hygiene of workers, Argentina has sanctioned Law 19,587. There are also the Risks at Work Law 24,557. Law 20,744 creates the Employment Contract Regime in a generic way, with workers' rights and guarantees, and specifically, there is Law 26,727 that creates the Agricultural Work Regime, of relevance to REDD+.

Transparent and effective forest governance also consists of actions to ensure gender equality. In this regard, in addition to the aforementioned international human rights treaties (which contain express guarantees regarding gender), Argentina is part of the Convention on the Elimination



of All Forms of Discrimination Against Women (Law 23,179). At the domestic level, the country issued Law 26,485 of "Comprehensive protection to prevent, punish and eradicate violence against women in the areas in which they develop their interpersonal relationships".

At the provincial level, Misiones, through Law IV-No. 68, the province adheres to the aforementioned National Law No. 26,485.

In terms of public participation, the National Constitution contains express provisions in Article 39 related to public initiatives and in Article 40 related to public consultations.

At an infra-constitutional level, there is Access to Public Information Law (Law 27,275) which guarantees access to public information and promotes public participation. This is a regulation that covers all thematic areas.

In environmental matters, the right to access to information and justice are contemplated at the constitutional level, through articles 41 and 43 of the National Constitution specifically created for the access to environmental information.

Another pillar of safeguards B and C is linked to public participation and rights of access to information. These are part of the so-called "access rights" enshrined by the Rio de Janeiro Declaration of 1992, which stated that environmental issues are best addressed with public participation and access to information. Already prior to this declaration, these rights were recognized as part of the civil and political rights enshrined in the international human rights treaties previously stated.

Within environmental regulations, there are two minimum budget standards linked to access rights: the General Environmental Law (Law 25,675), which enshrines access to information and public participation in the environmental decision-making process, as basic principles and requirements of environmental policy. Specifically, the Law on Free Access to Public Environmental Information (25,815) establishes the minimum requirements for access to government environmental information, as well as from autonomous entities and companies providing public services, whether public, private or mixed.

Evaluation of effective implementation

To implement anti-corruption regulations at the national level, there is an Anti-Corruption Office, dependent on the National Executive Branch,



where stakeholders can lodge complaints, request sworn declarations of assets of public officials, and report instances of conflict of interest. On the other hand, the General Audit of the Nation is the body in charge of carrying out the external evaluation, both technical and budgetary, of the implementation of regulations and public policies at the national level. This includes evaluations of REDD+ activities associated with the National Native Forest Law, as well as other related programs and projects.

The Forest Law itself includes the National Registry of Offenders, which compiles information on people or entities that have been in violation of national or provincial forest or environmental laws allowing for transparency and effectiveness of forestry regulations.

At the provincial level, Misiones has the Court of Accounts, a control body for public activities within the province. The organization was certified by the ISO 9000:2015 quality management standards.

The State Attorney's Office of Misiones is the judicial body responsible for processing public complaints and Complaints against the provincial administration. This clarifies the public's right to lodge complaints against government actions.

Another key institution at the provincial level is the Ombudsman, which operates in different cities in Misiones. This body is independent and has the authority to intervene in conflicts that violate the rights of citizens, including environmental rights.

Within the provincial Public Administration, the General Secretariat of Access to Justice, Human Rights and Family Violence is the department that supports the population to ensure access to justice.

At the provincial level, to implement Decree 1402 on the elimination of child labor and the protection of adolescent work, Misiones creates the Provincial Commission for the Eradication of Child Labor (COPRETI), which ensures that the rights of children are not violated, and provides access to vital supplies such as nutrition, health and education. At the same time, modifications were introduced to Law XV–No. 5, which regulates municipalities that provide communities with tools to guarantee the rights of children and adolescents. The creation of a local system to protect the rights of children was established through the formation of networks and institutions that committed to prevent violations of their rights.



With specific regard to REDD+, at the national level the "Guide for the Integration of Gender Perspective in Forest Management and Climate Change", is part of the Safeguards tools for REDD+. This guide provides clear guidelines for implementing REDD+ projects at the local level with respect to gender inclusion.

In relation to access to public information, the National Institute of Statistics and Censuses (INDEC) generates relevant socioeconomic statistics for decision-making for politicians. This includes data disaggregated in terms of gender, indigenous peoples and local communities. At the provincial level, Misiones has the Provincial Institute of Statistics and Censuses (IPEC), which generates socioeconomic data related to the population of Misiones. Likewise, the province has the Land Observatory of the Province of Misiones, which plans, coordinates, trains and evaluates the execution of work for domain regularization and land use planning within the framework of public policies carried out by the GPM.

In order to operationalize the specific regulatory framework for access to environmental information, during the monitoring period the Environmental Information Center (CIAM) within the scope of the former MAyDS, with the purpose of disseminating environmental information at the national level. The system brings together procedures, disseminates information, provides data, maps, and regulations, among other functions.

The regulations on access to public information are implemented through virtual platforms (such as the TAD-remote procedures, online application forms and former MAyDS email) and in-person means (such as the former MAyDS entry table), through which Citizens can file requests for access to public environmental information. There are internal procedures and deadlines for attention and response to requests, in accordance with current regulations. During the monitoring period, there was also a "green mailbox," which allowed suggestions to be submitted to the national environmental authorities.

Misiones has Law IV-No. 58 and Provincial Decree No. 846/1 that regulate the right of access to public information related to the provincial administration. This Law aims to guarantee the transparency of the public administration and the obligated subjects; facilitate the exercise of the right of every person to freely obtain public information; and promote effective citizen participation. Establishes the principle of publicity of government acts, the transparency of the public service. Said



regulations are implemented through the Undersecretary of Security and Justice, dependent on the Ministry of Government of Misiones. Likewise, the province has Resolution 464/08 of the Environmental Impact Assessment Procedure for all types of projects, and includes participatory and information instances, and Resolutions 105/09, 353/09 and 410/11 complement said procedure.

The Province of Misiones has on its platform the section "Ecology Listens to You", where citizen service channels are provided, by telephone, WhatsApp, emails and postcards where they can request information.

In compliance with the right of access to information and promoting transparency, there are several current systems implemented by the MEyRNR. Among them, the Geographic Information System, which provides information that contributes to the analysis and use of natural resources and infrastructure.

The General Directorate of Early Warning (DGAT) of Misiones is an entity dependent on the MEyRNR that collects, evaluates and shares information, maps and trends related to natural threats and vulnerabilities in the Province. This makes it possible to identify areas prone to certain risks and develop early detection plans to prevent or minimize the adverse effects of events such as rural and forest fires. To improve the communication and dissemination of information on environmental emergencies, the DGAT developed the "Map of Environmental Emergencies", a website that provides spatial information on at-risk populations, infrastructure, available resources, and other layers of information relevant to emergency management. In addition, informational posters have been placed in strategic locations and social networks are used to spread the message about fire prevention and protection of biodiversity.

Moreover, the National Climate Change Cabinet (GNCC) constitutes the space for dialogue and multi-sector coordination. The GNCC articulates between the different areas of government of the National Public Administration, the Federal Environmental Council (COFEMA) and the different actors of civil society, is also responsible for designing public policies agreed upon with a strategic view to reduce GHG emissions and generate coordinated responses for the adaptation of vulnerable sectors to the impacts of climate change.



The Climate Change Risk Mapping System is a tool that shows locations of the areas and populations most vulnerable to the threats of climate change are.

Regarding forests, the Native Forest Law (Law No. 26,331) establishes public participation and the dissemination of information as part of the policy and management of native forests. It also requires a public hearing and consultation prior to all native forest clearing authorizations. In all cases, the necessary measures must be followed to guarantee access to information of Indigenous peoples, native peoples, local communities and other related ones, on the authorizations granted for clearing, within the framework of Law 25,831.

At the federal level, COFEMA constitutes the articulation platform between the different local jurisdictions and the Nation. COFEMA has a Forest Commission, where provincial forest secretaries/directors and the National Forest Directorate participate, and the technical and strategic guidelines for the implementation of Law 26,331 are democratically adopted. At the provincial level, in relation to the mechanisms of consultation and public participation, the Law of OTBN Law XVI – No. 105, declares in Art. 14 that in all Sustainable Management or Land Use Plans, the corresponding consultations must be carried out, recognizing and respecting the rights of the Native Peoples and their Communities. Likewise, Art. 21 expressly provides for Public Participation in the land use implementation of the Law.

It should be noted that the procedure for preparing and approving the OTB includes the involvement and participation of different actors – public and private – and members of civil society. Along these lines, the former MAyDS Resolution 398/15 approved four indicative methodological guides for the development of participatory processes:

- Social actor analysis guide for the OTBN participatory process;
- Dissemination guide for the OTBN participatory process;
- Methodology guide for the OTBN participatory process;
- Guide for the documentation of the OTBN participatory process.

In matters of Indigenous participation, Argentina is part of the ILO Convention 169 adopted by Law 24,071, which establishes the standards to guarantee the prior, free and informed consultation and consent of Indigenous peoples on projects, programs and actions in their ancestral territories. These rights are guaranteed in Law 23,302 and Law 26,160, among other regulations. At the provincial level, the participation of Indigenous peoples at the provincial level, the Law on the



Comprehensive Promotion Regime of Guaraní Communities (Law VI No. 37) in its article 7, that any project, plan or action related to the promotion of the Guaraní communities must have the free and full participation and acceptance of its members.

Other important milestones of multi-sector participation during the monitoring period are the multi-sector dialogue meetings that were carried out in six forest regions of the country during the preparation for REDD+, led by the then National UN-REDD Program. Misiones hosted one of these meetings in 2017. These dialogues gave rise to the development of the National Action Plan for Forests and Climate Change 2030 (PANByCC), by the former MAyDS of the Nation, under the orbit of the National Directorate of Forests and the National Directorate of Climate Change. Provincial and national public actors, the technical and academic sector, civil society organizations, representatives of Indigenous peoples and local communities, private companies, and agricultural and forestry producers from Misiones participated. In 2017, 58 people participated in a workshop in Eldorado (Misiones): 29% were representatives of Indigenous peoples of the province; 24% referents from different provincial and municipal ministries; 19% were representatives of the technical and academic sectors; 17% were representatives of local NGOs; 9% from the private sector and 2% from settlers

In these dialogues, the causes of deforestation and forest degradation in Misiones were identified, and strategic actions were defined to address these causes. They were also relevant spaces for strengthening the capacities of local multi-sectoral actors in REDD+, who learned about the pillars and future perspectives. Through different multi-sector technical working groups, during Argentina's preparation period for REDD+, key instruments were developed for the participation of actors in REDD+ initiatives and mechanisms:

- Technical manual for consultation with Indigenous peoples in forest management and climate change.
- Guide for the participation of key actors in forest management and climate change.

Both instruments are published on the former MAyDS sites.

Qualitative evaluation

The Province of Misiones has demonstrated a strong framework for transparency and access to information, supported by international, national, and provincial regulations. As of the preparation of this Program, both the country and the Province have conducted a series of



	large-scale participatory events involving multiple stakeholders, which establishes a critical mass of actors engaged in REDD+ initiatives, aligning with the Cancun Safeguards B: Transparent Forest governance; and D: Multi-stakeholder participation.
Comments:	The indicator reports how certain aspects of the following Cancun Safeguards are respected: B: Transparent forest governance. D: Multi-stakeholder participation. Analysis of this indicator will be the responsibility of the SIS-REDD+ Misiones Unit. Preliminary results will be shared with the Multisectoral Program Monitoring Forum and published in the Annual Report of the SIS-REDD+ Misiones, according to the established procedure.

Data / Parameter (Indicator):	The GPM has implemented policies, programs, and plans to strengthen the rights of indigenous peoples and local communities who live and depend on the forests, in accordance with the current international, national, and provincial legal framework.
Data unit:	Not applicable.
Description:	Qualitative analysis of the current international, national, and provincial legal framework related to the rights of indigenous peoples and local communities relevant to forest governance in the province. This is complemented by a qualitative analysis of the efforts deployed by the GPM through policies, programs, and plans implemented to strengthen the aforementioned regulatory framework.



Source of data:	National and provincial strategic legislation and polyprovincial laws, decrees, regulations, policies, and program to strengthen policy regarding indigenous peoples in the property of the implementation of policies, programs, and/or planstrengthening, subscription of agreements, conventions, instruments related to indigenous peoples and local community of the regulatory framework, programs, policies, are to the policy regarding indigenous peoples in the province, in Forest Law (26.331), Family Farming Law (27118), Land Ownership Law for lands traditionally occupied by indige (26.160), and/or other policies, programs, and projects to governance in the province that are relevant. Participation records: minutes and reports from we spaces for participation and consultation with indigencommunities. Provincial records of policies on indigenous lar authorizations, recognitions, etc. for lands of indigenous and consultations, recognitions, etc. for lands of indigenous and consultations.	is that have served ovince. It ces of information in for institutional minutes, or other unities. In gand/or progress and projects related including the Native di Possession and mous communities of strengthen forest orkshops and other ous peoples and inds: Permits, use
	(ii) Partially Appropriate (iii) Not Appropriate	
Justification of choice of data or description of measurement/assess ment methods and procedures applied:	The indicator allows for the evaluation of the alignment of the legal framework regarding indigenous peoples and local communities with relevant international standards. It also assesses the efforts that the GPM has implemented to strengthen this framework in the context of forest governance in the province. The sources of information used for the measurement of this indicator are a combination of regulations and instruments at national and provincial levels, which in the latter case includes the MEyRNR and other entities of the GPM. This ensures the objectivity of the data collected and analysed, as it is complemented/verified with data generated by another jurisdiction.	



Measurement methodology of the indicator

While this indicator draws on information generated prior to the development of the Program, it was not reported in a structured manner based on a predetermined evaluation process. For this reason, to allow for an efficient qualitative analysis that is consistent with the indicators of 6.2, the following procedure will be carried out to evaluate the indicator:

- 1. <u>Approach analysis</u>: Review of relevant and current international, national, and provincial regulations during the reporting period.
- 2. <u>Evaluation of effective implementation</u>: Examination of official GPM documents and records, periodic reports, monitoring and/or progress reports on the implementation of Law 26.331, among others, with official information on the implementation of policies, programs, and/or institutional strengthening plans related to the analysed framework in the previous step.
- 3. <u>Qualitative evaluation</u>: Use of criteria of consistency, adequacy, and coherence. The analysis will be expressed in the following three categories: (i) "adequate", (ii) "partially adequate", or (iii) "not adequate", with the respective justification.

Analysis approach

Indigenous peoples and local communities (IPLC) are collective subjects with specific legal protection, due to being in a situation of social and economic vulnerability. This indicator, fully aligned with Cancun Safeguard "C" of the UNFCCC, acquires special relevance in Misiones, since the Indigenous Mbyá people ancestrally live in its territories, with a total population of between 12,000 and 13,000 people. Currently, there are about 135 Indigenous communities distributed throughout the province, representing around 1.2% of the total population. The province is also home to local communities, made up of farmers, Creoles and small rural producers who are mainly dedicated to the cultivation of yerba and tea. Part of these groups arise from a process of colonization of spontaneous lands, which is why they focus on the cultivation of tobacco, beans, corn, orchards and farms, complementing their income with additional jobs outside their properties.

In matters of IPLC participation, the National Constitution of the Argentine Republic recognizes the ethnic and cultural pre-existence of its indigenous peoples (Article 75, paragraph 17). Besides, Argentina is part of the ILO Convention 169 adopted by Law 24,071, which establishes the standards to guarantee the prior, free and informed consultation and consent (FPIC) of Indigenous peoples on projects, programs and actions in their ancestral territories. This Convention enshrines the fundamental human rights of these



groups, establishing specific commitments by States in relation to projects or programs that may affect them, such as the right to consultation and prior, free and informed consent, among other rights. Besides, these rights are guaranteed in Law 23,302 and Law 26,160, among other regulations.

The country has also signed the United Nations (UN) Declaration on the Rights of Indigenous Peoples of 2007, as well as the Human Rights treaties mentioned above. Nevertheless, it is worth highlighting that the country (neither Misiones) has a specific law that regulates the implementation of the right to FPIC, to make it easier to implement the FPIC procedure on the ground. This legal loophole is generally covered by different protocols and safeguards according to the requirements of the international project or other that promotes the initiative.

Additionally, to the ILO and UN Declaration, there are various global agreements on environmental matters that were adopted by Argentina contain specific guarantees for Indigenous and local communities. Such is the case of Convention on Biological Diversity and Nagoya Protocol, with express provisions regarding equitable distribution of benefits, FPIC, respect for ancestral knowledge, community participation in decision adaptation processes. For his part, the Paris Agreement on climate matters and Escazú Agreement In relation to access rights, they contain specific recognitions concerning the rights of Indigenous peoples.

In the Argentine legal system, the National Constitution in its Article 75 paragraph 17, recognizes the ethnic pre-existence of Indigenous peoples, and enshrines different rights. At a legislative level, a compendium of national norms protects the rights of self-determination, participation, cultural rights, education, their ancestral territories, among others, of the country's Indigenous peoples, such as Law 23,302 on Support for Indigenous Communities existing in the country, Law 26,160, which declares the land use emergency of the Indigenous communities originating in the country, among other regulations. Additionally, a key milestone in the legal field has been the reform of the National Civil and Commercial Code in 2015, where the category of community property of Indigenous peoples was introduced to civil law.

At the provincial level, Misiones has a framework of IPLC's rights and guarantees aligned with international and national standards. The law of Integrated Promotion of Guarani Communities Scheme (Law VI No. 37) guarantees full respect for their cultural and spiritual values and their own



ways of life. Article 7 establishes that any project, plan, or action related to the promotion of Guaraní communities must have the free and full participation and acceptance of its members. Likewise, it regulates the ownership of Indigenous land (including islands or parts of fiscal islands) in the Province through the Fiscal Lands Law (Law XVI - No. 6), promotes social development and the agrarian economy, encouraging roots to the rural residents who uses the land as a work and production asset. With the same approach, the Law of Rooting and Colonization (Law XVI-No. 77) establishes a Plan of Rooting and Colonization for said communities.

Effective implementation evaluation

This legal framework was implemented at the national level during the monitoring period, by the National Institute of Indian Affairs that, among several competencies, carries out a process of surveying and recognizing Indigenous territories in Argentina. This is done through the National Land Directorate, which implements the National Program for Land use Survey of Indigenous Communities, which consists of a technical, legal and cadastral survey of the country. He also leads the National Registry of Indigenous Communities (Re.Na.C.I.) and updates as an information system for decision-making, the National Map of Indigenous Peoples.

In institutional terms, the GPM implements its regulatory frameworks through the Provincial Directorate of Guarani Affairs, which is part of the Ministry of Human Rights.

During the monitoring period, progress was made in co-execution between the Province (through the Ministry of Agriculture and Production, and the Indigenous Participation Council) and the Nation in the technical, legal and cadastral survey of provincial Indigenous territories.

Regarding sectoral regulations relevant to REDD+, the National Native Forests Law contemplates a series of provisions that safeguard Indigenous rights and local communities that live in or depend on native forests; and for its part, the Family Agriculture Law recognizes and values the ancestral knowledge and practices of Indigenous peoples and local communities in Argentine rural production.

In terms of environmental protection of native forests, Indigenous safeguarding is adopted by Provincial Law XVI No. 105, which expressly established in Article 6 that the OTBN of the province must be carried out in full compliance with Article 75, paragraph 17 of the National Constitution, Convention 169 of the ILO, Universal Declaration of the Rights of Indigenous Peoples, Article 8J of the Convention on Biological Diversity and in



accordance with the requirements of Article 6 of National Law No. 26,331. In addition, it adds the "green" category of the OTBN, it includes areas with native forests that, due to the suitability of the soils, can be used to develop productive activities, as long as these activities are sustainable, do not affect areas populated by Indigenous Communities. As for category I (red), with high conservation value that should not be transformed, this includes sectors that may be the habitat of Indigenous communities.

This Law also creates the Provincial Program for the Protection and Sustainable Management of Forests, which among its powers is to develop special native forest plans for Indigenous communities. It is added that all land use plans, or sustainable management plans must recognize and respect the rights of Indigenous peoples, carrying out the corresponding consultations (article 14).

At the national level, between 2010 and 2021, 10% of the plans that received compensation from the FNECBN were assigned to Indigenous communities.

Misiones has the Provincial Family Agriculture Law (Law VIII No. 69) that includes Indigenous and local communities within the productive models of family farming. This regulation is implemented by the Secretary of State for Family Agriculture of Misiones.

For their part, many Indigenous and local communities have had legal protection since the creation of the "Green Corridor" in Misiones. It is large forest corridor which crosses the province, encompassing a mosaic of landscapes including, protected areas, private properties, agricultural land and communities of Indigenous peoples. It crosses 22 municipalities distributed in 8 departments. The corridor ensures habitat connectivity and protects the water supply of the cities of the Province.

During the Country's preparation for the REDD+ mechanism, Indigenous people actively participated in the multi-sectoral dialogue processes, as mentioned above. Specifically, in the multi-sector workshop held in Eldorado (Misiones) in 2017 within the framework of the then UN-REDD National Program, 29% of the participants represented Indigenous peoples of the province. In these workshops, the communities themselves positively valued the possibility of being able to integrate into multi sectoral dialogue processes. Their contributions were integrated into the National Action Plan for Forests and Climate Change, the backbone of REDD+ in the country, which safeguards the Indigenous perspective on REDD+ strategy.

Specifically, within the framework of said Program, a technical working group of Indigenous peoples, made up of the former MAyDS, the INAI, the National



Ombudsman's Office, representatives of the Indigenous Participation Council and specialized non-governmental organizations. As a result of this work, the "Technical manual for consultation with Indigenous peoples in the management of forests and climate change" was published. This is a management tool that clarifies clear steps for compliance with the rights of Indigenous peoples in the implementation of REDD+ in Argentina.

In 2017, a meeting between MEyRNR, communities, business and EMIPA in Tekoa Pindo Poty took place. The communities involved were: Pindo Poty - Caramelito -Kaa Kupe - Jejy - Kury - Ka aguy Pora -Jejy Miri - Yryapy - Ita Piru.

Likewise, with funds from the Nagoya Protocol framework, two Guarani Art Schools were created to support production and marketing of crafts, as well as supporting the development of productive crops, training and development of beekeeping, native seed collection and native species production.

Qualitative evaluation

The country has a solid national and international framework that recognizes the right of IPCL to be consulted on issues that may affect their rights, with institutions for its effective implementation, within the framework of the national policy for the management of native forests; However, it does not have a specific law that regulates the implementation of the right to FPIC.

As detailed above, the design and implementation phases of the National REDD+ Strategy have served to strengthen the capacities and engagement of Indigenous Peoples and Local Communities (IPLCs) in REDD+ within the Province. The framework established by Forest Law 26.331 and the implementation of the GCF Results-Based Payments project have further consolidated this process. Lastly, the design phase of the REDD+ ECO2 Program has reinforced this progress, building on previous national and provincial advancements.

Safeguard "C" of the UNFCCC acquires special relevance in Misiones, since the Indigenous Mbyá people ancestrally live in its territories, with a total population of between 12,000 and 13,000 people. Currently, there are about 135 Indigenous communities distributed throughout the province, representing around 1.2% of the total population. The province is also home to local communities, made up of farmers, Creoles and small rural producers who are mainly dedicated to the cultivation of yerba and tea. Part of these groups arise from a process of colonization of spontaneous lands, which is why they focus



	on the cultivation of tobacco, beans, corn, orchards and farms, complementing their income with additional jobs outside their properties.
Comments:	The indicator reports how certain aspects of the following Cancun Safeguards are respected: C: Strengthening the rights of indigenous peoples and local communities. Analysis of this indicator will be the responsibility of the SIS-REDD+ Misiones Unit. Preliminary results will be shared with the Multisectoral Program Monitoring Forum and published in the Annual Report of the SIS-REDD+ Misiones, according to the established procedure.

6.2. Data and Parameters Assessed

The indicators that will be evaluated during the crediting period of the Program are set out below. These have been designed to assess the main aspects of the Cancun Safeguards, in accordance with the provincial interpretation within the framework of the SIS-REDD+ Misiones. This interpretation is directly aligned with the national SIS ("SIS-AR").

Safeguard A - Alignment with national and international forest policies

The EPREDD+ is consistent and framed within international, national, and provincial regulations regarding forests and climate change. Its objectives and actions fall within existing regulatory frameworks. In doing so, it contributes to the goals and commitments of Argentina as adopted through the ratification of the Paris Agreement, the United Nations Framework Convention on Climate Change, the Escazú Agreement, and the Convention on Biological Diversity. Likewise, it is in line with Article 41 of the National Constitution, as well as national environmental regulations of minimum standards.

Data / Parameter (Indicator):	The actions of the Program were designed and are being implemented consistently with the relevant provincial, national, and international legal framework for REDD+, including the National Forest and Climate Change Action Plan (PANByCC).
Data unit:	Not applicable.
Description:	Qualitative analysis to assess the extent to which the Program's actions, including Plans for Promotion registered in the REDD+ ECO2 Registry, were designed and are being implemented in alignment with the national and international framework, especially Law n° 26,331 and PANByCC.
Source of data:	• <u>International documents</u> : international agreements, conventions, and regulations related to REDD+ and the UNFCCC, CBD, and related others.



	• <u>National documents and legislation</u> : laws, decrees, regulations, and national policies related to PANByCC and Law n° 26,331.
	Provincial documents and legislation: provincial laws, decrees, regulations, and policies related to the Program.
	 Policy and program implementation reports: periodic reports, monitoring reports, and/or progress reports of the Program, Implementation status reports of Law n° 26,331, Biennial Update Report (BUR) submitted to the UNFCCC, National Safeguard Information Summary submitted to the UNFCCC, and other national reports on the implementation of international instruments. Program documents, records, and reports: official Program documents or reports, such as the REDD+ ECO2 Registry, the Communication and Complaints Mechanism Registry of the SIS-REDD+ Misiones, financial reports, and other reports that provide information on Program performance relevant to this safeguard. External evaluations: external evaluations and audits of the Program,
	the EPREDD+, PANByCC, and Law n° 26,331.
Description of measurement/assess ment methods and procedures to be applied:	To evaluate the indicator, a qualitative legal analysis approach will be used to assess the consistency of the Program's actions with the relevant national and international legal framework. The following points will be considered: 1. Approach analysis: Collection and analysis of all legal frameworks of different orders to assess the degree of approach to this aspect of the safeguard. 2. Documentary review: Complementing the previous analysis with public
	policy instruments for the implementation of the evaluated approach framework.
	3. <u>Comparison and alignment</u> : Comparison and evaluation of alignment of components, promotion plans, and other implementation modalities of the Program with PANByCC.
	4. <u>Qualitative evaluation</u> : Use of Consistency, appropriateness, and coherence criteria. The analysis will be expressed in the following three categories: (i) "consistent," (ii) "partially consistent," or (iii) "not consistent," with the respective justification.
	Analysis of the indicator will be the responsibility of the SIS-REDD+ Misiones Unit. Preliminary results will be shared with the Multisectoral Monitoring Forum of the Program before being published in the Annual Report of the SIS-REDD+ Misiones, according to the established procedure.
Frequency of	With every Monitoring Report

monitoring/recording:



Value:	(i) Appropriate (ii) Partially appropriate (iii) Not appropriate
Calculation method:	Described in row "Description of measurement/assessment methods and procedures to be applied" above
Comments:	-

Safeguard B - Transparent and Effective Forest Governance

The EPREDD+ was designed and is implemented in accordance with international, national, and provincial regulations for transparent and effective forest governance.

Data / Parameter (Indicator):	The Program is implemented while ensuring access to and disclosure of public information in accordance with relevant international, national, and provincial regulations.
Data Unit	Not applicable.
Description:	Qualitative analysis of the legal, institutional, political framework, and implemented programs, with the purpose of assessing the effectiveness of transparent and efficient access to information related to the Program. In addition to evaluating in detail the existing legal framework and regulations, as well as relevant policies and programs for the Program in question, the effective implementation of these frameworks and measures will be assessed, with an emphasis on ensuring access to information in a transparent and effective manner, in accordance with current standards for safeguards and applicable legislation.
Source of data:	 International, national, and provincial documents and legislation: international instruments, laws, decrees, regulations, and national and provincial policies related to transparency and access to information. Policy and program implementation reports: periodic reports, monitoring reports, and/or progress reports on international instruments, policies, and others relevant to the subject matter.



- <u>Program documents, records, and reports</u>: official Program documents or reports, such as the REDD+ ECO2 Registry, the Communication and Complaints Mechanism Registry of the SIS-REDD+ Misiones, financial reports, and other reports that provide information on the Program's performance relevant to this safeguard.
- <u>Materials for dissemination and communication produced and disseminated</u>: informational pieces, brochures, website sections, social media publications, emails, and other inputs produced and disseminated to inform various aspects of the Program.
- <u>Workshops/events</u>: Minutes of workshops and events or other dissemination and outreach spaces conducted by the Program.
- Perception surveys: Results of surveys of key stakeholders.
- Other sources deemed appropriate.

Description of measurement/assess ment methods and procedures to be applied:

To evaluate the indicator, a qualitative legal analysis approach will be used to assess the consistency of the Program's actions with the relevant national and international legal framework. The level of approach to the safeguard (legal-institutional framework) will be complemented by an analysis of the various means of dissemination, consultation, and effective exchange carried out with interested actors in general, in addition to analysing the various data sources indicated for this indicator. The following points will be considered:

- <u>Approach analysis</u>: Review of relevant international, national, and provincial regulations regarding access to public information. It is evaluated whether the Program complies with established legal requirements and whether appropriate policies and procedures have been implemented to ensure access to and disclosure of public information.
- <u>Documentary review</u>: Examination of documents, materials, publications, press releases, etc., produced by the Program, assessing their accessibility by key actors, their understanding, and whether they provide sufficient information.
- <u>Perception surveys</u>: Surveys of key stakeholders will be conducted and analysed to explore their perception regarding program information, understanding, adequate access, etc.
- <u>Qualitative evaluation</u>: Use of criteria of consistency, appropriateness, and coherence. The analysis will be expressed in the following three categories: (i) "adequate," (ii) "partially adequate," or (iii) "not adequate," with the respective justification.

Analysis of the indicator will be the responsibility of the SIS-REDD+ Misiones Unit. Preliminary results will be shared with the Multisectoral Monitoring Forum of the Program before being published in the Annual Report of the SIS-REDD+ Misiones, according to the established procedure.



Frequency of monitoring/recording:	With every Monitoring Report	
Value:	Adequate	
	Partially adequate Not adequate	
Calculation method:	Described in row "Description of measurement/assessm procedures to be applied" above	ent methods and
Comments:	The Communication and Complaints Mechanism of excerpt from its Registry can be accessed at: https://programajnr.misiones.gob.ar/salvaguardas/comu	· ·

Data / Parameter (Indicator):	The Program ensures citizen participation and access to justice through an adequate and effective claims mechanism.
Data Unit	Not applicable.
Description:	Qualitative analysis of the design, implementation, and performance of the Communication and Complaints Mechanism of SIS-REDD+ Misiones, including its alignment with the current legal and institutional framework, with the purpose of assessing compliance with the rights of access to information, participation, and access to justice by the general public within the Program's framework.
Source of data:	 International, national, and provincial documents and legislation: international instruments, laws, decrees, regulations, and national and provincial policies related to access to information, submission of claims, and suggestions by the public. Program documents, records, and reports: official Program documents or reports, particularly the Registry of the Communication and Complaints Mechanism of SIS-REDD+ Misiones, financial reports, and reports that provide information on the Program's performance relevant to this safeguard. Satisfaction surveys: Results of user satisfaction surveys of the Communication and Complaints Mechanism of SIS-REDD+ Misiones. Others deemed appropriate.
Description of	To evaluate the indicator, a qualitative legal analysis approach will be used to
measurement/assess	assess the consistency of the Program's actions with the relevant national and
ment methods and	international legal framework. The level of approach to the safeguard (legal-institutional framework) will be complemented by an analysis of the functioning



procedures to be	of the Communication and Complaints Mechanism and user perceptions. The
applied:	following points will be considered: 1. Approach analysis: Relevant international, national, and provincial regulations regarding access to public information, complaints, and suggestions are reviewed. It is evaluated whether the Communication and Complaints Mechanism complies with established legal requirements. 2. Satisfaction surveys: The results of user satisfaction surveys for the Mechanism will be analysed to explore their perception regarding its operation. 3. Performance evaluation: The capacity of the Mechanism to respond to and address all types of requests (information, complaints, suggestions) in a timely manner, in accordance with current legislation, will be analysed. The analysis will be expressed in the following three categories: (i) "adequate," (ii) "partially adequate," or (iii) "not adequate," with the respective justification. Analysis of the indicator will be the responsibility of the SIS-REDD+ Misiones Unit. Preliminary results will be shared with the Multisectoral Monitoring Forum of the Program before being published in the Annual Report of SIS-REDD+ Misiones, according to the established procedure.
Frequency of monitoring/recording:	With every Monitoring Report
Value:	Adequate Partially adequate Not adequate
Calculation method:	. Described in row "Description of measurement/assessment methods and procedures to be applied" above
Comments:	The Communication and Complaints Mechanism of the Program and an excerpt from its Registry can be accessed at: https://programajnr.misiones.gob.ar/salvaguardas/comunicacion-y-reclamos/

Data / Parameter (Indicator):	The financial management of the Program, including the operation of its Benefit Sharing Mechanism, is carried out transparently and efficiently in
	accordance with the current regulatory framework.
Data unit:	Not applicable.
Description:	Qualitative analysis of the degree of transparency and efficiency in the financial management of the REDD+ ECO2 Fund, with special reference to the operation of the Program's Benefit Sharing Mechanism (BSM). This includes evaluating the frequency, robustness, public access, and clarity of financial reports.



	This indicator aims to measure the reliability and accountability in the management of the Program's financial resources, promoting the trust of stakeholders and integrity in the use of funds allocated to REDD+.
Source of data:	 International, national, and provincial documents and legislation: relevant national and provincial regulations on anti-corruption, public access to financial information of the public administration in general, and fiduciary funds in particular. Program documents, records, and reports: official Program documents or reports, particularly the Registry of REDD+ ECO2, the Registry of the Communication and Complaints Mechanism of SIS-REDD+ Misiones, financial reports, and other reports that provide information on the Program's performance relevant to this safeguard. Satisfaction surveys: surveys of beneficiaries of the REDD+ ECO2 Fund, key to exploring their perceptions of transparency and efficiency.
Description of measurement/ass essment methods and procedures to be applied:	To measure the indicator, a qualitative evaluation of transparency and efficiency in the management of the REDD+ ECO2 Fund will be conducted, assessing compliance with the current regulatory framework and, especially, the level of compliance with the rules of the Program's BSM. Likewise, initiatives undertaken by the GPM to promote transparency and access to information, such as generated dissemination materials, submitted reports, socialization processes, and exchanges carried out, among others, will be analysed. Thus, the indicator seeks to evaluate the level of approach to the safeguard (legal-institutional framework) for transparency in the financial management of the Program, along with assessing the performance of the Program's BDM and its impact in delivering concrete benefits to beneficiaries. The following methodology will be applied to measure the indicator:
	 Approach analysis: Identify requirements for transparency, access to information, and efficiency established by the current regulatory framework and the operational instruments of the REDD+ ECO2 Fund and the BDM. Official Program records: Evaluate, based on these Program databases, funds generated from the sale of VCUs, registered Promotion Plans beneficiaries, and funds allocated during the reporting period. Complaints related to the program are also assessed in the Registry of the Communication and Claims Mechanism. Assessment of reports and audits: Analyse results of internal or external audits of the Program from previous periods to evaluate whether areas for improvement were addressed. Analysis of information disclosure: Analyse the frequency of technical and financial reports of the Program, their comprehensibility, information disclosure, and compliance with transparency standards established by legislation. Evaluate financial reports of the REDD+ ECO2 Fund presented to the Multisectoral Monitoring



	Forum of the Program in accordance with the relevant regulations and participato dynamics developed during the reporting period.		
	5. <u>Qualitative evaluation</u> : Use criteria of consistency, adequacy, and coherence. The analysis will be expressed in the following three categories: (i) "adequate," (ii) "partially adequate," or (iii) "not adequate," with the respective justification.		
	Analysis of the indicator will be the responsibility of the SIS-REDD+ Misiones U Preliminary results will be shared with the Multisectoral Monitoring Forum of Program before being published in the Annual Report of SIS-REDD+ Mision according to the established procedure.		
Frequency of monitoring/recording:	With every Monitoring Report		
Value:	Adequate Partially adequate Not adequate		
Calculation method:	Described in row "Description of measurement/assessment methods and procedures to be applied" above		
Comments:	-		

Safeguard C - Knowledge and Rights of Indigenous Peoples and Local Communities

The EPREDD+ aims to contribute to climate change mitigation efforts by strengthening the fundamental rights of the Guarani communities and local communities in the Province. It respects indigenous culture, ancestral knowledge, and practices, while emphasizing the importance of these groups in forest preservation and the fight against climate change.

Data / Parameter (Indicator):	The Program was designed and is implemented in a manner consistent with the international, national, and provincial legal framework regarding the rights of indigenous peoples and local communities in the Province of Misiones.
Data unit:	Not applicable.



Description:	Qualitative analysis to assess the extent to which the actions of the Program were designed and are implemented in alignment with the international, national, and provincial framework regarding the rights of indigenous peoples.
Source of data:	 International, national, and provincial documents and legislation: international instruments, laws, decrees, regulations, and national and provincial policies related to transparency and access to information. Policy and program implementation reports: country reports on indigenous policy implementation (e.g., ILO Convention 169 reports), national reports that include aspects related to indigenous policy in environmental matters (e.g., CBD reports, reports to the UNFCCC), national reports on the implementation of Law n° 26,160, Law n° 26,331, and Law n° 27,118; provincial reports from the MEyRNR and Asuntos Guaraníes. Program documents, records, and reports: official Program documents or reports, such as the REDD+ ECO2 Registry, the Registry of the Communication and Complaints Mechanism of SIS-REDD+ Misiones, financial reports, and other reports that provide information on the Program's performance relevant to this safeguard. Documentation of participatory processes: minutes and reports of workshops and other participation and consultation activities with indigenous peoples and local communities. Other indigenous policy instruments: agreements, conventions, minutes, or other instruments related to indigenous peoples and local communities relevant to the Program.
Description of measurement/ass essment methods and procedures to be applied:	To measure the indicator, a qualitative evaluation of the level of approach to this safeguard, key for the rights of indigenous peoples and local communities, is first conducted. Then, the level of consistency of the Program's actions and components with the relevant international, national, and provincial legal framework is evaluated. Finally, the efforts made by the GPM to strengthen compliance with the safeguard during the monitoring period will be assessed. Key aspects of this assessment include dialogue with the Guaraní people and local communities and efforts to disseminate culturally appropriate information about the Program. The following methodology will be applied to measure the indicator: 1. Approach analysis: Identify and analyse the relevant regulatory framework, including institutional and public policy framework to facilitate its application in the Program's context. 2. Program alignment analysis: Conduct a qualitative assessment of the level of alignment of the Program's design with the approach framework identified in the previous step.



	3. Official records of Program implementation: Carry out of how the effective implementation of the Program is align framework of this Safeguard C. This analysis will be based provided by the Program's databases that are of interest of Guaraní or local communities, such as resources allocated in Fund to communities, registered Promotion Plans in the Program to communication and Claims Mechanism, and others, as a such as Information dissemination analysis: Analyse efforts involve and/or consult with communities, evaluating the role Monitoring Forum of the Program in this regard, as well as and other participation and/or dissemination activities specific that occurred during the reporting period. 5. Qualitative evaluation: Use criteria of consister coherence. The analysis will be expressed in the following "consistent," (ii) "partially consistent," or (iii) "not consistent justification. Analysis of the indicator will be the responsibility of the SIS-F Preliminary results will be shared with the Multisectoral Mo Program before being published in the Annual Report of Saccording to the established procedure.	ed with the approach on official information r involve members of by the REDD+ ECO2 ogram, the Registry of ppropriate. made by the GPM to e of the Multisectoral minutes of workshops to indigenous peoples oncy, adequacy, and three categories: (i) "with the respective REDD+ Misiones Unit. Initoring Forum of the
Frequency of monitoring/recording:	With every Monitoring Report	
Value:		
	Adequate	
	Partially adequate	
	Not adequate	
Calculation method:	Described in row "Description of measurement/assess procedures to be applied" above	sment methods and
Comments:	. -	



Data / Parameter (Indicator):	The Benefits Sharing Mechanism (BSM) of the Program ensures access to Program benefits for indigenous peoples and local communities in a suitable, fair manner, and in accordance with its operational rules.
Data unit:	Not applicable.
Description:	Qualitative analysis to assess the extent to which the Program BSM enables adequate and fair access for indigenous peoples and local communities in the province of Misiones, who live in and depend on native forests, in accordance with the current legislation, its operational rules, and their customs.
Source of data:	 International, national, provincial, and Program documents and legislation: international instruments, laws, decrees, regulations, and national and provincial policies related to indigenous peoples' access to REDD+ benefits, and operational (or other) rules governing the operation of the REDD+ ECO2 Fund and the BSM in its special modality for the Guaraní people and local communities. Program documents, records, and reports: official Program documents or reports, such as the REDD+ ECO2 Registry, the Registry of the Communication and Complaints Mechanism of SIS-REDD+ Misiones, financial reports, and other reports that provide information on the Program's performance relevant to this safeguard. Internal and external audits conducted on the Program.
Description of measurement/ass essment methods and procedures to be applied:	To measure the indicator, a qualitative assessment is first made regarding how indigenous peoples and local communities should access Program benefits, ensuring that this access is appropriate according to current regulations and respects indigenous rights. For this purpose, the efforts made by the GPM to strengthen the effective participation of indigenous peoples and communities in the Program will be analysed, along with the funds effectively channelled, focusing on monitoring and analysing the amount allocated to this sector. Key aspects of this assessment include the dialogue conducted with the Guaraní people and local communities and efforts to disseminate culturally appropriate information about the Program. The following methodology will be applied to measure the indicator: 1. Approach analysis: Identify and analyse (qualitatively) the relevant regulatory framework regarding access to REDD+ benefits for indigenous peoples and local communities, including the operational rules of the REDD+ ECO2 Fund. 2. Program alignment analysis: Conduct a qualitative assessment of the level of alignment of the BDM's design within the Program's special modality for the Guaraní people and local communities with the approach framework identified in the previous step.



	3. Official records of BSM implementation: Analyse (qualitatively) the BSM's performance based on financial-accounting reports of the REDD+ ECO2 Fund to determine the flows of funds allocated to indigenous peoples and local communities (allocation percentages, forms of channelling) and compliance with the relevant approach framework and BDM rules. 4. Information dissemination analysis: Analyse efforts made by the GPM to involve and/or consult with communities, evaluating the role of the Multisectoral Monitoring Forum of the Program in this regard; minutes of workshops and other participation and/or dissemination activities specific to indigenous peoples that occurred during the reporting period, as well as the Registry of Communications and Claims Mechanism related to the BSM, and others, as appropriate. 5. Perception surveys: Conduct surveys, interviews, or workshops in the field to gather direct information from stakeholders (communities, leaders, indigenous leaders, or others) regarding access to the BSM in accordance with their rights, customs, and traditions. 6. Qualitative evaluation: Use criteria of consistency, adequacy, and coherence. The analysis will be expressed in the following three categories: (i) "adequate," (ii) "partially adequate," or (iii) "not adequate," with the respective justification. Analysis of the indicator will be the responsibility of the SIS-REDD+ Misiones Unit. Preliminary results will be shared with the Multisectoral Monitoring Forum of the Program before being published in the Annual Report of SIS-REDD+ Misiones, according to the established procedure.
Frequency of monitoring/recording:	With every Monitoring Report
Value:	Adequate Partially adequate Not adequate
Calculation method:	Described in row "Description of measurement/assessment methods and procedures to be applied" above
Comments:	

Safeguard D - Full and Effective Participation of Parties



The EPREDD+ ensures proper dissemination of information, as well as full and effective participation, and grievance mechanisms with a gender focus. This involves civil society actors, indigenous peoples, forest-dependent communities, scientific and academic institutions, private landowners, forest producers and companies, professionals, and key government entities in the process of preparing, implementing, and monitoring REDD+ in the province of Misiones.

Data / Parameter (Indicator):	The Program was designed and is implemented consistently with the provincial, national, and international legal framework regarding public participation rights.
Data unit:	Not applicable.
Description:	Qualitative analysis to assess the extent to which the Program's actions were designed and are implemented in alignment with the international, national, and provincial framework regarding public participation rights.
Source of data:	 International, national, provincial, and Program documents and legislation: international instruments, laws, decrees, regulations, and national and provincial policies related to multi-stakeholder participation in environmental matters. Program documents, records, and official reports: official Program documents; the REDD+ ECO2 Registry; the Registry of the Communication and Complaints Mechanism of SIS-REDD+ Misiones; financial reports, and others. Safeguard reports: Country Safeguard Information Summary submitted to the UNFCCC; Annual Report of SIS-REDD+ Misiones. Documentation of participatory processes: minutes and reports of workshops and other multi-stakeholder participation and consultations. Surveys and polls: surveys, interviews, and polls conducted with key actors. Other relevant sources as appropriate.
Description of measurement/ass essment methods and procedures to be applied:	To measure the indicator, a qualitative evaluation is conducted first regarding the level of approach to this safeguard. Next, the consistency of the design of the Program's actions and components with the approach framework is assessed. Finally, the efforts made by the GPM to strengthen respect for the safeguard during the monitoring period are evaluated. The assessment of results and procedures implemented to ensure multi-stakeholder consultation within the Program will be essential for this last step. The following methodology will be applied to measure the indicator: 1. Approach analysis: Identify and analyse (qualitatively) the relevant regulatory framework for multi-stakeholder participation in the context of REDD+,



including the institutional and public policy framework to facilitate its implementation within the Program's context. <u>Program alignment analysis</u>: Conduct a qualitative assessment of the level of alignment of the Program's design with the approach framework identified in the previous step. Official records of Program implementation: Conduct a qualitative analysis to determine how the effective implementation of the Program aligns with the approach framework of Safeguard D, based on official information provided by Program databases related to multi-stakeholder participation, such as training workshops related to the Program; the Registry of the Communication and Claims Mechanism; Program performance reports presented to the Multisectoral Monitoring Forum according to Program rules; publicly accessible financial reports, and others as applicable. 4. Information dissemination analysis: Analyse efforts made by the GPM to promote full and effective participation by examining minutes, technical reports, records, or other instruments of memory and records of multi-sectoral participatory processes, including free, prior, and informed consultation with indigenous peoples. Records of surveys, interviews, and polls conducted where actors make contributions are also examined. The level of participation, representation of sectors and key actors for the Program, gender equity, appropriate invitation, cultural and social appropriateness of participation will be assessed. Qualitative evaluation: Use criteria of consistency, adequacy, and coherence. The analysis will be expressed in the following three categories: (i) "consistent," (ii) "partially consistent," or (iii) "not consistent," with the respective justification. Analysis of the indicator will be the responsibility of the SIS-REDD+ Misiones Unit. Preliminary results will be shared with the Multisectoral Monitoring Forum of the Program before being published in the Annual Report of SIS-REDD+ Misiones, according to the established procedure. With every Monitoring Report Frequency of monitoring/recordi ng: Consistent Value: Partially Consistent Not Consistent



Calculation method:	Described in row "Description of measurement/assessment methods and procedures to be applied" above
Comments:	-

Safeguard E - Conservation of Native Forests and Biodiversity, Enhancing Other Social and Environmental Benefits

The EPREDD+ will promote actions to preserve native forests and address climate change, while also advocating for the environmental benefits, biodiversity, ecosystem services, water regulation, and soil conservation derived from native forests. At the same time, REDD+ actions will mitigate risks to these aspects, promoting the full implementation of key national and provincial environmental regulations, thereby preventing and mitigating undue harm to nature.

Data / Parameter (Indicator):	The Program was designed and is implemented consistently with the provincial, national, and international legal framework for the conservation of biodiversity and ecosystem services of forests.
Data unit:	Not applicable.
Description:	Qualitative analysis to assess the extent to which the Program's actions were designed and are implemented in alignment with the international, national, and provincial framework regarding the conservation of biodiversity and ecosystem services of forests.
Source of data:	 International, national, provincial, and Program documents and legislation: international instruments, laws, decrees, regulations, and national and provincial policies related to the conservation of biodiversity and ecosystem services of forests. National and provincial biodiversity information systems: national and provincial reports associated with native forests, including the National Forest Monitoring System⁸⁶, the Integrated Environmental Information System (SINIA)⁸⁷, and others. Program documents, records, and official reports: official Program documents; the REDD+ ECO2 Registry; the Registry of the Communication and Complaints Mechanism of SIS-REDD+ Misiones; financial reports, and other reports

⁸⁶ https://www.argentina.gob.ar/ambiente/bosques/monitoreo-bosques-nativos

⁸⁷ https://ciam.ambiente.gob.ar/



that provide information relevant to the Program's performance related to this safeguard.

Other sources as deemed appropriate.

Description of measurement/ass essment methods and procedures to be applied:

To measure the indicator, a qualitative evaluation is conducted first regarding the level of approach to this safeguard by the international, national, and provincial legal framework concerning biodiversity and ecosystem services in forest management. Next, the consistency of the design of the Program's actions and components with the analysed approach framework is assessed. Finally, the efforts made by the GPM to strengthen respect for the safeguard during the monitoring period are evaluated. In this case, the analysis of national and provincial policies, programs, projects, and information systems implemented in the field will be essential.

The following methodology will be applied to measure the indicator:

- 1. <u>Approach analysis</u>: Identify and analyse (qualitatively) the relevant regulatory framework for biodiversity and ecosystem services concerning REDD+, including the institutional and public policy framework to facilitate its implementation within the Program's context.
- 2. <u>Program alignment analysis</u>: Conduct a qualitative assessment of the level of alignment of the Program's design (components and actions) with the approach framework identified in the previous step.
- 3. <u>Documentary review</u>: Examine technical reports produced by national and provincial government agencies regarding the implementation of policies, programs, plans, or other actions related to the conservation of biodiversity and ecosystem services of native forests in the provincial territory. This will identify areas of special interest for ecosystem services, public policies with which the Program could generate synergies in biodiversity and ecosystem services, among other relevant inputs to consider when implementing the Program.
- 4. Official records of Program implementation: Conduct a qualitative analysis to determine how the effective implementation of the Program aligns with the approach framework of Safeguard E, based on official information provided by Program databases related to biodiversity and ecosystem services in forest management from the previous step. This will involve analysing to what extent the registered Promotion Plans and other Program interventions contribute effectively to the objectives of this safeguard, based on official data generated by jurisdictions and agencies other than the MEyRNR.
- 5. <u>Qualitative evaluation</u>: Use criteria of consistency, adequacy, and coherence. The analysis will be expressed in the following three categories: (i) "consistent," (ii) "partially consistent," or (iii) "not consistent," with the respective justification.

Analysis of the indicator will be the responsibility of the SIS-REDD+ Misiones Unit. Preliminary results will be shared with the Multisectoral Monitoring Forum of the



	Program before being published in the Annual Report of SIS-REDD+ Misiones, according to the established procedure.	
Frequency of monitoring/recording:	With every Monitoring Report	
Value:	Consistent Partially Consistent Not Consistent	
Calculation method:	Described in row "Description of measurement/assessment methods and procedures to be applied" above	
Comments:	-	

Safeguard F - Prevention of Reversal Risks

REDD+ actions are designed and implemented with a sustainability focus, preventing potential reversals of the efforts made caused by fires.

Data / Parameter (Indicator):	The Program is aligned with and contributes to the strengthening of the Province's Fire Management Plan.
Data unit:	Not applicable.
Description:	Qualitative analysis of the legal framework, policies, programs, plans, information systems, and other tools currently available for forest fire management in the Province, and how the Program's actions are aligned and contribute to the improved performance of those tools.
Source of data:	 International, national, and provincial documents and legislation: international instruments, laws, decrees, regulations, and national and provincial policies related to forest fire management. National policies, programs, projects, and systems: National Fire Management System and other key initiatives for forest fire management at the national level.



- <u>Provincial policies, programs, projects, and systems</u>: The Fire Management Plan of the Directorate of Forests of the MEyRNR and other key initiatives for forest fire management at provincial level.
- <u>Program documents, records, and official reports: official Program documents</u>; the REDD+ ECO2 Registry; the Registry of the Communication and Complaints Mechanism of SIS-REDD+ Misiones; financial reports, and other reports that provide information relevant to the Program's performance related to this safeguard.

Description of measurement/ass essment methods and procedures to be applied:

To measure the indicator, a qualitative evaluation is conducted first regarding the level of approach to this safeguard by the international, national, and provincial legal framework for forest fire prevention and response in the provincial territory. Next, the consistency of the design of the Program's actions and components with the analysed approach framework is assessed. Finally, the efforts made by the GPM to strengthen MEyRNR's Fire Management Plan and other associated capacities and systems during the monitoring period are evaluated. In this case, the analysis of national and provincial policies, programs, projects, and information systems implemented in the field will be essential.

The following methodology will be applied to measure the indicator:

- 1. <u>Approach analysis</u>: Identify and analyse (qualitatively) the relevant regulatory framework for forest fires in the context of REDD+ including the institutional and public policy framework to facilitate its implementation within the Program's context.
- 2. <u>Program alignment analysis</u>: Conduct a qualitative assessment of the level of alignment of the Program's design (components and actions) with the approach framework identified in the previous step.
- 3. <u>Documentary review</u>: Examine technical reports produced by national and provincial government agencies regarding the implementation of policies, programs, plans, or other related actions, particularly the National Fire Management Service (SNMF), the Province's Fire Management Plan, among other relevant inputs to consider when implementing the Program.
- 4. Official records of Program implementation: Conduct a qualitative analysis to determine how the effective implementation of the Program aligns with the approach framework of this Safeguard F and how it contributes to the fire management systems and procedures identified in the documentary review of the previous step. This will involve analysing to what extent the Program contributes effectively to the objectives of this safeguard, based on official data generated by other jurisdictions.
- 5. <u>Qualitative evaluation</u>: Use criteria of consistency, adequacy, and coherence. The analysis will be expressed in the following three categories: (i)



	"consistent," (ii) "partially consistent," or (iii) "not consistent," with the respective justification. Analysis of the indicator will be the responsibility of the SIS-REDD+ Misiones Unit. Preliminary results will be shared with the Multisectoral Monitoring Forum of the Program before being published in the Annual Report of SIS-REDD+ Misiones, according to the established procedure.
Frequency of monitoring/recording:	With every Monitoring Report
Value:	Consistent Partially consistent No consistent
Calculation method:	Described in row "Description of measurement/assessment methods and procedures to be applied" above
Comments:	-

Safeguard G - Prevention of Leakage Risks

The EPREDD+ aligns its actions with the Territorial Planning of Native Forests, respecting the regulations established in each conservation category, which will prevent the displacement of emissions.

Data / Parameter (Indicator):	The Program contributes to strengthening the GPM's capacity for monitoring native forests, allowing the assessment and prevention of the risk of emissions displacement from REDD+ in the Province.
Data unit:	Not applicable.
Description:	Qualitative analysis of the legal framework, policies, programs, plans, information systems, and other tools that are current and useful for assessing and preventing the risk of emissions displacement from REDD+ in the Province



Source of data:

- <u>International, national, and provincial documents and legislation</u>: international instruments, laws, decrees, regulations, and national and provincial policies related to the risk of emissions displacement from REDD+.
- <u>National policies, programs, projects, and systems</u>: Native Forest Monitoring System, Greenhouse Gas Inventory ⁸⁸, and other key systems and initiatives for addressing and respecting this safeguard.
- <u>Provincial policies, programs, projects, and systems</u>: Monitoring System of the Program and the Province, along with other key initiatives for managing the risk of emissions displacement from REDD+ in the Province.
- <u>Program documents, records, and official reports</u>: official Program documents, such as the REDD+ ECO2 Registry, Monitoring Reports, the Annual Report of SIS-REDD+ Misiones, and other reports that provide relevant information on the Program's performance related to this safeguard.
- Others deemed appropriate.

Description of measurement/ass essment methods and procedures to be applied:

To evaluate the indicator, a qualitative criterion of the legal, institutional, and available tools for addressing the risk of emissions displacement from REDD+ in the provincial territory will be used. Next, the consistency of the design of the Program's actions and components with the analysed approach framework is assessed. Finally, the efforts made by the GPM to strengthen its monitoring and risk prevention capacity during the monitoring period are evaluated.

The following methodology will be applied to measure the indicator:

- 1. <u>Approach analysis</u>: Identify and analyse the relevant regulatory framework for addressing the risk of emissions displacement from REDD+ including the institutional and public policy framework to facilitate its implementation within the Program's context.
- 2. <u>Program alignment analysis</u>: Conduct a qualitative assessment of the level of alignment of the Program's design (components and actions) with the approach framework identified in the previous step.
- 3. <u>Documentary review</u>: Examine technical reports produced by national and provincial government agencies regarding the implementation of policies, programs, plans, or other actions related to the risk of emissions displacement from REDD+, especially those produced within the framework of PANByCC, among other relevant inputs to consider when implementing the Program.
- 4. <u>Official records of Program implementation</u>: Conduct a qualitative analysis to determine how the effective implementation of the Program aligns with the approach framework of this Safeguard G and how it contributes to the systems and procedures for managing the risk of emissions displacement from the Program. This will involve analysing to what extent the Program effectively contributes to the

⁸⁸ https://ciam.ambiente.gob.ar/repositorio.php?tid=9#



objectives of this safeguard, based on the progress of the National Government within the framework of PANByCC.

5. <u>Qualitative evaluation</u>: Use criteria of consistency, adequacy, and coherence. The analysis will be expressed in the following three categories: (i) "consistent," (ii) "partially consistent," or (iii) "not consistent," with the respective justification.

Analysis of the indicator will be the responsibility of the SIS-REDD+ Misiones Unit. Preliminary results will be shared with the Multisectoral Monitoring Forum of the Program before being published in the Annual Report of SIS-REDD+ Misiones, according to the established procedure.

Step 1: Approach Analysis

Leakage, or emissions displacement, occurs when efforts to reduce emissions in one area led to increased emissions elsewhere (for example, efforts to prevent deforestation in one province may result in increased deforestation in a neighbouring province).

National Approach

In its First Summary of Safeguards Information presented to the UNFCCC in 2019, Argentina's government reported on Cancun Safeguard G, stating that the effective implementation of Native Forest Law 26,331 helps reduce emissions leakage risks in the National REDD+ Strategy (PANByCC) and in subnational REDD+ activities, such as the REDD+ ECO2 Program in Misiones. This is achieved through national deforestation monitoring and early warning systems that allow for the identification and tracking of these risks. Native Forest Law 26,331 applies throughout the country based on pre-established criteria that prevent deforestation from simply shifting to forests designated for conservation, regardless of jurisdiction.

Argentina also has institutional channels to support regional agreements that mitigate interprovincial deforestation risk and foster cooperation among international organizations and/or forest agencies, including COFEMA and Climate Change National Cabinet. Additional tools are in place at the national level to prevent and detect leakage risks, including:

- <u>Native Forest Territorial Zoning (OTBN):</u> a provincial-level forest mapping framework under Native Forest Law 26,331, indicating forest areas for monitoring based on conservation categories (red, yellow, and green).
- <u>National Native Forest Monitoring System (SNMBN)</u>: provides reports on forest cover loss using data supported by maps and digital overlays accessible through a public platform. The SNMBN currently covers the regions of the Chaco,



Yungas, Paraná Rainforest, and Espinal. Monitoring of the Andean Patagonian Forest and Monte regions is also underway, with preliminary 2018 data showing only 1.7% native forest loss in these two regions.

• <u>Deforestation Early Warning System:</u> a component of SNMBN, generating deforestation alerts and incorporating timber tracking for enhanced regulation and prevention of illegal timber trafficking.

Provincial Approach in Misiones

Forest governance in Misiones is managed by the General Directorate of Native Forests (DGBN) within the Ministry of Ecology and Renewable Natural Resources (MEyRNR). The DGBN enforces the National Native Forest Law and Law XVI–No. 7, which covers conservation plans, OTBN under Law XVI 105, regulatory controls, monitoring, and sanctions. (A detailed assessment of the approach to Cancun Safeguard G is available in Indicator 2 of this PDD.)

Misiones operates a Monitoring, Reporting, and Verification (MRV) System for REDD+, which consolidates data for the Program's monitoring plan. This MRV integrates information from systems like the Native Forest Monitoring System, Deforestation Early Warning System, Forest Management, Control and Verification System, and Fire Early Warning System. These systems are instrumental in enforcing Law 26,331, which established the National Program for the Protection of Native Forests. Among its goals, the National Program aims to maintain updated information on native forest cover and conservation status, and to equip enforcement authorities in different jurisdictions with the technical capacity to create, monitor, supervise, and evaluate sustainable native forest management plans. Therefore, the MRV System for REDD+ and monitoring plan implementation are supervised by the National Program under DGBN management within the MEyRNR.

DGBN has two directorates: the Directorate of Forest Control and the Directorate of Sustainable Management. The Directorate of Forest Control oversees compliance with native forest regulations in Misiones through its Forest Control Department and Guides and Archives Department. This Directorate is responsible for the Forest Management, Control, and Verification System, which is essential for monitoring REDD+ ECO2 Program performance, as detailed in Section 5.4.

Step 2. Program alignment analysis

The National Action Plan for Forests and Climate Change (PANByCC) complements and reinforces the framework of the Native Forest Law by establishing actions linked to governance strengthening (EEE 1), enhanced monitoring and control capacities (EEE 3), and support for local communities (EEE 2). This includes initiatives such



as land tenure regularization (action 2.1), territorial planning (EEO 6), conservation within productive landscapes (EEO 8), and forest fire prevention (EEO 10). Additionally, the PANByCC includes actions aimed at bolstering the country's capacity to monitor and prevent emissions displacement, including improved enforcement of existing laws, institutional strengthening, and the optimization of organizational structures across national, provincial, and municipal levels.

Similarly, the Provincial REDD+ Strategy of Misiones (EPREDD+) aligns with the same strategic axes of the PANByCC. Its effective implementation through the JNR Program is expected to enhance both national and provincial capacities to monitor and mitigate leakage risks by strengthening monitoring systems. The Program's Benefit Sharing Mechanism (BSM) allocates resources specifically within Account 3 (Operation of the Program) to support institutional capacity-building efforts that address deforestation and degradation drivers, including strengthening early warning and fire response systems, monitoring illegal logging, and controlling traceability to reduce timber trade illegality. Additionally, Sub-account 3.1 within Account 3 is dedicated to necessary investments and maintenance, reinforcing capacities to reduce deforestation and degradation drivers.

The Program's "Leakage Management" strategy, detailed in Section 3.4, focuses on addressing deforestation activities at their source, aiming to avoid any increase in GHG emissions outside the jurisdictional area as a result of program activities (leakage). To identify and quantify leakage risks, the Program employed the VCS Jurisdictional and Nested REDD+ (JNR) Leakage Tool, aligning each program activity and leakage mitigation measure with one or more of the identified deforestation drivers.

According to Verra's JNR Scenario 2 Requirements, the Program must also consider leakage management for adjacent jurisdictions within the same country. In Misiones, over 90% of its boundaries are international, neighbouring Brazil to the North and East and Paraguay to the West, with a smaller southern border adjacent to Corrientes Province. Additionally, carbon stock enhancement activities are outside the scope of the Program, so any related GHG reductions, removals, and potential leakage are excluded from the baseline.

Step 3. Documentary review

In subsequent monitoring reports, the Program will be able to assess its impact on enhancing the Province's capacity for leakage risk reduction and monitoring. To this end, Section 5.3 of this PDD outlines specific monitoring indicators designed for this purpose.



The General Directorate of Native Forests (DGBN) will oversee monitoring the data and parameters listed in Section 5.3. This information, which is used at the national level for UNFCCC reporting, will undergo an annual review to ensure alignment with national frameworks and submissions. Values will only be adjusted if there are changes to the national definitions. Additionally, the DGBN's technical team will conduct annual monitoring of Section 5.3 data. Within this section, the Program provides a series of dedicated indicators to comprehensively track leakage in alignment with the JNR methodologies.

As the Program advances in its implementation, the Province is expected to strengthen its Monitoring, Reporting, and Verification (MRV) capacity, including aspects of leakage management. This progress will be supported by the additional funds allocated through the Program's Benefit Sharing Mechanism (Account 3) and through the experiences and adjustments that can be made to the MRV system over time.

Step 4. Official records of Program implementation

Since this document represents the Program's registration phase, there is currently no information available on how the Program will actively strengthen adherence to this aspect of Cancun Safeguard G. However, the Program and its various components have been designed with a series of robust and transparent monitoring systems to effectively manage leakage risk. Key mechanisms include:

- Allocation of resources to strengthen the Misiones REDD+ MRV System: Annually, or when a monitoring report is presented (whichever comes first), the SIS Unit will verify that the ECO2 Fund has allocated predetermined amounts, according to the Program's Benefit-Sharing Mechanism rules, to Account 3, "Operation of the Program." This account includes the mandate to enhance the Province's general forest monitoring capacity. These financial reports will be made available to the public and the Program's Multisectoral Monitoring Forum.
- Quality and transparency arrangements in monitoring: The General Directorate of Native Forests (DGBN) will oversee data and parameters for monitoring Program performance (further details in Section 5 of this PDD). National-level information for UNFCCC reporting will undergo an annual review for consistency with national approaches. Adjustments will only occur if national definitions change. DGBN's technical team will also conduct annual monitoring of Section 5 data. For the initial FREL validity period, the same Coralia Environmental team responsible for FREL development will manage processing. The methodologies specified in Sections 3.6.3 "Methods for Quantification of Baseline



	and Program Emissions" and 3.6.4 "Land Cover Maps" will be replicated for data processing, with rigorous quality assurance and control measures in place.							
	DGBN will ensure accurate collection, processing, storage, and reporting of monitoring data, which will be archived on MEyRNR's servers, with electronic copies retained on MEyRNR's computers and reviewed annually. Documentation for monitoring, validation, verification, and certification will be archived for at least five years post-program completion. Backups of generated information will be retained for two years following the crediting period.							
	• Leakage Monitoring: The Program includes specific leakage indicators detailed in Section 5.3, "Data and Parameters Monitored," in accordance with JNR standard requirements. The monitoring report and underlying data will be available on the ECO2 Program's website (https://programajnr.misiones.gob.ar/) and shared with the Program's Multisectoral Monitoring Forum. Non-conformities will be addressed through the REDD+ Communication and Grievance Mechanism. Any deviations from validated monitoring methods or discrepancies with the monitoring plan will be justified in the relevant reports and updated in subsequent FREL versions if necessary. As a result, the progressive implementation of the Program is expected to strengthen the Province's MRV capacity, thereby enhancing its ability to manage potential leakage risks effectively.							
Frequency of monitoring/recording:	With every Monitoring Report							
Value:	Consistent Partially Consistent Not Consistent							
Calculation method:	Described in row "Description of measurement/assessment methods and procedures to be applied" above							
Comments:	-							



6.3. Description of the Safeguards Information System

SIS-REDD+ Misiones

The SIS is one of the requirements established by the UNFCCC for REDD+. During COP17 held in Durban in 2011⁸⁹, a set of decisions regarding the characteristics of these systems was agreed. Table 23 summarizes these guidelines and indicates how they have been addressed by SIS-REDD+ Misiones:

COP17 Guidelines	COP 17 Guideline adoption in the design of SIS-REDD+ Misiones		
Information provided must be accessible to all key REDD+ stakeholders	The SIS is publicly accessible on its website and uses straightforward language suitable for a range of potentially interested sectors. Additionally, from the earliest stage of its design, the public was informed about the development process (Phase 1), and the design document was open for consultation (Phase 3) ⁹⁰ . Furthermore, its institutional arrangements include the functioning of the multisectoral Forum for Monitoring the REDD+ ECO2 Program (see Section SIS Component 3: Functions and Institutional Arrangements).		
Information must be transparent and comprehensive in relation to the wide range of topics to be reported in the SIS	The SIS addresses the seven Cancun Safeguards based on the National Interpretation of Safeguards (MAyDS, 2019) (see the "objective" title in Section SIS Component 1: Objectives and Scope).		
The system should be designed flexibly, allowing for continuous improvements and adjustments as needed	The SIS was designed with a flexible structure: it reports safeguard information at three levels: related to (i) the EPREDD+; (ii) the Jurisdictional Program; and (iii) any other future REDD+ initiative that could be implemented (see the "scope" title in Section SIS Component 1: Objectives and Scope).		
The system should, as much as possible, rely on existing systems and sources of information	The SIS prioritizes obtaining information from existing sources, complemented by information generated by the program itself (see Section SIS Component 2: Reporting Needs and Information Sources).		

Table 23: Alignment of SIS-REDD+ Misiones with COP17 Guidelines

Components

⁸⁹ Decision 12/CP.17, paragraph 2, of the UNFCCC.

⁹⁰ Informational brief from the Dialogue Forum for providing feedback on Program documents (Phase 3), including the SIS-REDD+ for Misiones: https://programajnr.misiones.gob.ar/salvaguardas/consulta-fase-3/



Verra's JNR Programs must have safeguards systems that align with the requirements established by the UNFCCC, with the SIS being a central element. Inspired by the model proposed by the UN-REDD Program⁹¹, the SIS-AR (national), the Safeguard Information System for REDD+ in Misiones (referred to as "SIS-REDD+ Misiones") was structured based on four components.

The development of the components is an excerpt from the SIS-REDD+ Misiones Design Document, made available for public consultation on March 16th through the ECO2 Dialogue Table. The document can be downloaded from the SIS website here: https://programajnr.misiones.gob.ar/salvaguardas/sistema-de-informacion/.

SIS Component 1: Objectives and Scope

Objectives

SIS-REDD+ Misiones is an up-to-date and publicly accessible platform with the aim of providing information on:

APPROACH: how the existing legal and institutional instruments for REDD+ in the province align with the Cancun Safeguards to ensure an appropriate implementation framework for safeguard compliance.

According to Argentina's First Summary of Safeguard Information presented to the UNFCCC in 2019⁹², the country has a legal framework that addresses the different aspects of the Cancun Safeguards. This level of adequate alignment has allowed the country to access the Green Climate Fund's Results-Based Payment Program, an aspect thoroughly evaluated by the fund in the ESA Report attached to the country's Financing Proposal.

Additionally, SIS-REDD+ Misiones includes an additional approach assessment to the approach framework of the aforementioned report (MAyDS, 2019), which will presented to the VVB during validation.

RESPECT: how the Cancun Safeguards are respected during the design and implementation of REDD+ activities in the Province, particularly in the REDD+ ECO2 Program, as well as other present or future REDD+ initiatives to be implemented.

To achieve this, the SIS-REDD+ Misiones has identified and designed a set of indicators to assess compliance with the Cancun Safeguards.

To accomplish these two main objectives of the SIS, SIS-REDD+ Misiones has the following goals:

1. Inform the public, especially the involved sectors and actors, about how the Cancun Safeguards are addressed and respected during the design, implementation, and monitoring of EPREDD+ and the REDD+ ECO2 Program, in accordance with current legal and institutional frameworks.

⁹¹ UN-REDD Program. 2015. REDD+ Safeguard Information Systems: Practical Design Considerations.

⁹² Available for consultation on: https://www.argentina.gob.ar/ambiente/cambio-climatico/resumen-informacion-salvaguardas



- Generate transparent and up-to-date information for the GPM to report on the approach and respect of the Safeguards to MAyDS (within the framework of the SIS-AR) and to Verra regarding the REDD+ ECO2 Program.
- Serve as a reliable and accurate source of information regarding the social, environmental, and governance performance of REDD+ in the Province of Misiones, functioning as a virtual space for the participation and capacity building of various stakeholders, providing accessible and appropriate information channels for suggestions, complaints, requests for information, and other resources⁹³.
- 4. Provide transparency and reliability to REDD+ in the province.

Scope

The information provided by SIS-REDD+ Misiones is strictly provincial and limited to the forest region of native forests and green corridors. For this purpose, the information is reported under the following REDD+ approaches in the province:

- Provincial REDD+ Strategy: to inform about the approach and respect of the Cancun Safeguards during the design and implementation of the EPREDD+, as a general framework where the REDD+ ECO2 Program operates.
- REDD+ ECO2 Program: to inform about the approach and respect of the Cancun Safeguards and the specific requirements established by Verra for JNR Programs during the design and implementation of the REDD+ ECO2 Program.
- Other REDD+ Initiatives: leaves open the possibility to integrate Safeguard reporting with other initiatives that may be developed in future or that may require reporting, thus ensuring a comprehensive and coherent provincial Safeguard approach.

SIS Component 2: Reporting Needs and Information Sources

⁹³ To achieve this goal, the website of the SIS-REDD+ Misiones was initially called the "ECO2 Dialogue Forum." It served as a virtual space provided by the Government of the Province of Misiones for the general public. Its purpose was to listen to and incorporate the voices and interests of various sectors of Misiones society into the ECO2 REDD+ Program. These sectors included indigenous peoples and communities, construction workers, loggers, agricultural producers, forest owners, NGOs, and others.

The Dialogue Forum aims to enhance capabilities and disseminate key information about various aspects of the ECO2 REDD+ Jurisdictional Program. It seeks to promote an informed and participatory process, democratize public decisions, and ensure the rights of participation and access to environmental information as enshrined in the Escazú Agreement, relevant national and provincial regulations, and in strict compliance with REDD+ environmental and social safeguards.

During the three Consultation Phases, the Forum periodically featured informational capsules on core aspects such as the Consultation and Outreach Plan of the Program, reports on the results of the participation phases, a Questions and Answers document about the Program, Agreements and Conventions entered by the GPM with third parties for the Program's development. Above all, it was the space where, during Phase 3, various components of the JNR Proposal to be submitted to Verra were open for public consultation. (Link: https://programajnr.misiones.gob.ar/salvaguardas/#)



This component addresses two key aspects of any SIS:

1. <u>Information to report ("reporting needs")</u>: This refers to the information that must be reported through SIS-REDD+ Misiones and is based on its objectives. It is necessary to understand how the Safeguards are contextualized, which in the case of SIS-REDD+ Misiones is based on the National Interpretation of Safeguards from SIS-AR (and its provincial interpretation, see below); which Safeguards should be reported; and which indicators will be used to evaluate compliance with them.

SIS-REDD+ includes different compliance indicators according to its reporting approaches:

- For the EPREDD+: narrative reporting on the APPROACH to the safeguards, applicable to all types of REDD+ activities in the province.
- For the REDD+ ECO2 Program: a series of indicators are proposed to assess compliance with the Cancun Safeguards in the Program's implementation.
- 2. <u>Information sources</u>: once reporting needs are defined, it is necessary to identify where the information can be obtained to feed SIS-REDD+ Misiones. These are known as "information sources," which generally consist of existing systems, both specific to REDD+ and related to other social-environmental policies, managed by various entities/organizations (public, private, national, and international).

SIS Component 3: Functions and Institutional Arrangements

SIS-REDD+ Misiones will have the following functions:

- Collect information on Safeguards from various sources that operate periodically and transparently.
- Process the collected information through a technical team assigned to this role at the Ministry
 of Ecology and Renewable Natural Resources (MEyRNR) of the Province of Misiones.
- Analyse the collected and processed information considering each UNFCCC Safeguard, following the conceptualization and scopes mentioned above, and the current legal and institutional frameworks. This analysis will be conducted by the technical team assigned to this purpose at the MEyRNR of the Province of Misiones.
- Produce information reports on the approach and compliance with the Safeguards, based on the aforementioned steps, to inform the public (especially key REDD+ actors), VERRA as funding body, entities or creditors for carbon certificate sales or results-based payments, other donors, partners, and national and international organizations and entities interested in REDD+ in the Province of Misiones.

Institutional Arrangements for Implementing the SIS:



To implement this information system, institutional arrangements will be made to ensure the effective operation of the Misiones SIS.

(i) SIS Technical Team or "SIS Unit"

Once the Program is registered with Verra, the SIS Technical Team (SIS-Unit) will be formed, consisting of a technical representative from the MEyRNR and another from the Ministry of Climate Change of the Province, directly appointed by the authorities of both ministries. These representatives should ideally have technical experience in data management, statistics, and the preparation of technical reports, preferably in the fields of forestry, environmental sciences, social sciences, or related fields. Their work will be coordinated by those responsible for implementing the EPREDD+, the Jurisdictional REDD+ ECO2 Program, and other REDD+ initiatives as necessary. The roles of the SIS Technical Team may include:

- Periodically surveying the assigned information sources and collecting relevant Safeguard information.
- Developing internal information gathering protocols.
- Developing a matrix for qualitative and quantitative analysis of information.
- Periodically updating information sources, considering the possibility of incorporating new sources.
- Gather and produce the necessary information to assess and report the safeguards indicators of section 6.1 and 6.2Maintaining contact and coordination with various governmental and nongovernmental entities that provide information sources.
- Coordinating the signing of inter-institutional agreements necessary for data collection.
- Analysing the provided information according to Safeguard standards and the types of activities carried out within the REDD+ framework in the province.
- Maintaining a processing and record matrix for information.
- Preparing technical Safeguard analysis reports and conducting dialogue and feedback processes with key actors.
- Providing technical leadership of the reporting processes to Verra and other key organizations and actors.
- Coordinating the dissemination and feedback of reports through designated communication channels and methods, through the SIS-REDD+ Misiones and other means.

Figure 42 illustrates the operating scheme of the SIS-REDD+ Misiones and the role of the SIS Technical Team.



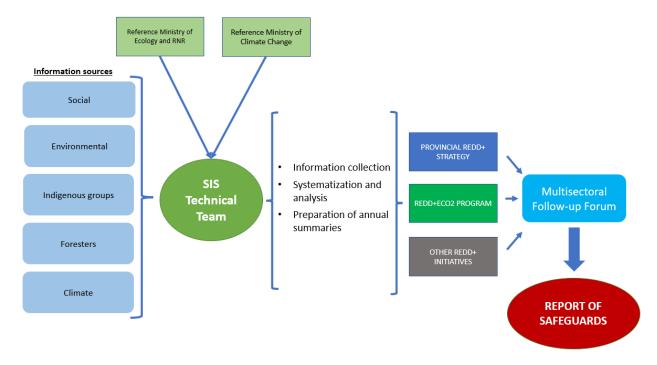


Figure 42: Institutional Arrangements for Implementing the SIS-REDD+ Misiones

Interim SIS Technical Team: Until the Program is registered with the first Monitoring Report, the Government of the Province of Misiones has hired the Argentine consulting firm SinergiAr, which specializes in REDD+ environmental and social safeguards (www.sinergiar.com). This consultancy works closely with the team from the Ministry of Ecology dedicated to developing the Program, providing relevant information and strengthening their capacities in REDD+ safeguards. It is expected that once the SIS Technical Team is formed, the acquired capacities can be utilized effectively.

(ii) Multisectoral Forum for Monitoring the REDD+ ECO2 Program

The Dialogue Table was initially formed as a virtual space for participation, dissemination, and capacity building related to the REDD+ ECO2 Program. It has been in place since the start of the consultation process (prior to Phase 1), created to complement the participatory process and systematize multi-actor dialogue. For this purpose, the Dialogue Table provided the public with updated and accessible information for all types of actors on aspects related to:

- Planning participatory processes such as workshops, technical virtual meetings, and other dialogue, including dates and target audience.
- Specific and accessible information capsules on different core aspects of the REDD+ ECO2 Program, carbon markets, and technical documents.
- Reports on participatory events held, highlighting the most relevant aspects.
- Tools and components of the Project Document to be submitted to register the Program as part of Phase 3 of consultation.



As a result of the inputs received during the consultation process and to ensure the effective implementation of the Cancun Safeguards, this Dialogue Table will be consolidated as the Multisectoral Forum for Monitoring the REDD+ ECO2 Program once the Program is registered with Verra. Its purpose will be to monitor the Program's follow-up by the public, including progress in implementing the SIS and the Benefit Sharing Mechanism. In this way, all REDD+ activities in the Province (included in the REDD+ ECO2 Program) will have a procedure to promote multi-actor participation, access to information, and transparency.

Regarding the SIS, the Forum will play a fundamental role in providing feedback, socializing, and ensuring transparency in the information to be reported. To do so, according to the operational regulations to be established once the Program is registered with Verra, the SIS Technical Team will submit a Safeguard report draft to the Forum well in advance, allowing it to review and provide feedback to ensure that the information reported in the SIS is accurate and complete.

In principle, this Forum will be composed of *ad-honorem* representatives from institutions already performing similar functions in the Province's forest policy, within two existing participatory spaces related to REDD+: the Local Consultative Council for the Green Climate Fund's implementation and the Native Forests Forest Sector Dialogue Table. The Forum will be open to all citizens; however, the GPM will invite specific institutions such as:

- Faculty of Forestry Sciences (UNaM).
- Association of Forest Engineers of Misiones.
- Association of Agronomists of Misiones.
- National Institute of Agricultural Technology (INTA).
- Argentine Forestry Association (AFOA).
- Association of Timber, Sawmills, and Related Industries of Alto Paraná (AMAYADAP).
- APICOFOM.
- National Forest Carbon Table.
- Environmental civil society organizations and organizations related to indigenous populations.

The Forum will work with a GPM Coordinator, who will be responsible for regularly communicating the information produced by the Program and conducting periodic assessment surveys. Additionally, on an annual basis, hybrid - in-person and virtual - meetings will be held to present Program progress and work on suggestions, complaints, and necessary adjustments, with a special focus on Safeguard-related aspects. The Forum's website can be accessed at any time using the following link:

https://programajnr.misiones.gob.ar/salvaguardas/#

SIS Component 4: Operating Structure



Through the virtual platform, SIS-REDD+ Misiones⁹⁴ records, systematizes, and disseminates compliance with Safeguards by the various REDD+ initiatives in the province, especially the REDD+ ECO2 Program. In this way, it complies with the requirements established by the UNFCCC and Verra.

Key aspects of SIS-REDD+ Misiones operation are described below, and illustrated in Figure 43:

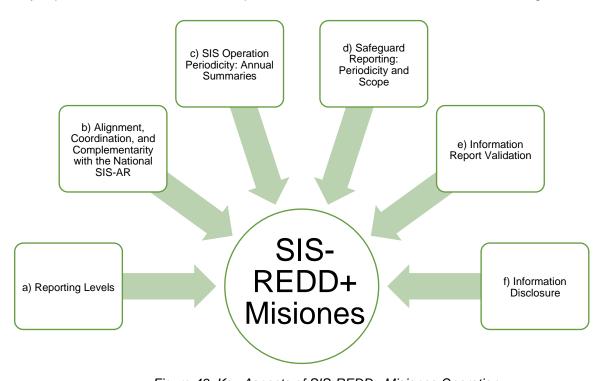


Figure 43: Key Aspects of SIS-REDD+ Misiones Operation

A brief description is provided below for each of these aspects within the framework of the SIS-REDD+ Misiones.

Capacity Building and Continuous Improvement of SIS

Under a continuous and progressive improvement approach, a series of steps are planned to update and adjust the design and operation of SIS-REDD+ Misiones. The following three actions are to be implemented once SIS-REDD+ Misiones operation begins:

<u>Information gathering protocols</u>: standardize and establish protocol formats for collecting key information according to each Safeguard, through existing and relevant information sources. These protocols, validated with relevant actors and institutions, will facilitate the work of SIS technicians, provide coherence in the processes and scope of collected information, and streamline work time.

⁹⁴ Access link: https://programajnr.misiones.gob.ar/salvaguardas/sistema-de-informacion



<u>Matrix for qualitative and quantitative analysis of Safeguard information</u>: once the information is collected, an analysis matrix with information indicators will be developed to standardize the analyses, maintain consistency within these analyses in the different reports presented during various REDD+ implementation phases, and ensure that, if changes in the SIS team are made, work criteria and methodologies will be sustainable over time.

<u>Automation of processes</u>: although it is challenging to automate processes due to the diversity of sources and types of Safeguard-related information required, options will be explored to facilitate, streamline, and, most importantly, enhance the transparency of SIS operation in the long term.

To ensure the sustainability and efficiency of SIS-REDD+ Misiones, a capacity-building plan will be implemented for key stakeholders, including the technicians responsible for its operation and all actors participating in validation and feedback processes for Safeguard summaries and reports.

Policy on Oversight and Accountability for SIS Technical Team Measurement and Evaluation Activities

Objective: Ensure accuracy, transparency and accountability in the monitoring and reporting of the SIS-REDD+ Missions.

1. Measurement and Evaluation Standards

All measurement and evaluation activities must adhere to the methodological standards and procedures to be defined in the SIS Technical Team manuals once consolidated. On an interim basis, consultants with recognized expertise in REDD+ safeguards will be hired to provide inputs to be reviewed and validated by the Province team.

Validated and internationally recognized data collection methods will be used to ensure consistency and comparability of results.

2. Supervision and Control

The Minister of Ecology and/or his or her designee will serve as the supervisor of the SIS Technical Team's measurement, assessment and reporting activities.

On an interim basis, recognized experts in REDD+ safeguards may be hired to support the process and ensure quality assurance until the SIS Technical Team's capacity is built.

3. Transparency in reporting

Reports will be thoroughly documented and presented in reports that are transparent and accessible to all interested parties.

Each report will include a clear description of the methods used, data sources, and any limitations that may affect the interpretation of the results.



The reports will be published on the SIS-REDD+ website and will be fed back to the Program Monitoring Forum.

The Program Monitoring Forum plays an essential role in the socialization and validation of the SIS-REDD+ Missions safeguards reporting information.

4. Responsibility and Accountability

All personnel involved in measurement and evaluation activities are responsible for following established procedures and for reporting any irregularities or discrepancies detected during the process.

5. Continuous capacity building

Continuous training will be provided for all SIS Technical Team personnel on measurement and evaluation procedures, including methodological and regulatory updates.

The technical competence of staff will be evaluated periodically to ensure that high quality standards are maintained.

6. Correction Mechanisms

Clear procedures will be established to address and correct any deviations or problems identified during measurement and evaluation activities that may arise from successive monitoring reports submitted.

Corrective actions will be documented and reviewed to prevent recurrences.

Misiones' REDD+ Communications and Grievance Mechanism

The Communication and Grievance Mechanism for REDD+ in the Province of Misiones (hereinafter "Grievance Mechanism") is the channel through which citizens in general, and key REDD+ stakeholders in particular, can make suggestions, requests for public environmental information and complaints related to all types of REDD+ activities in the Province, including the Provincial REDD+ Strategy, the Jurisdictional REDD+ ECO2 Program or other future initiatives.

The Grievance Mechanism was put into operation from the beginning of the design stage of the EPREDD+ and the REDD+ ECO2 Program, through the website of the ECO2 Dialogue Table, which later became the SIS-REDD+ Misiones website.

The main aspects of the design and operation of the Grievance Mechanism are described below.

Objetive and Scope

The objective of this Grievance Mechanism is to serve as a reliable and efficient communication channel for the different stakeholders, directly or indirectly related to REDD+, who for different reasons wish to



request information, complaints or suggestions to the GPM in relation to the design or implementation of REDD+ in the Province of Misiones.

The scope of this Grievance Mechanism is directed to all types of REDD+ activities in the Province, from the design stage, to their implementation and even their monitoring. In this way, the Grievance Mechanism works in a comprehensive and systematic way, to facilitate access to information by the different stakeholders, and aligned with the scope of the SIS-REDD+ Misiones.

Types of Actions Admitted

The types of actions that may be brought before the Grievance Mechanism are described below:

Request public information	Request public information related to technical, accounting, financial and/or strategic aspects of REDD+ and/or the Program.
Make a claim	Make a complaint related to the design, participation, dissemination and/or adequate implementation of REDD+ and/or the Program, such as: noticing irregularities in the implementation, complaining about non-compliance with agreements, execution delays, problems with the Program, among others.
Make suggestions	Provide information considered relevant for the REDD+ design and implementation stage, express opinions, or other contributions considered relevant for the improvement of REDD+ and/or the Program.
Making complaints	Know the existing mechanisms in the Province of Misiones to file complaints in relation to crimes, contraventions and / or other offenses that arise in the context of the implementation of REDD+, such as: illegal logging, illegal trade of timber or native fauna, sexual abuse, gender violence.

To facilitate this process of classification of claims and communications, the Mechanism has a system on its website that allows the user to easily classify the type of action he/she wishes to take, which is shown below:





En qué sector se desempeña laboral o profesionalmente: (marque solo una opción) Sector público (ministerios provinciales, gobierno nacional, municipios, comunas, etc.) Sector privado (productores, transportistas, comerciantes, entidades financieras, entidades bancarias, etc.) Organizaciones de la sociedad civil (ONGs, organizaciones territoriales, organizaciones religiosas, etc.) Pueblos indígenas Comunidades campesinas, criollas, pequeños productores Academia (universidades u otras instituciones educativas, públicas o privadas) Instituciones técnicas/científicas Sindicatos/organizaciones gremiales, Colegios profesionales Otros TEMÁTICA En relación a qué iniciativa/programa quiere realizar su reclamo: La implementación de la Estrategia Provincia REDD+ de Misiones (EPREDD+). El Programa REDD+ ECO2 de Misiones. Otras iniciativas vinculadas a REDD+ en la Provincia

Figure 44. Classification of Grievance Mechanism. Source: SIS-REDD+ Misiones web page

For more information, visit the Grievance Mechanism section of the SIS-REDD+ Misiones website, available at: https://programajnr.misiones.gob.ar/salvaguardas/.

Considerations on the design of the Grievance Mechanism

Given its scope, the Grievance Mechanism was designed with a gradual approach, foreseeing the possibility of complementing some of its aspects, as the Program's REDD+ implementation progresses, as necessary and convenient for its best performance.

Some of its main components are presented below.

Guiding Principles of the Communications and Grievance Mechanism

The design of the Grievance Mechanism was inspired by the following principles:

Principle	Content	Reflected in the MCR+
Free of charge	Any request or claim is free and free of charge for any natural or legal person.	It does not foresee any cost for the user.
Confidentiality	Maintain the confidentiality of the applicants' personal data and in accordance with Argentine regulations.	All information is confidential and protected, in accordance with the Personal Data Protection Law N°25326. No names will be published in the
		Claims Mechanism operation reports in order to preserve identities.



		Anonymous complaints can be
		Anonymous complaints can be made.
Accesibility	Raise awareness of all actors addressed by the Mechanism and provide adequate assistance to those who face particular barriers to access. Access barriers may include: a lack of knowledge of the Mechanism, its language, illiteracy, associated costs, physical location and fear of reprisals.	During the 3 PHASES of consultation of the REDD+ ECO2 Program, information was provided about the availability of the Grievance Mechanism, and some suggestions were even channeled during the design stage of the Program. Once the Program is registered with Verra, specific virtual workshops on the Mechanism will be held and its existence and operation will be reported in all workshops or face-to-face events to be held.
Predictability	Provide a clear and known procedure with an indicative timeline for each stage, with clarity in the types of processes and with follow-up.	A PDF with the flowchart and other basic concepts about its operation can be downloaded from the website.
Transparency	Keep the parties duly informed on the progress of the Program and provide sufficient information on the functioning of the Mechanism to strengthen confidence in its effectiveness and to address any public interest that may arise.	Upon action, the Grievance Mechanism automatically sends a response to the registered box with the process number, through which the user will be able to follow up. Reports on the performance of the Grievance Mechanism will be published annually on the SIS website.
Adequacy	Address a broad spectrum of complaints, suggestions, requests, denunciations.	The Grievance Mechanism manages in an integrated manner all types of REDD+ activities with relevance in the Province.
Impartiality	Respond to complaints and requests in an objective manner and based on the current regulatory framework.	In the case of "high priority" complaints, third parties are involved in the resolution of the conflict, in order to strengthen impartiality.
Cultural appropriateness	Adapt communications to different cultures, especially for indigenous peoples and local communities.	During the 2 PHASES of the participatory process with the original inhabitants, suggestions and complaints were collected, and information was provided on the



		existence of the Grievance Mechanism. Once the Program is registered, the Complaints Mechanism will work in a complementary manner with GPM's Guarani Affairs, to strengthen accessibility by indigenous peoples, providing non-virtual access modalities to it.
Updating and continuous improvement	Continuously adjust, update and improve the functioning of the Mechanism, according to identified needs and lessons learned, as well as incorporating those recommendations arising from the dialogue with stakeholders.	Improvements to the Grievance Mechanism are foreseen, especially for the implementation stage of the REDD+ ECO2 Program, once it is registered.

Table 24. Guiding Principles of the Communications and Grievance Mechanism

Functioning

The Grievance Mechanism (RCM+) can be accessed through the following three (3) ways:

Virtual

Through the SIS-REDD+ Misiones website, which has been in operation since the beginning of the REDD+ ECO2 Program design process, being disseminated during the three (3) consultation PHASES of the program.

To make a request for information, suggestions or complaint related to REDD+ in the Province, it is only required to create a user and confirm your email address, in order to ensure proper processing and effective response by this MCR+.

To perform any of the supported actions, the user only has to log in to the MCR+ website and choose the type of action he/she wishes to perform. In this way, the MCR+ allows an integrated, simple and easy-to-understand management for the different stakeholders.

The MCR+ can be accessed through https://programajnr.misiones.gob.ar/salvaguardas/.

Telephone



Through the direct communication line of the Ministry of Ecology and Renewable Natural Resources of the Province of Misiones, +54 3764- 883555, line also enabled for contact by SMS and WhatsApp. The web section of the same can be found at: https://ecologia.misiones.gob.ar/ecologia-te-escucha/.

MEyRNR staff will be trained to refer to the Claims Mechanism all actions related to REDD+ in the Province, in order to ensure that the mechanism registers (a process number is assigned) and resolves them in a unified and integrated manner. This training process is expected to be carried out once the REDD+ ECO2 Program is registered in Verra.

Presential

Users may also carry out the same procedures in person at the offices of the Ministry of Ecology and Renewable Natural Resources, as well as in the territory before any of its employees or officials in the performance of their duties.

The main offices of the Ministry of Ecology and Renewable Natural Resources are located at San Lorenzo 1538, Posadas, Misiones.

The staff of the Ministry of Ecology and Renewable Natural Resources will refer to the Grievance Mechanism all actions related to REDD+ in the Province, so as to ensure that the Grievance Mechanism registers the process and resolves it. In all cases, the Complaint can be made anonymously if the user so wishes. The training process for agents of the Ministry of Ecology and Renewable Natural Resources is expected to be carried out once the REDD+ ECO2 Program is registered with Verra.

As it emerges from the participatory processes with the Multisectoral Forum and/or practical experience with REDD+ and/or the Program, other means of access to the Mechanism could be incorporated.

About users

Any natural or legal person, public or private, has the right to request and access information, file complaints, and make suggestions in the framework of REDD+ implementation in Misiones, and it is not necessary to prove a subjective right, legitimate interest or legal sponsorship. It will not be necessary to prove reasons or specific interest.

Centralization of attention and management arrangements

The management of the Grievance Mechanism will be centralized in a specific responsible official, who will integrate (or be in constant contact with) the SIS Technical Unit, within the Ministry of Ecology and Renewable Natural Resources:

Said official will be in charge of:

- Registering applications
- Categorize requests



- Performing income analysis according to tabulations, type of actor, etc., including statistical analysis
- Make referrals to competent technical areas to obtain specific answers.
- Ensure compliance with deadlines
- Prepare and record responses
- · Communicate with users
- Follow up appeals

The definition of the responsible for the Mechanism and the consolidation of the SIS Technical Unit will be confirmed once the Program is registered with Verra.

The following is a description of the Mechanism activities.

Registration of requests

For the purpose of an adequate treatment and management of the Mechanism, the Mechanism shall register the information disaggregated as follows:

Type of actions:

- requests for public information
- suggestions
- complaints
- complaints

Type of applicant:

- native peoples
- native forest owners, lessees, tenants or others
- plan beneficiaries
- suppliers and service providers relevant to REDD+ implementation
- government agencies
- civil society organizations
- technical-academic sector
- small producers and farming communities
- financial institutions
- international, public or private organizations

Qualification by gender:

- Males
- Women
- Non-binary
- Prefer not to answer



By thematic area:

- Aspects related to monetary, financial and administrative benefits.
- Aspects related to forest monitoring and control.
- Aspects related to compliance and/or reporting of safeguards.
- Aspects related to forest or greenhouse gas inventories, land use planning of native forests, etc.
- Aspects related to gender equity and women's rights.
- Aspects related to stakeholder participation, information disclosure, transparency in fund management or other aspects related to forest and climate governance.
- Aspects related to the rights of indigenous peoples and local communities (land tenure, free and informed prior consultation, benefit sharing or other).

By treatment status:

- resolved
- denied
- in process
- in mediation
- in consultation with other jurisdictions or organizations (detail)
- derived

This information will help to analyze which sectors and stakeholders are most affected, positively or negatively, by REDD+ implementation. This information will allow us to evaluate which areas present the most conflicts in the implementation of the NAPB&CC.

Categorization of requests

Each request received will be categorized according to the nature and potential risk -mainly in case of complaints and denunciations-, in order to register the highest risk requests as a priority. A priority level will be assigned according to the following criteria:

- Low priority: requests for information on which neither the recognition of rights depends nor has been filed by communities or native peoples;
- Medium priority: complaints or requests for information that could generate a non-significant negative impact on people's rights or ecosystems. It also includes all claims from communities or indigenous peoples;
- High priority: complaints or requests for information that could have a significant negative impact on people's rights or ecosystems.

Management of referrals

Once the requests have been received and registered, they are classified into internal and external, which implies a different procedure in each case:



Internal referrals: requests within the scope of the RCM+ that will be addressed and responded to by the teams and technical areas linked to the implementation of REDD+ in Misiones.

External referrals: those that, although within the scope of the RCM+ due to the nature of the claim or request, require the intervention of technical areas of provincial or national agencies, municipalities, scientific institutions, or others, with indirect competencies but linked to the implementation of REDD+ in Misiones. The scope required by the external areas will be analyzed in order to delimit the contribution to the response. Relevant articulations may be generated for the realization of joint responses.

Communication with the user

The person in charge of the Complaints Mechanism will communicate with the user through the e-mail address indicated in the contact data and according to the procedure number assigned by the website. In all cases, the user will receive a receipt indicating the main details of the claim, suggestion, complaint or request for information, together with the response deadlines and the persons responsible for responding. In the case of virtual claims, the receipt is automatically generated and sent to the registered e-mail address. The receipt will be the digital notification received in your e-mail, together with the procedure number.

Special situations

In the case of a "High Priority" request, being a case of seriousness, urgency or social sensitivity, the Mechanism may order that the formal response mentioned above be accompanied by one or more meetings of face-to-face and/or virtual dialogue with the applicant(s) in order to expose greater clarity in the answers. This power will be implemented especially when there are communities or vulnerable groups affected, in order to ensure due access to information and the necessary citizen attention, beyond the formal procedures, generating the appropriate specific participation instance so that those affected can make their consultations and present their needs in a direct, simple and informal manner.

In the case of native peoples and local communities, to lead these dialogues, the support of Asuntos Guaraníes will be requested, for the contribution of a specialist who can facilitate the dialogue, in order to be able to attend and respond in a culturally appropriate manner. Once the Program is registered with Verra, the Ministry of Ecology and Renewable Natural Resources will enter into a coordination agreement with Asuntos Guaraníes, in order to facilitate the operation of the Mechanism. Minutes of these meetings will be drawn up containing the minutes of the meeting, and the identity of the participants may be protected. The issues raised and the answers and agreements reached shall be specified. Said minutes will be included in the Register of requests received and will serve as input for the continuous improvement of the Mechanism.



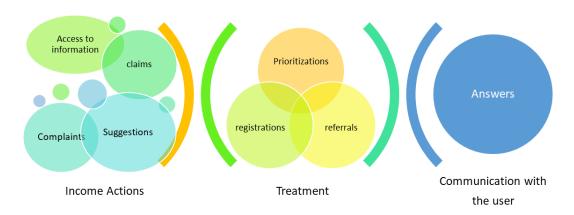


Figure 45. Stages of the Communications and Grievance Mechanism.

Reporting of the Grievance Mechanism and its interaction with the Missions REDD+ SIS

An extract of the Grievance Mechanism Register will be published annually on the Grievance Mechanism website, indicating key aspects such as: number of requests received, type, category, subject, sector and processing status, among others, without publishing personal data of the users.

The Mechanism will generate relevant information in the respect of the Cancun Safeguards, which will allow generating an annual report on the types of complaints, denunciations, requests, etc. received and analyzing the information. The information produced in these annual reports will be an integral part of the Annual Safeguards Summary and the Periodic Safeguards Information Report.

Controversy resolution

As a complement to the Grievance Mechanism, a dispute resolution system is established for REDD+ in the following cases:

The applicant does not receive the response to its request for information made or receive it after the deadline (according to legal deadlines).

The applicant considers that the response to its request was not sufficient.

The applicant does not consider that his claim has been fully or partially resolved.

The applicant does not consider that the resolution of its claim or complaint is satisfactory.

In such cases, a space for amicable dispute resolution will be set up on an ad hoc basis, organized according to the following consecutive steps:

The Misiones REDD+ team, at the request of the SIS Technical Team, will convene a virtual or face-to-face dialogue, which must take place at a time and place agreed upon with the claimant(s).



A non-governmental organization, public or private, that is impartial in the nature of the claim, will be summoned as an overseer of the dialogue. This will ensure the transparency and quality of the dialogue. To this end, once the Program is registered with Verra, the GPM will draw up a list of candidates with institutions interested in participating to ensure a more efficient procedure.

In the virtual or face-to-face dialogue space, the aim will be to bring the interests of the parties closer together, learn the reasons for disagreement, and collectively find possible appropriate ways for all parties to solve the problem.

As a result of the space for dialogue and review, minutes will be drawn up with the agreements or points discussed at the meeting, signed by all participants.

In the event that, in this space of amicable resolution of the conflict, satisfactory results are not reached for both parties, the applicant may act through the various administrative and judicial complaint channels enabled in the exercise of their civil rights.

Other available instances of justice access

The figure of the People's Defender is operative in different cities of the Province of Misiones. This body is independent and has the power to intervene in conflicts that violate citizens' rights.

In the judicial area, there are four jurisdictions of the Judicial Power where all citizens can file complaints and claims.

Misiones has a General Secretariat for Access to Justice, Human Rights and Family Violence, which provides services to citizens to guarantee and facilitate access to justice through the various channels existing in the Judicial Branch of the Province, in order to allow people to fully enjoy the services of the judicial system.

Proposals for continuous improvement

The Communication and Grievance Mechanism for REDD+ in the Province of Misiones is being developed with the same approach as the SIS-REDD+ Misiones, of progressive and continuous improvement, including actions to make it sustainable over time. The following is a list of actions for its improvement:

Protocolize internal admission, treatment and communication procedures, so that they can be automated, reduce management times, increase predictability and make response capacity more efficient.

Digitalize procedures, even when physical formats are maintained due to cultural adaptation for native peoples and local communities.

Carry out periodic management reports and disseminate them in the SIS reports.

If technically and financially possible, submit the Mechanism to ISO Standards Certification.



Audit the mechanism through the internal and external control and audit system of the Province of Misiones.

Send a satisfaction survey to users once each procedure has been completed, in order to gather input for continuous improvement.

Likewise, a key operational aspect for the proper functioning of the Complaints Mechanism is that it be operated by people trained for this purpose, with tools and training in its operation, as well as in citizen service and in regulations on access to public information and provincial administrative procedures.

Improvements to the Grievance Mechanism for the ECO2 Program stage in territory For the implementation stage of the REDD+ECO2 Program, once registered, the Grievance Mechanism will be complemented with some measures to strengthen access to it, especially by indigenous peoples and other vulnerable sectors. To this end, measures will be implemented such as:

Disseminate the Complaints Mechanism, its access routes, procedures and its purpose within the framework of REDD+.

Enable the possibility of entering any of the actions that are part of it (requests for information, complaints, suggestions, reports) in physical format, especially for indigenous peoples and local communities that have technological or connectivity limitations, through "physical mailboxes" or other modalities that are deemed convenient. To do so, mechanisms for collecting them must be protocolized - in accordance with the administrative regulations in force in the Province of Misiones - and linked to the standardized procedure (reception of complaints, notice and registration, etc.).

Consider the possibility that the physical entry forms and responses can be in native languages of indigenous peoples.

Provide in-person workshops on the operation of the Complaints Mechanism, to provide verbal responses and establish dialogue to bring the parties together in the event of disputes, primarily for complaints from indigenous peoples.

7. FURTHER INFORMATION

Emission calculations are included in spreadsheet FREL Emissions-2009-2014-ver02.xlsx.



> APPENDIX I: SUMMARY OF REGULATIONS

Level	Law/Decree/ Resolution	Number	Name	Name of regulation	Sanction year	Description
International	NA		NA	Escazú Agreement	2018	The Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean, better known as the Escazú Agreement, is an international treaty signed by 25 Latin American and Caribbean nations concerning the rights of access to information about the environment, public participation in environmental decision-making, environmental justice, and a healthy and sustainable environment for current and future generations. The Escazú Agreement is the first international treaty in Latin America and the Caribbean concerning the environment, and the first in the world to include provisions on the rights of environmental defenders.
International	NA		NA	Convention on Biological Diversity	1992	The Convention on Biological Diversity (CBD), known informally as the Biodiversity Convention, is a multilateral treaty. The Convention has three main goals: the conservation of biological diversity (or biodiversity); the sustainable use of its components; and the fair and equitable sharing of benefits arising from genetic resources. Its objective is to develop national strategies for the conservation and sustainable use of biological diversity.
International	NA		NA	United Nations Framework Convention on Climate Change (UNFCCC)	1992	The United Nations Framework Convention on Climate Change (UNFCCC) established an international environmental treaty to combat "dangerous human interference with the climate system", in part by stabilizing greenhouse gas concentrations in the atmosphere. The treaty called for ongoing scientific research and regular meetings, negotiations, and future policy agreements designed to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.





International	NA		NA	Paris Agreement	2015	The Paris Agreement is an international treaty on climate change. Adopted in 2015, the agreement covers climate change mitigation, adaptation, and finance. The Paris Agreement's long-term temperature goal is to keep the rise in mean global temperature to well below 2 °C above preindustrial levels, and preferably limit the increase to 1.5 °C, recognizing that this would substantially reduce the effects of climate change. It aims to help countries adapt to climate change effects and mobilize enough finance.
International	NA		NA	Sustainable Development Goals (SDGs)	2015	The Sustainable Development Goals (SDGs) or Global Goals are a collection of seventeen interlinked objectives designed to serve as a "shared blueprint for peace and prosperity for people and the planet, now and into the future". In 2015, the United Nations General Assembly (UNGA) created the SDGs as part of the Post-2015 Development Agenda. The SDGs emphasize the interconnected environmental, social and economic aspects of sustainable development by putting sustainability at their centre.
International	NA		NA	Indigenous and Tribal Peoples Convention	1989	The Indigenous and Tribal Peoples Convention, 1989 is an International Labour Organization Convention, also known as ILO Convention 169, or C169. It is the major binding international convention concerning indigenous peoples and tribal peoples, and a forerunner of the Declaration on the Rights of Indigenous Peoples. It asserts the rights of indigenous and tribal peoples to choose to integrate or to maintain their cultural and political independence. It also recognizes the cultures, traditions, and special circumstances of indigenous tribal peoples.
National	Law	27566	Law 27566	Escazú Agreement national approval	2020	The national law approves the Regional Agreement on Access to Information, Public Participation and Access to Justice in Environmental Matters in Latin America and the Caribbean (Escazú Agreement) by the Argentine Republic.





National	Law	24.375	Law 24375	Convention on Biological Diversity national approval	1994	This national law approved the Convention on Biological Diversity. Its priority objectives are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising from the use of genetic resources.
National	Law	24.295	Law 24295	UNFCCC national approval	1994	This national law was passed for the purpose of carrying out actions linked to the UNFCCC, supporting activities to be developed through the mechanisms provided for that purpose.
National	Law	27.270	Law 27270	Paris Agreement national approval	2016	This national law ratifies the Paris Agreement adopted in 2015.
National	Law	24.071	Law 24071	Indigenous and Tribal Peoples Convention national approval	1992	This national law approves Convention 169 of the International Labor Organization concerning Indigenous and Tribal Peoples in Independent Countries.
National	Law	26.331	Law 26331	Law 26.331 on Minimum Standards for the Environmental Protection of Native Forests, or Native Forest Law	2007	This national law regulates the use of native forests. The law aims to reduce deforestation in Argentina, conserve native forests, regulate the responsible management of forest use, and promote sustainable forest management. To this end, the law determines forest conservation categories, creates a trust fund for the conservation and promotion of responsible forest management under a payment for environmental services model, and establishes enforcement authorities whose mandate is to develop data to monitor the conservation status of native forests, in coordination with the provinces.
National	NA	-	NA -	Constitution of the Argentine Nation	1994	The Constitution of the Argentine Nation is the basic governing document of Argentina, and the primary source of existing law in Argentina. The current version is the reformed text of 1994.





National	Law	25.675	Law 25675	General Environmental Law (No. 25.675)	2002	This national law establishes minimum standards for the achievement of sustainable and adequate management of the environment, the preservation and protection of biological diversity and the implementation of sustainable development.
National	Decree	91/2009	Decree 91/2009	National regulation decree of Law No. 26.331	2009	The purpose of this Decree is to regulate Law No. 26.331 on minimum standards for the environmental protection of native forests. In particular, these regulations contain the definition of the native forest concept, which includes natural forest ecosystems in different stages of development, as well as palm groves. In addition, the Decree introduces specific provisions on the territorial management of native forests and on the issue of authorizations for the clearing and sustainable use of forests.
National	Resolution	256/2009	Resolution 256/2009	Experimental Program for the Management and Conservation of Native Forests	2009	This resolution establishes the 2009 Experimental Program for the Management and Conservation of Native Forests, in which the holders and legitimate owners or possessors of land on which native forests are conserved, civil associations, foundations, cooperatives, universities, legal entities under public law, small forest producers and indigenous and peasant communities may participate, upon presentation of management and conservation plans to the competent authority.
National	Resolution	267/2019	Resolution 267/2019	National native forest restoration plan	2019	This resolution approves the national native forest restoration plan. This plan is part of an integrated forest management policy on a national scale, which proposes the enhancement of native forest resources, the recovery of the native forest area in those areas that require the restoration of ecosystem services, the development of new production models compatible with the protection of native forests and the generation of opportunities for the communities that live in the forest.



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National	Resolution	380/2019	Resolution 380/2019	Native Forest Land Use Planning	2019	This resolution establishes that the secretary of the Ministry of environment and sustainable development will accredit those native forest territorial ordinances approved by the local enforcement authorities, having to evaluate compliance with COFEMA resolutions no. 230/2012; no. 236/2012, no. 277/2014, no. 350/17 and SAYDS resolution no. 398/2015, in particular.
National	Resolution	450/2009	Resolution 450/2009	Modification of Experimental Program for the Management and Conservation of Native Forests	2009	Modification of Resolution No. 256/09 by which the 2009 Experimental Program for the Management and Conservation of Native Forests was created. In particular, it modifies Article 2.
National	Law	22.351	Law 22351	National Law on National Parks	1980	The law establishes procedures for the declaration of national parks, natural monuments or national reserves of those areas of the national territory that due to their extraordinary beauty or richness in native flora or fauna or because of a specific scientific interest must be protected and preserved for scientific research, education and enjoyment of present and future generations.
National	Resolution	2148/1990	Resolution 2148/1990	Strict Natural Reserve	1990	This regulation designates as strict natural reserve the type of protected area that offers the maximum guarantees for the conservation of Argentina's biological diversity, as determined by decree of the national executive branch.





National	-	-		Agreement of the Federal System of Protected Areas (SIFAP)	2003	Creation of the Federal System of Protected Areas (SiFAP) through an agreement signed by the National Parks Administration (APN), the then Secretariat of Environment and Sustainable Development, and the Federal Environmental Council (CoFeMA). It is formed by the protected areas that are part of the national and provincial systems and that the authorities have voluntarily registered in it, without affecting their respective jurisdictions. It is an instrument for interjurisdictional coordination of conservation actions in protected areas, the sustainable use of their components and associated cultural resources, thus contributing to achieving the objectives of the Convention on Biological Diversity and other relevant agreements and instruments. Link to the agreement: https://sifap.gob.ar/pdf/AcuerdoMarco_creacionSiFAP2003.pdf
National	Law	27.487	Law 27487	National Law on investments for cultivated forests (No. 25080)	2018	The law establishes a regime for the promotion of investments in new forestry projects and the expansion of existing forests. The installation of new forestry-industrial projects and the enlargement of existing ones may also benefit, provided that timber supply is increased through the establishment of new forests. Benefits of this kind must be related to the investments actually made in the implantation. The activities included in the regime established by the present law are: the establishment of forests, their maintenance, management, irrigation, protection and harvesting, including research and development activities, as well as the industrialization of wood, when all of them form part of an integrated forestry or forestry-industrial enterprise.
National	Law	26.815	Law 26815	Federal Fire Management System	2012	This law establishes minimum environmental protection standards for forest and rural fires in the national territory. It applies to actions and operations for the prevention, suppression and combat of forest and rural fires that burn live or dead vegetation, in native and planted forests, protected natural areas, agricultural areas, grasslands, pastures,





						scrublands and wetlands and in areas where building structures are intermingled with vegetation outside the strictly urban or structural environment. It also covers planned fires, which are left to burn under previously established environmental conditions, and for the achievement of management objectives of a territorial unit. It creates the Federal Fire Management System, coordinated and administered by the National Fire Management Service.
National	Law	27.520	Law 27520	National Climate Change Law	2019	This law establishes minimum environmental protection standards to guarantee adequate actions, instruments and strategies for adaptation and mitigation of climate change throughout the national territory. At the institutional level, the National Climate Change Cabinet is created, chaired by the Head of the Cabinet of Ministers, and whose function will be to articulate among the different government areas of the National Public Administration the implementation of the National Climate Change Adaptation and Mitigation Plan.
National	Decree	1030/2020	Decree 1030/2020	National regulation decree of Law No. 27520	2020	This decree regulates the Law of minimum standards for adaptation and mitigation to global climate change. It contains several definitions (sink, emissions, Nationally Determined Contribution, National Inventory of Greenhouse Gas Emissions, among others). It establishes the functions of the National Climate Change Cabinet and other authorities at national and provincial levels. Article 17 refers to the creation of National Climate Change Information System.





National	Law	25.831	Law 25831	Regime of free access to environmental public information	2004	The present law establishes minimum requirements for environmental protection to guarantee the right of access to environmental information held by the State, whether at national, provincial, municipal or City of Buenos Aires level, as well as by autarchic entities and companies rendering public services, whether public, private or mixed. For the purposes of these regulations, environmental information is understood as all information in any form of expression or support related to the environment, natural or cultural resources and sustainable development. Article 3 regulates access to information, which shall be for any natural or juridical person. Article 7 lists the circumstances in which the information requested may be denied.
National	Law	22.428	Law 22428	Legal regime for the promotion of private and public action aimed at the conservation and recovery of the productive capacity of soils	1981	This declares the private and public action aimed at the conservation and recovery of the productive capacity of soils to be of general interest. The enforcement authorities of the provinces that adhere to the regime of the Law shall be responsible for: a) creating and organizing soil conservation districts; b) promoting the constitution of conservation consortiums; c) facilitating or guiding the technical advice to conservation consortiums; d) promoting the constitution of demonstration areas of conservation land management with interested producers; e) recommending the adoption of measures it considers convenient so that conservation norms are applied in the planning and execution of public works to be carried out under its jurisdiction; f) approving plans and programs of conservation and recovery of grounds that elaborate consortiums; g) summoning the responsible parties to cease practices or management that are in contravention of conservationist norms; h) making responsible parties cease practices or management in contravention of the conservation norms in the planning and execution of public works to be carried out under its jurisdiction.



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National	Resolution	69/2020	Resolution 69/2020	Regulation of the trust fund for the environmental protection of native forests	2020	This resolution approves the regulation of the trust fund for the environmental protection of native forests.
National	Resolution	2/2021	Resolution 44228	Misiones OTBN Update	2021	This resolution accredits the Update of the Native Forest Land Use Planning of the Province of Misiones, approved by Resolution of the Ministry of Ecology and Renewable Natural Resources No. 265 dated July 14, 2017. It is established that the accredited area for the Province of Misiones of the OTBN conservation categories are as follows: CATEGORY I (RED) - 233,083 ha; CATEGORY II (YELLOW) - 901.617 ha; CATEGORY III (GREEN) - 477,858 ha
Province	Law XVI	6	Law XVI 6	Fiscal land regime	1974	Lands and islands or part of fiscal islands that are located within the territorial limits of the Province are subject to this Law. The Executive Power, through the Ministry of Ecology and Renewable Natural Resources, promotes social development and the agrarian economy. It also promotes the creation of towns, and urbanized rural centres, subdivides land according to urban planning standards, and that rural properties must constitute units suitable for a family farm under the conditions regulated.
Province	Law XVI	7	Law XVI 7	Forest Law	1977	(Previous Law 874) This provides for the optimal use of forests, the defence, enrichment and expansion of forests and forest lands, and the promotion of plantation forests and the forestry industry, which are declared to be of public interest. The exercise of rights over forests and forest lands of private or fiscal property, as well as their fruits and products, is subject to the restrictions and limitations of the Law.





Province	Law XVI	29	Law XVI 29	Natural Protected Areas System	1992	This law establishes the Provincial System of Natural Protected Areas and the rules that govern it. It declares of public interest the conservation of natural environments and their resources for constituting a natural heritage of socioeconomic importance. The authority responsible for applying the Law has the obligation and mission to oversee its strict compliance, taking care of the integrity, defence and maintenance of natural environments and their resources.
Province	Law XVI	35	Law XVI 35	Environmental Impact Assessment, Scope, Infractions and Punishments.	1993	The purpose of this Law is to prevent behaviours that produce degrading effects on the environment within the territory of the province. It establishes definitions, responsibilities, basic criteria and general guidelines for the use and implementation of environmental impact assessment as one of the instruments of provincial environmental policy.
Province	Law XVI	105	Law XVI 105	Misiones OTBN regulation	2010	This law establishes the management of Native Forests and the mechanisms to be implemented in the Province of Misiones for the Conservation of Native Forests and the Regime for the Promotion of Sustainable Management. The Authority responsible for Application of the Law is the Ministry of Ecology and Renewable Natural Resources. It creates the Provincial Program for the Protection and Sustainable Management of Native Forests.
Province	Law XVI	53	Law XVI 53	Protective Forests and Ecological Belts	1997	This declares protective forests and ecological strips. The conversion to agricultural or livestock land of the protective forests defined in Article 1 and of the ecological strips defined in Article 2, is prohibited. The Ministry of Ecology and Renewable Natural Resources is the Authority responsible for Application.





Province	Law XVI	60	Law XVI 60	Green Corridor of the Province of Misiones	1999	The Integral Area of Conservation and Sustainable Development is created, with the designation "Green Corridor of the Province of Misiones", whose delimitation is defined in Annexes I and II and includes the Natural Protected Areas listed in Article 2 of this Law. The programs and incentives will be directed, as a priority, to those areas identified as being of special interest to re-establish the connection between isolated native forest stands.
Province	Law XVI	65	Law XVI 65	Provincial Fire Management Plan (PPMF)	2000	The Provincial Fire Management Plan (PPMF) is implemented with the purpose of preventing, preventing and fighting forest and rural fires to achieve effective protection of the native and implanted forest wealth of the Province. The Ministry of Ecology, Renewable Natural Resources and Tourism is the enforcement authority of the Law.
Province	Law XVI	106	Law XVI 106	Regulatory Framework for Renewable Wood Energy Resources in the Province of Misiones	2016	The purpose of this law is mainly to promote: the reduction of deforestation due to the consumption of firewood from native forests; the improvement, in agro-industries, of energy efficiency in the processes of use and management of renewable firewood and other forest biomass products; the substitution of the production, marketing and industrial consumption of firewood and charcoal from natural forests for firewood from cultivated forests, etc. The law prohibits the production, marketing and industrial consumption of firewood and charcoal from natural forests.
Province	Law XVI	103	Law XVI 103	Environmental Services Payments generated by Native Forests or Forest Plantations.	2009	This regulation regulates payments for environmental services generated by native forests or established forest plantations. Such payments may come from: a) compensation from the "National Fund for the Enrichment and Conservation of Native Forests"; b) agreements signed by the Province of Misiones with national private entities and/or international public or private entities; and c) any other fund that provides for payments for environmental services.





Province	Law I	172	Law I 172	Provincial Climate Change Secretariat	2020	This law creates the Climate Change Secretariat with hierarchical and functional dependence on the Provincial Government and establishes the functions it oversees. Its function, among others, is to contribute to the fulfilment of the commitments assumed by the National State at the moment of the ratification of the Paris Agreement and other agreements subscribed and to be subscribed in the future. These include those established by the Ministry of Environment and Sustainable Development of the Nation.
Province	Decree	157	Decree 157	Provincial climate change cabinet creation	2021	This instrument creates, within the orbit of the secretariat of state of climate change, the provincial climate change cabinet, whose purpose shall be to articulate policies on climate change and generate awareness throughout society on its relevance.
Province	Resolution	460	Resolution 460	Evaluation of the Environmental Impact Study for the authorization of native forests Plans	2011	This resolution implements the procedure for the presentation and Evaluation of the Environmental Impact Study for the granting of authorization of Land Use Change Plans and Sustainable Management Plans, within the framework of the regime of National Law No. 26.331, Provincial Law XVI No. 105 and Provincial Law XVI No. 35 on Environmental Impact Assessment.
Province	Law XVI	81	Law XVI 81	Environmental information law	2009	This law establishes the means for requesting and receiving information on the state and management of the environment and natural resources. The enforcement authority of this Law is the Ministry of Ecology, Renewable Natural Resources and Tourism. This Ministry oversees compliance with this Law by public and private organizations and institutions, providing the corresponding sanctions if they do not do so.
Province	Law XVI	37	Law XVI 37	Soil conservation law	2009	This law declares of public interest the state and private actions aimed at the conservation, improvement and recovery of the productive capacity of the soil of the province. It covers productive soils, meaning all those capable of sustaining any form of primary, agricultural or forestry production.





Province	Law XVI	12	Law XVI 12	National Law 22428 approval	2009	By this law, the Province of Misiones adheres to the regime established in National Law 22.428.
Province	Law I	70	Law I 70	Creation of Ministries	2022	This law creates the Ministry of Climate Change of the province of Misiones, designating its functions and procedures.
Province	Decree	67/2011	Decree 67/2011	Regulation of Law No. 105	2011	This decree approves the Regulation of Law XVI - No. 105 and establishes the mechanisms to be implemented for the Conservation of Native Forests and the Regime for the Promotion of Sustainable Management.
Province	Resolution	265	Resolution 265	Misiones OTBN update approval	2017	This provides for the approval of the update of territorial management of native forests in the province of Misiones, by the Ministry of Ecology and Renewable Natural Resources.
National	Resolution	497	Resolution 497	Provincial native forest strategic plans	2022	This resolution enables the procedure for the submission of provincial native forest strategic plans as a means of implementing the national fund for the enrichment and conservation of native forests. It approves the distribution of the same for the year 2022.
Province	Resolution	253	Resolution 253	Scheme to evaluate plans	2011	This resolution establishes that the Sustainable Management Plans and Conservation Plans, as well as the Plan Development Projects, with the corresponding Annual Operating Plan for the first year, to access the benefits of National Law No. 26.331 and other concordant regulations, shall be approved by appropriate Resolution, after evaluation by the Technical Commission created herein, without prejudice to the subsequent evaluation and approval by the National Authority of Application.
National	Law	25326	Law 25326	Law on Personal Data Protection	2000	The purpose of this law is the comprehensive protection of personal data recorded in files, registers, data banks, or other technical means of data processing, whether public or private, intended to provide information, to guarantee the right to honour and privacy of individuals, as well as access to the information recorded about them, in accordance with the





						provisions of Article 43, third paragraph of the National Constitution.
Province	Decree	1226	Decree 1226	Regulatory decree of Law XVI "Regulatory Framework for Renewable Wood Energy Resources".	2012	This decree regulates Law XVI "Regulatory Framework for Renewable Wood Energy Resources". The regulation shall apply to all products and by-products of cultivated forests and native forest by-products with sustainable forest management certification that may be used for energy purposes.
Province	Decree	1114	Decree 1114	Creation of the Provincial Committee of the REDD+ Program	2022	The Committee will be responsible of the governance of the Program.
Province	Resolution	241	Resolution 241		2023	This resolution institutionalizes Misiones REDD+ Strategy.
National	Resolution	313	Resolution 313	Interpretative scope of the minimum standards regulations.	2015	This COFEMA (Federal Environment Council) resolution reaffirms the scope of minimum standards regulations. It reaffirms that the interpretative scope of the minimum budget rules must be carried out in a harmonious manner and without distorting the provisions of Article 124 of the National Constitution. It reaffirms powers for the execution of public works or works in the public interest in all the territory of local jurisdictions, within the sustainable management, to promote the general welfare of its citizens, especially that of citizens and those sectors to whom it is necessary to provide equal opportunities.





National	Resolution	92	Resolution 92	Minimum environmental protection requirements	2004	This COFEMA resolution approves the minimum content and definition of minimum standards regulations, as well as the characterization of the standard that sets out minimum protection requirements.
National	Resolution	363	Resolution 363	National registry of climate change mitigation projects	2021	This resolution creates the national registry of climate change mitigation projects, within the framework of the secretariat of climate change, sustainable development and innovation. Its objectives are to register and systematize the projects that reduce anthropogenic emissions or increase the capture of greenhouse gases in the national territory.
National	Resolution	424	Resolution 424	PPR REDD+ Funding proposal	2020	By this resolution, COFEMA declared the preparation of the REDD+ payments for results funding proposal to be of federal environmental interest.
Province	Decree	2164	Decree 2164	Agreement between MAyDS and MEyRNR	2022	This represents a cooperation agreement between National Ministry of Environment and Sustainable Development and Provincial Ministry of Ecology and Natural Renewable Resources.
National	Decree	360	Decree 360	Strategic Technical Guidelines for the implementation of Law No. 26.331 on Minimum Standards for the Environmental Protection of Native Forests	2018	This COFEMA resolution approves the "Strategic Technical Guidelines for the implementation of Law No. 26.331 on Minimum Standards for the Environmental Protection of Native Forests". It also entrusts the Application Authorities to guide the application of the National Fund for the Enrichment and Conservation of Native Forests and the National Program for the Protection of Native Forests to actions whose object is framed within the Strategic Technical Guidelines, gradually readapting existing plans, orienting new plans and supporting institutional strengthening.
Province	Law XVI	33	Law XVI 33	Declares several properties a Natural Reserve,	2009	This law creates the Yabotí Biosphere Reserve. The lands referred to in Articles 1 and 2 are subject to regulations provided in Article 32 of Law XVI - No. 29 on Natural Protected Areas.





				denominating it Yabotí Biosphere Reserve.		
Province	Decree	2472	Decree 2472	Regulatory decree of Law XVI 33.	1993	The regulatory decree of the Yabotí Biosphere Reserve. It approves the manual of Technical Instructions for the Formulation of Management Plans for Native or Implanted Forests in the Yabotí Biosphere Reserve.
National	Law	25080	Law 25080	National law for investment on Cultivated forests		The law establishes a regime for the promotion of investments in new forestry projects and the expansion of existing forests. The installation of new forestry-industrial projects and the enlargement of existing ones may also benefit, provided that timber supply is increased through the establishment of new forests. Benefits of this kind must be related to the investments actually made in the implantation. The activities included in the regime established by the present law are: the establishment of forests, their maintenance, management, irrigation, protection and harvesting, including research and development activities, as well as the industrialization of wood, when all of them form part of an integrated forestry or forestry-industrial enterprise.