

SELVA PARANAENSE VIDA NATIVA GS1 PROJECT MONITORING REPORT



Document Prepared by Nideport, EcoSecurities and ProSustentia

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GHG Accounting/ Crediting Period	15 December 2021 - 14 December 2121; 100 years
Monitoring Period of this Report	15 December 2021 – 31 July 2022
History of CCB Status	-
Gold Level Criteria	Climate: The project has identified main climate change risks and defined the main adaptation projects to be implemented throughout the project lifetime, both for biodiversity and community Biodiversity: The project has stopped logging in 22,298.8 ha and improved security conditions in 22,878.5 ha by mitigating illegal entering in a proposed KBA area. Moreover, first enrichment activities have been implemented with native species. Community: Development projects in communities under the poverty line have been implemented, leading to training, more production capacity and community participation, specifically benefiting women and the most vulnerable.

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1 SUMMARY OF PROJECT BENEFITS

1.1 Unique Project Benefits

Outcome or Impact	Achievements during the Monitoring Period	Section Reference	Achievements during the Project Lifetime
1) Recovery of biodiversity affected by anthropic activities by enrichment and regeneration of areas with native species.	First activities of enrichment and regeneration have taken place with native species planted in degraded areas.	5.1.1	As this is the first monitoring period, the same achievements apply.
2) Biodiversity threats reduction with state-of-the-art monitoring technology implementation and biodiversity monitoring plan.	A baseline biodiversity analysis and a first monitoring based on the biodiversity monitoring plan in place were conducted. Different interaction instances with other security forces in the area have taken place (rangers, militaries, police, and firefighters). Although illegal activities are visible in the area, these are expected to have decreased as some have been prevented by the authorities.	5.1.2	As this is the first monitoring period, the same achievements apply.
3) Enhance community development by identifying and implementing productive projects.	5 different development projects in place, defined and designed through public participation with the community in the project zone.	4.1.3	As this is the first monitoring period, the same achievements apply.

1.2 Standardized Benefit Metrics

Category	Metric	Achievements during monitoring period	Section Reference	Achievements during the project's
GHG emissions removals & reductions	Net estimated emission removals in the project area, measured against the without-project scenario.	180,643 tCO ₂ e	3.2.2	10,178,342 tCO ₂ e
	Net estimated emission reductions in the project area, measured against the without-project scenario.	Not applicable	-	Not applicable

Forest cover ¹	For REDD ² projects: Number of hectares of reduced forest loss in the project area measured against the without-project scenario.	Not applicable	-	Not applicable
	For ARR ³ projects: Number of hectares of forest cover increased in the project area measured against the without-project scenario.	Not applicable	-	Not applicable
Improved Land Management	Number of hectares of existing production forest land in which IFM ⁴ practices have occurred as a result of the project's activities, measured against the without-project scenario.	22,298.8 ha	5.1.1	22,298.8 ha
	Number of hectares of non-forest land in which improved land management has occurred as a result of the project's activities, measured against the without-project scenario.	579.7 ha	5.1.1	579.7 ha

Category	Metric	Achievements during Monitoring Period	Section reference	Achievements during the Project Lifetime
Training	Total number of community members who have improved skills and/or knowledge resulting from training provided as part of project activities.	64	2.3.13 and 4.1.1	64
	Number of female community members who have improved skills and/or knowledge resulting from training.	36	2.3.13 and 4.1.1	36

¹ Land with woody vegetation that meets an internationally accepted definition (e.g., UNFCCC, FAO or IPCC) of what constitutes a forest, which includes threshold parameters, such as minimum forest area, tree height and level of crown cover, and may include mature, secondary, degraded and wetland forests (*VCS Program Definitions*)

² Reduced emissions from deforestation and forest degradation (REDD) - Activities that reduce GHG emissions by slowing or stopping conversion of forests to non-forest land and/or reduce the degradation of forest land where forest biomass is lost (*VCS Program Definitions*)

³ Afforestation, reforestation and revegetation (ARR) - Activities that increase carbon stocks in woody biomass (and in some cases soils) by establishing, increasing and/or restoring vegetative cover through the planting, sowing and/or human-assisted natural regeneration of woody vegetation (*VCS Program Definitions*)

⁴ Improved forest management (IFM) - Activities that change forest management practices and increase carbon stock on forest lands managed for wood products such as saw timber, pulpwood and fuelwood (*VCS Program Definitions*)

	provided as part of project activities.			
Employment	Total number of people employed in of project activities ⁵ , expressed as number of full-time employees ⁶ .	0	4.1.1	0
	Number of women employed in project activities, expressed as number of full-time employees	0	4.1.1	0
Livelihoods	Total number of people with improved livelihoods ⁷ or income generated as a result of project activities	0	4.1.1	0
	Number of women with improved livelihoods or income generated as a result of project activities	0	4.1.1	0
Health	Total number of people for whom health services were improved as a result of project activities, measured against the without-project scenario	0	4.1.1	0
	Number of women for whom health services were improved as a result of project activities	0	4.1.1	0

Category	Metric	Achievements during Monitoring Period	Section Reference	Achievements during the Project Lifetime
	Total number of people for whom access to, or quality of, education was improved as a result of project activities, measured against the without-project scenario	0	4.1.1	0

⁵ Employed in project activities means people directly working on project activities in return for compensation (financial or otherwise), including employees, contracted workers, subcontracted workers and community members that are paid to carry out project-related work.

⁶ Full time equivalency is calculated as the total number of hours worked (by full-time, part-time, temporary and/or seasonal staff) divided by the average number of hours worked in full-time jobs within the country, region or economic territory (adapted from UN System of National Accounts (1993) paragraphs 17.14[15.102];[17.28])

⁷ Livelihoods are the capabilities, assets (including material and social resources) and activities required for a means of living (Krantz, Lasse, 2001. *The Sustainable Livelihood Approach to Poverty Reduction*. SIDA). Livelihood benefits may include benefits reported in the Employment metrics of this table.

	Number of women and girls for whom access to, or quality of, education was improved as a result of project activities, measured against the without-project scenario.	0	4.1.1	0
Water	Total number of people who experienced increased water quality and/or improved access to drinking water as a result of project activities, measured against the without-project scenario	0	4.1.1	0
	Number of women who experienced increased water quality and/or improved access to drinking water as a result of project activities, measured against the without-project scenario	0	4.1.1	0
Well-being	Total number of community members whose well-being ⁸ was improved as a result of project activities	302	4.1.1	302
	Number of women whose well-being was improved as a result of project activities	Not measured	-	Not measured

Category	Metric	Achievements during Monitoring Period	Section reference	Achievements during the Project Lifetime
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⁸ Well-being is people's experience of the quality of their lives. Well-being benefits may include benefits reported in other metrics of this table (e.g. Training, Employment, Health, Education, Water, etc.), but could also include other benefits such as empowerment of community groups, strengthened legal rights to resources, conservation of access to areas of cultural significance, etc.

Biodiversity conservation	Change in the number of hectares significantly better managed by the project for biodiversity conservation ⁹ , measured against the without-project scenario	22,878.5 ha	5.1.1	22,878.5 ha
	Number of globally Critically Endangered or Endangered species ¹⁰ benefiting from reduced threats as a result of project activities ¹¹ , measured against the without-project scenario	2 EN species confirmed in the project area	5.3.1	2 EN species confirmed in the project area

2 GENERAL

2.1 Project Description

2.1.1 Implementation Description

The project area is located in the extreme east of the province of Misiones, in the department of San Pedro, bordering Brazil. The field of native forest where the project is located has 22,878.5 hectares. The project activity applies VM0005 Methodology for Conversion of Low-productive Forest to High-productive Forest, v1.2.

The project activity reduces GHG emissions by avoiding re-logging activities and by promoting enrichment planting and forest management practices that promote the regrowth and rehabilitation of the native forest ecosystem.

Internal and natural risk factors were identified in the project activity PD and during this monitoring period addressed in line with the different management plan and procedures in place (security, forest management, community plan, etc.), according to needs. In the case of illegal activities risking biodiversity, the main threat identified in the area, they were addressed through mitigation actions, such as surveillance, signs installation, and synergy activities with other security authorities to respond to these risks in the area.

According to the applied methodology, the only leakage possible to occur is due to market effects. The leakage factor for market-effects used in this project is the highest one (0.7), for conservative purposes. Therefore, leakage is calculated only once and remains fixed for the entire crediting period. There is no need to monitor leakage since the factor applied is already the highest one.

The non-permanence risk factors were assessed according to the AFOLU non-permanence risk tool and are detailed in the Non-Permanence Risk Report (NPRR) shared with the VVB. The NPRR will be reassessed every verification, to make sure all the risks and risk management procedures are properly identified and updated.

The project proponent elaborated different plans (e.g. the Forest Management and Conservation Plan, the Contingency Plan, etc.) to define the risks to the project and how they are going to be managed through time. Additionally, the project proponent has developed financial spreadsheets to address the financial viability of the project over the years and the opportunity costs related to it.

The project proponent designed a procedure for receiving and addressing claims, suggestions, complaints, and appeals from stakeholders throughout the project lifetime. Besides this, the project proponent maintains good relations with the local and regional fire

⁹ Biodiversity conservation in this context means areas where specific management measures are being implemented as a part of project activities with an objective of enhancing biodiversity conservation.

¹⁰ Per IUCN's Red List of Threatened Species

¹¹ In the absence of direct population or occupancy measures, measurement of reduced threats may be used as evidence of benefit

brigades and will manage fire risks, the major natural risk identified, through its staff and government notifications, fire probability signage, and fire monitoring software.

The project activity is also a CCB certificated project that promotes the following benefits for climate, communities, and biodiversity:

- Job opportunities, including positions reserved for women.
- Technical, legal and economic guidance for indigenous community development.
- Ecosystems services conservation and enhancement for the surrounding communities.
- Native fauna and flora enhancement.
- Management of invasive species.

These CCB benefits were monitored through fauna and flora inventories, community monitoring sheets and forms, interviews with community leaders, surveys and other methods described further in this monitoring report.

During the monitoring period, from 15/12/2021 to 31/07/2022, the project activity achieved a total of 180,643 tCO₂e emissions reductions.

The image shows the site called "Reserva GS1", in red lines, the area of the project "*Selva Paranaense Vida Nativa GS1*" (SPVN) is delimited. A placemark indicates the location of the "Management Operations Center" with respect to the project area. It also indicated the point where the gate of the property is located (Gate-Access Control). That is where control and registration activities are carried out. Every person who enters is registered whether they are part of the staff or not.

Through the implementation of a system of "restoration islands", active restoration cores will be installed in the hollows, clearings or larger openings and will be distributed. Through this methodology, it will be possible to guarantee the installation of genetic islands that will soon function as seedbed pumps that could distribute these species again over the entire surface.

At this stage a restoration planting trial was carried out in an area of 1,000 m². The land was prepared using tree branches in order to lay down the vegetation and thus facilitate the movement of personnel with tools and seedlings in the area. With the support and collaboration of second year students at the National University of Alto Uruguay from San Vicente, Misiones, a controlled planting of individuals of species selected for their growth and rusticity characteristics was carried out. During the planting exercise we detected various considerations to improve the quality of planting and ensure the desired success for the establishment.

2.1.2 Project Category and Activity Type

Sectoral scope: 14 (AFOLU)

Project category: Conversion of low-productive forests to high-productive forests (LtHP). The project will develop enrichment and regeneration of native forest activities.

Activity type: enrichment and regeneration of native forest

The project is not a grouped project.

2.1.3 Project Proponent(s)

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Title	President
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2.1.4 Other Entities Involved in the Project

No other entities are involved in the project; therefore, this section is not applicable.

2.1.5 Project Start Date (G1.9)

15/12/2021 is the project start date as it is the date when the first baseline analysis and forest inventory activities were conducted in the project area.

2.1.6 Project Crediting Period (G1.9)

Crediting period start date: 15/12/2021

Crediting period end date: 14/12/2121

Crediting period total duration: 100 years

2.1.7 Project Location

The project area encompasses 22,878.5 of land authorized for timber harvesting inside GS1. It is located in the extreme east of the province of Misiones in Argentina, immersed in Paraje Cruce Caballero, in the department of San Pedro, bordering Brazil. The entire area is located between the ecoregions of the Atlantic Rainforest of the Upper Parana and the Araucaria Rainforest. The property is located between the Piñalito Provincial Park to the north, and the Yabotí Biosphere Reserve to the south; it is also located a few kilometers from the Cruce Caballero Provincial Park and Arauco Private Reserve, which protects the Arroyo Alegría Valley, belonging to the same company. This distribution represents an important green corridor in the area.

The Geodetic coordinates for the center point of the project area are:

26°31'47.75"S

53°49'9.39"O

	Geodetic coordinates
Alecrín	26°28'48"S 54°08'20"W
Cruce Caballero	26°32'23"S 53°56'29"W
Pje. Gentile	26°34'06"S 53°59'30"W
Pje. Piñeiro	26°34'31"S 53°56'02"W
Tobuna	26°28'12"S 53°53'31"W
Pje. Alegría	26°30'05"S 53°55'59"W

The geodetic coordinates for the communities are:

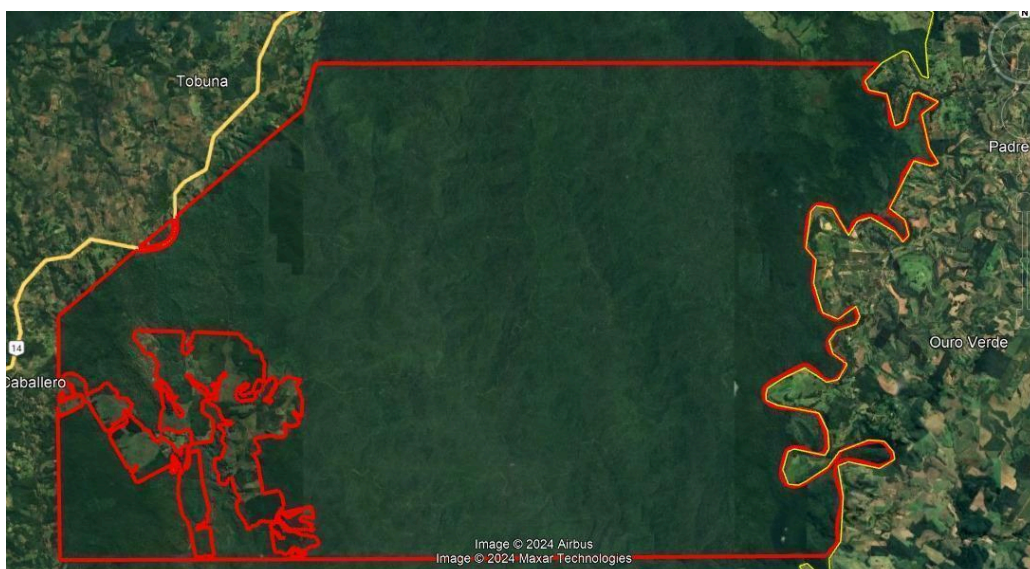


Figure 1: Project location

2.1.8 Title and Reference of Methodology

The project applies methodology VM0005 Methodology for Improved Forest Management: Conversion of Low-Productive to High-Productive Forest.

Reference	Title	Version
VCS Methodology VM0005	Methodology for Improved Forest Management: Conversion of Low Productive to High Productive Forest	1.2

The applied methodology uses other accessory tools.

Reference	Title	Version
CDM Tool	CDM Tool for Calculation of the Number of Sample Plots for Measurements within A/R CDM Project Activities	2.1.0
CDM Tool	CDM Tool for testing significance of GHG emissions in A/R CDM project activities	1.0
CDM Tool	AR-ACM0002: Afforestation or reforestation of degraded land without displacement of pre-project activities	1.1.0
CDM Tool	Estimation of emissions from clearing, burning and decay of existing vegetation due to implementation of an A/R CDM project activity	4.0
VCS Tool	VT0002 Tool for the Demonstration and Assessment of Additionality in IFM Project Activities	1.0
VCS Tool	VT0003 Tool for the Estimation of Uncertainty for IFM Project Activities	1.0
VCS Tool	AFOLU Non-Permanence Risk Tool	4.0

2.1.9 Other Project activities (G5.9)

Emission trading project activities and other binding limits: the emissions removal as a result of this project will not be used for compliance under any other trading program or mechanism. The current VCS project is entirely independent of any other carbon project scheme being developed in Colombia such as REDD projects; therefore, no double counting

has occurred.

Other forms of environmental credit: the project has not sought or received any other GHG environmental credit.

Participation under other GHG project activities: the project has not been registered nor is it seeking registration under any other GHG project activities.

2.1.10 Sustainable Development

National Sustainable Development Objectives have been adapted to local conditions and prioritized according to local needs in Argentina. In this sense, the Sustainable Development Goals (SDG's) addressed by the project activity are in line with these priorities stated nationally and will be monitored accordingly:

1. No poverty: national objectives seek to reduce at least to half by 2030 the proportion of people living under poverty conditions in all its dimensions. In this sense, the project focuses on developing project activities seeking to improve livelihoods and well-being of vulnerable communities in the project zone. The monitoring and follow-up strategy of the projects will be carried out through measurements by means of management evaluations. In the corresponding projects, a group of participants "under project" will be taken, to whom an incentive (project benefits) will be applied and the impacts on this population will be measured against a control group composed of a group of people who will not receive benefits at this stage but will receive them in the following stage. This strategy is given under the logic of scalability of the project. This will allow comparative measurements to describe and quantify a series of changes over time, between the population segment that does not receive benefits from the project (land use without project) and those who receive them in the first phase (scenario with project).

5. Gender equality: Argentina has specifically adapted the objectives related to gender equality, focusing on providing equal opportunities for women, girls and LGBTI+ community. The project addressed these objectives by focusing special attention on women and girls needs and developing projects with gender perspective, while moderating instances to ensure gender equality in public participation. Monitoring includes indicators specific for the project's impact on girls and women (jobs, training, education, etc.)

8. Decent work and economic growth: This will be achieved by generating jobs, training communities and initiating economic activities in the area by implementing different activities within the project zone as well as assisting existing economic activities. For every program developed, the number of jobs, training and livelihood changes are monitored.

13. Climate action: National objectives include the promotion of measures to improve planning and Climate Change management. In this sense, at a community level, the project includes project activities with a Climate Change adaptation perspective (housing improvement, food security, safe water access, among others). Moreover, the project generates emissions reductions by stopping re-logging activities and conserving and enriching natural forests. These reductions are monitored through forest inventories that calculate the carbon stocks in the project area.

15. Life on land: the project's objectives are directly related to national objectives promoting the sustainable use of the land, by reducing and reversing forest degradation and biodiversity loss, especially the most threatened species. Monitoring will be based on the area of forest enriched and regenerated using forest inventories, while biodiversity conservation will be based on triggering species monitoring.

The monitoring of project's fulfillment is included in the different indicators described throughout the document both in the community (SDG 1, 5, 8), biodiversity (SDG 15) and climate (SDG 13) monitoring plans.

2.2 Project Implementation Status

2.2.1 Implementation Schedule (G1.9)

Date	Milestone(s) in the project's development and implementation
2020	Project development
June 2020	Land irrevocable lease with option to purchase
Sep 1 st – Oct 31 st 2021	Community assessment and census
Aug. 28 th 2021	Baseline fauna biodiversity inventory
Oct 26 th 2021	Baseline forest inventory
June 3 rd 2021	FPIC with Tekoa Alecrín community
Nov. 26 th 2021	Public consultation with communities in project zone
Dec 15 th 2021	Project start date with stopped logging
15 th Dec. - 31 st July 2022	1 st Monitoring Period
May 25-27 th 2022	First enrichment and regeneration practices
July 11-30 th 2022	Forest inventory
July 13 th 2022	Biodiversity inventory
March 2027	End of enrichment period activities
Nov. 30 th 2121	End of crediting period

2.2.2 Methodology Deviations

Four deviations from the methodology are requested as per VM0005 requirements:

1st Deviation Request – Shortening of Initial Monitoring Interval for Carbon Stock Assessment .

Section 10.4.3 of VM0005 states that “The change in carbon stocks must be estimated by taking measurements in plots at each monitoring event. Monitoring events must take place at intervals of 5, or preferably 3 years.”

However, we ask for a deviation for this first monitoring interval to be shorter than that. A minor deviation is requested from the initial monitoring period for this unique and exceptional starting stage for the shortening of this initial monitoring period. This requirement is in line with the regulatory requirements detailed in VCS- Standard-v4.5, point 3.20, 3.20.2, and 2.20.3; Methodology Deviations:

- Projects are permitted to deviate from the procedures set out in methodologies in certain cases, such as where alternative methods may be more efficient for project-specific circumstances, or where the deviation will achieve the same level of accuracy or is more conservative than what is set out in the methodology.
- Methodology deviations shall not negatively impact the conservativeness of the quantification of reductions or removals, except where they result in increased accuracy of such quantification.
- Methodology deviations shall be permitted at validation or verification, and their consequences shall be reported in the validation or verification report, as applicable, and all subsequent verification reports.

Furthermore, in a complimentary note, it is mentioned that methodology deviations and monitoring

plan deviations do not require the project proponent to prepare new methodology documentation and are not managed via the methodology approval process. Instead, the validation/verification body validates the deviation as part of the project validation or verification process, as applicable, in accordance with the VCS Standard.

Upon careful consideration, the progression of the project was analyzed, concluding that conducting an annual inventory survey is a more stringent and comprehensive approach compared to conducting surveys at intervals of 5 or preferably 3 years. Therefore, this minor deviation is formally requested from the aforementioned standard requirement.

The requested deviation pertaining to point 2.2.2 is centered around the carbon stock change assessment, which has been conducted over an 8-month duration rather than the standard 3-year timeframe, specifically spanning from December 15, 2021, to July 31, 2022. Contrary to any implications on the monitoring plan outlined in the preceding section, there has been no adverse impact; instead, the plan has been enhanced for greater precision and transparency in calculations and its information is more precise.

To support this request, we have conducted a thorough analysis of the associated risks and benefits. Conducting a forest inventory every year, instead of every 5 or 3 years, offers several advantages and ensures transparency and accuracy in assessing climate change impacts, leading to positive outcomes, which include:

1. **Enhanced Risk Management:** Conducting an annual forest inventory facilitates the identification and assessment of risks on a more frequent basis. This enables us to proactively manage and mitigate these risks, resulting in the development of more effective risk management strategies and reduced overall exposure to risk. Additionally, it allows for the early detection of signs related to forest fires, disease outbreaks, and invasive species. Facilitating timely interventions to prevent or mitigate potential damage.

2. **Biodiversity Conservation:** Annual Forest monitoring plays a vital role in safeguarding biodiversity by identifying and preserving critical habitats and ecosystems. This proactive approach contributes significantly to the overall health and resilience of ecosystems.

3. **Financial Health of the Project:** The extended period between inventories results in longer intervals between revenue-generating events, particularly from VCU sales. Consequently, this puts the project's financial stability at risk and threatens its overall sustainability. Furthermore, it hampers our ability to make investments that directly contribute to fire prevention, forest restoration, biodiversity conservation, and support for local communities. In essence, the project faces significant risks.

4. **Carbon Sequestration:** Conducting an annual forest inventory for a faster and more precise quantification of carbon stored in these ecosystems compared to the conventional 5- or 3-years intervals. This timeliness is crucial for gaining a comprehensive understanding of their role in mitigating climate change.

5. **Climate Finance:** Annual Forest inventories have the potential to attract climate finance and investments for reforestation, afforestation, and sustainable forest management projects. Such funding can significantly amplify the positive impacts of forest conservation efforts.

6. **Community Engagement:** Annual Forest monitoring increases the involvement of local communities, providing them job opportunities and promoting sustainable practices. This, in turn, can lead to improved livelihoods, reduced pressure on forests and the generation of income to improve the quality of life of the community to which they belong.

7. **Early Detection of Alterations:** Regular Forest inventories increase the chances of detecting significant changes or alterations. These include the state and evolution in biodiversity, the tracking of carbon capture and tree biomass levels, pest control, and any adverse situations that could potentially affect the project's development and progress. This, in turn, strengthens trust in the project's predictions regarding carbon offsets and deforestation.

8. **Emission Reductions:** Annual Forest inventories can detect illegal logging and deforestation, enabling timely interventions to prevent further emissions resulting from forest degradation.

9. **Enhanced Transparency and Accountability:** Annual Forest inventories enhance transparency and accountability. Stakeholders, investors, and the community gain confidence in the monitored forest results. Annual monitoring of forest carbon offsets demonstrates the effectiveness and genuineness of carbon reductions. Furthermore, it promotes transparency in forest management and

reduces the likelihood of illegal activities.

10. **Global Climate Goals:** Annual Forest monitoring plays a crucial role in achieving global climate goals, such as those outlined in the Paris Agreement. It ensures that countries accurately report their emissions and removals from the land-use sector.

11. **Improved Internal Controls:** Annual Forest inventories offer an opportunity to review and improve internal controls and processes. Regular assessments can lead to more effective control systems, reducing the risk of measurement errors.

12. **Preparation for Future Growth:** Regular Forest inventories can pinpoint areas for improvement and opportunities for increased efficiency. This information can be invaluable in preparing for future growth and expansion.

13. **Research and Innovation:** Annual Forest inventories enable the collection of more data, which can be utilized for research purposes. This leads to a better understanding of forest ecosystems and their role in climate change. This knowledge can inform the development of policies and strategies for climate mitigation and adaptation.

14. **Social Impact:** Annual Forest inventories significantly amplify the benefits at a local level. Considering that we have initiated the project with our own resources and incorporated investors to accelerate its progress, this approach has been designed to provide benefits to local communities. Any delay in obtaining carbon credits would pose a substantial risk to the Participatory Carbon Project activity that we have committed to during the Free, Prior and Informed Consent (FPIC) gathering already carried out.

15. **Stakeholder Confidence:** Regular Forest inventories demonstrate a strong commitment to transparency and accountability. This commitment can boost stakeholders' confidence by providing tangible evidence of offset and deforestation reductions. Failing to meet these expectations carries a substantial risk that investors, private individuals and other stakeholders may withdraw their willingness to purchase VCUs.

2nd Deviation Request – Area Smaller Than 75% of the Project Area

Section 4 of the VM0005 methodology (v1.2) establishes that, when estimating forest regrowth in the baseline scenario through a reference area, the selected area must be of similar size as the project area or larger, i.e., 75% of the project area or more, and must demonstrate similarity using criteria specified in the methodology.

The SPVN project proponent formally requests a deviation from the reference area size requirement. The selected reference site, located in Lot 6 of the Harriet S.A. property, managed by Puerto Laharrague S.A., comprises a total surface of 2,000 hectares, which represents 9 % of the total project area (22,878 hectares). Despite this smaller size, the site satisfies all other applicability conditions and similarity criteria required by the methodology, including:

- **Ecoregion:** Both sites are located in the Upper Paraná Atlantic Forest ecoregion, with comparable climate, topography, and floristic composition.
- **Forest Structure and Composition:** Both areas contain selectively logged native forests with similar canopy stratification, successional status, and tree species assemblages.
- **Management History:** The reference and project areas have undergone the same types and intensities of forest management over decades. Although they belong to different ownerships today, they were historically managed under the same regional silvicultural policies and extraction regimes.
- **Legal Status:** Both areas are classified as Category II¹² (Yellow - Sustainable Use) under the Provincial Land Use Plan for Native Forests, entitling them to the same legal harvesting permissions and post-logging expectations.
- **Disturbance Regime and Degradation Patterns:** The legacy of past logging activities—such as

¹² Native Forest Land Use Planning, Law No. 26.331/07, Category II – Yellow: Areas of Medium Conservation Value. Their use is restricted to sustainable harvesting, tourism, collection of non-timber products, and scientific research: <https://mapalegal.crea.org.ar/otbn/misiones>

canopy gaps, and bamboo colonization—is similarly present in both areas.

- Land Tenure and Independence: The reference area is independently owned and was not selected based on anticipated forest performance or known growth trends, ensuring its suitability and objectivity as a baseline proxy, as required by VM0005.
- Measurement Protocols: Forest inventories in the reference area followed the same design, plot structure, and measurement protocols as those implemented in the project area.

Field Monitoring Design and Implementation

The reference area includes 12 permanent 1-hectare plots, established in 2008 through a scientific initiative led by the Universidad Nacional de Misiones, aimed at evaluating forest recovery under reduced-impact logging in the Yabotí Biosphere Reserve. The plots were installed to represent structural heterogeneity based on canopy openness, slope, and post-harvest disturbance.

In 2022, the plots were measured by Fotosíntesis S.A.S., an independent technical team with recognized expertise in native forest inventories and carbon stock estimation in northeastern Argentina. Field data collection included species identification, DBH, height, canopy closure, bamboo cover, and regeneration. All measurements were carried out under the coordination of forester Heinrich Burschel using standardized protocols and calibrated equipment. The total monitored area (12 ha) represents 0.6% of the reference area, exceeding typical sampling densities recommended by IPCC for Tier 3¹³ monitoring in tropical forests.

Conservativeness and Substitution of Literature Value

The average regrowth rate observed in the reference area was 1.27 tC/ha/year, based on real forest dynamics under conditions comparable to the project site. This rate replaces the value of 0.47 tC/ha/year initially proposed in the Project Description (Section 3.3.3 *Monitoring of Regrowth in the Baseline Scenario*) using Bedrij et al. (2022)—a peer-reviewed study of forest recovery under selective logging, conducted in an ecologically similar site nearby.

While the reference area estimate is higher in absolute terms, its use is more conservative in the context of credit issuance: a higher regrowth rate in the baseline scenario increases the projected carbon stock without the project, thereby reducing the difference between baseline and with-project scenarios. As a result, the net project benefit (i.e., credited emission reductions) is lower.

This approach therefore results in both increased accuracy and maintained (or increased) conservativeness, as permitted by the VCS Standard v4.4, which states:

“Methodology deviations shall not negatively impact the conservativeness of the quantification of reductions or removals, except where they result in increased accuracy of such quantification.”

Furthermore, the use of site-specific, long-term empirical data collected under standardized protocols provides higher confidence in parameter estimation compared to generalized values from literature, further enhancing the methodological rigor of the project.

Requested Deviation

The project proponent hereby requests approval of a methodological deviation from the minimum size requirement for reference areas, based on the following:

- The selected area (2,000 ha) represents 9% of the project area, below the 75% threshold.
- The site satisfies all ecological, structural, historical, legal, and methodological similarity criteria outlined in VM0005.
- Forest inventories were conducted under a long-term monitoring framework by academic and

¹³ Improving wood carbon fractions for multiscale forest carbon estimation
<https://drive.usercontent.google.com/download?id=13FStysyDgbNYLdMhDTb6kGXRk8TUnYRM&authuser=0&acrobatPromotionSource=GoogleDriveListView>

technical institutions using robust sampling design and verified field protocols.

- The estimated regrowth rate results in a more conservative and more accurate quantification of carbon stock change in the baseline scenario.

- This deviation is transparently disclosed in the present Monitoring Report and fully documented in the annexed *Reference Area Justification Report*¹⁴, *Inventory Metadata File*¹⁵, and *One-Page Summary Report*¹⁶ issued by Fotosíntesis S.A.S.

3rd Deviation Request – Adjustment in DBH Threshold Between Project and Reference Area

As part of the baseline regrowth estimation using a reference area, a difference in the minimum diameter at breast height (DBH) threshold has been identified between the reference area and the project area. In the reference area, a DBH threshold of ≥ 10 cm was used, while the permanent sample plots in the project area include all trees with DBH ≥ 5 cm.¹⁷

This difference stems from historical measurement protocols applied in the reference area, where the ≥ 10 cm threshold was standard practice at the time of plot installation in 2008. As these plots were remeasured consistently under the same criteria in 2022, continuity and data integrity were preserved.

The project proponent therefore formally requests a methodological deviation related to the difference in DBH threshold between the baseline reference area and the with-project scenario.

Despite this difference, the impact on carbon stock change estimates is minimal and conservative. A sensitivity analysis conducted using the SPVN dataset showed that applying a ≥ 10 cm DBH threshold to the project plots—thus excluding trees between 5 and 10 cm—results in a 0.9% increase in the annualized carbon stock growth rate (tC/ha/year). This indicates that the higher threshold used in the reference area leads to a conservative estimate of regrowth and does not introduce bias or overestimation. The sensitivity analysis is available at the following link: Sensitivity Analysis of DBH Thresholds (≥ 5 cm vs ≥ 10 cm) for Reference Area and Monitoring Period

The deviation is further supported by the following:

- Measurement consistency and methodological continuity: All measurements in the reference area were conducted using consistent plot design and field procedures. Aside from the DBH threshold, all other aspects—plot size, tree height measurements, biomass equations—are fully aligned with those applied in the project area.

- Technical oversight: All field data were collected and verified by qualified professionals and validated by Fotosíntesis S.A.S. and the Faculty of Forestry Sciences at UNAM.

In accordance with Section 3.20 of the VCS Standard, this request constitutes a permitted methodology deviation, as it relates to measurement procedures explicitly defined by the methodology. The deviation does not alter any core element of the quantification framework and has no negative effect on the conservativeness of the emission reduction estimates. On the contrary, it reinforces a conservative baseline scenario.

As established in Section 3.20.3, this deviation is transparently reported and justified for validation and verification purposes, and it is understood that it does not establish a precedent for future projects.

¹⁴ Reference Area - Justification Report.

https://drive.google.com/file/d/1tQZ8LSIVdBj75dh7Zy-ia4eLW5O-WcWC/view?usp=drive_link

¹⁵ Metadata Inventory File

<https://docs.google.com/spreadsheets/d/1KcfKP44LE-Jap1gaxOI0sEPYry6YZ1Ga/edit?usp=sharing&oid=108646281459258903691&rtpof=true&sd=true>

¹⁶ One-page - Resultados Parcdelas de Remedición Puerto Laharrague S.A.

https://drive.google.com/file/d/12sh_D7qoWkSmT5ReR9es1KfaPPzQ1h9W/view?usp=drive_link

¹⁷ Reference Area - Justification Report.

https://drive.google.com/file/d/1tQZ8LSIVdBj75dh7Zy-ia4eLW5O-WcWC/view?usp=drive_link

All other methodological provisions—including frequency adjustments (addressed in Section 2.2.2), sampling design, and field implementation—remain fully consistent with VM0005 v1.2.

Both deviations—the higher minimum DBH threshold and the smaller reference area—introduce a precautionary bias in the baseline regrowth estimate. The ≥ 10 cm DBH threshold systematically excludes smaller diameter trees, resulting in a higher apparent regrowth rate in the reference area, which increases the estimated baseline carbon stock and consequently reduces the volume of credits issued. Similarly, the smaller reference area, while meeting all other methodological similarity criteria, yields a measured baseline regrowth rate higher than the literature-based value initially adopted in the PD, thereby increasing the projected baseline carbon stock and further reducing the net creditable benefit. In both cases, the deviations are conservative in accordance with the VCS Standard v4.4, which allows methodological adjustments that increase accuracy or maintain (or enhance) conservativeness in the quantification of emission reductions and removals.

4th Deviation Request - Monitoring frequency in the baseline scenario.

Section 3.3.3 of the Project Description (PD) defines the parameters for selecting and applying a reference area for estimating residual forest regrowth in the baseline scenario, in accordance with Sections 4, 9.1.1, and 10.2 of the VM0005 v1.2 methodology.

For the current monitoring period, the reference area is located in Lot 6 of the property owned by Hijas de Juan A. Harriet S.A. and managed by Puerto Laharrague S.A. The site lies within the same Upper Paraná Atlantic Forest ecoregion as the SPVN project area and fulfills the similarity requirements established in Section 4 of VM0005 in terms of management intensity, disturbance regime, and forest physiognomy.

Twelve permanent 1-hectare plots were established in 2008 by the Faculty of Forestry Sciences at the National University of Misiones (UNaM) as part of a scientific program on post-logging recovery. In 2022, the plots were re-measured by Fotosíntesis S.A.S., an independent technical team with recognized expertise in native forest inventories. This created a 14-year interval between measurements, providing a robust long-term dataset on post-harvest forest dynamics.

Accordingly, the project proponent requests a deviation from the monitoring frequency prescribed in Section 10.2 of VM0005. This deviation is strictly limited to the monitoring frequency in the reference area, which was monitored once over a 14-year interval (2008–2022), rather than annually. All other methodological requirements—including sample design, field protocols, and plot integrity—remain fully consistent with VM0005.

The total change in aboveground biomass observed over 14 years was annualized using linear interpolation and proportionally adjusted to match the project's monitoring period. This approach minimizes the influence of short-term variability (e.g., interannual climate anomalies or episodic disturbances), producing a stable and precautionary estimate of residual regrowth. By capturing a complete recovery trajectory, the dataset strengthens both accuracy and conservativeness, in line with the intent of VM0005 to ensure robust baseline representation of post-logging regrowth.

Furthermore, this deviation applies as the selected reference area yields a more conservative outcome when compared to ex-ante assumptions. The measured regrowth rate of 1.27 tC/ha/year is higher than the value assumed in ex-ante calculations (0.47 tC/ha - Bedrij et al., 2022). Although this represents a greater regrowth rate, it is closer to the dynamics observed in the actual project area and therefore results in a reduction of estimated VCUs. This ensures that the project does not benefit from underestimated baseline regrowth, reinforcing conservativeness in carbon accounting.

This deviation is technically justified on three grounds:

- Data quality and institutional oversight: Data collection and processing were carried out by qualified technical teams under the oversight of UNaM and Fotosíntesis S.A.S.
- Conservativeness: Despite reduced monitoring frequency, long-term data annualization ensures

that baseline regrowth is not overestimated.

- Ecological representativeness: The dataset credibly reflects natural recovery dynamics in the Upper Paraná Atlantic Forest.

In accordance with Section 3.20 of the VCS Standard, this request qualifies as a permitted methodological deviation as it pertains solely to monitoring frequency. The deviation does not compromise the conservativeness of baseline carbon stock change estimation, does not affect any other quantification elements, and is transparently reported for validation and verification purposes. It is understood as an exceptional, site-specific case and does not establish a precedent for future applications. 2.2.3 Minor Changes to Project Description (*Rules 3.5.6*)

The project has not had changes in the community or biodiversity project design during verification.

2.2.4 Project Description Deviations (*Rules 3.5.7 – 3.5.10*)

There have not been any project description deviations applied during this monitoring period.

2.2.5 Grouped Projects

This project is not a grouped project.

2.2.6 Risks to the Project (*G1.10*)

The identification of the probable natural and human risks to the expected benefits for the climate, the community and biodiversity during the life of the project, has taken place. According to the Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis, carried out on the ground (remote pre-diagnosis), the necessary technological and human means (cameras, sensors, drones, operators, etc.) will be available to detect, in due time and manner, any of the mentioned activities evidencing the following problems:

- Natural risks.
- Intentional forest fires.
- Deforestation.
- Poaching.
- Illegal trafficking (in any of its variants).
- Agricultural poaching.

The planning of security and response actions is based on three fundamental pillars: early warning, management of institutions and crime map. In the context of situational prevention, the integral nature of the approach considers different conflict scenarios, which, with due diligence and multi-agency collaboration, may lead to a positive result.

The probability of fires, torrential rains that could cause flooding and winds that could bring down trees or affect the biodiversity of the site have been considered as natural risks. The mitigation actions include short- and long-term activities such as early warnings in the short term, and 24/7 monitoring and action plans to respond to these risks in the medium term (as from the credit emissions gradually till 2025). In some cases, being the natural cycle of native forests, the only measures may include regeneration/replacement of fallen individuals. Regarding impacts on communities, the nearest communities are 15 km away and are therefore not affected by activities or events that may occur on the site. During the monitoring period, no natural-induced risks materialized.

Regarding human-induced risks during the monitoring period, illegal entering to the property is still visible. There is special vulnerability from a geographical point of view with illegal entering from the Brazilian border. The entire border is naturally delimited by the Pepirí Guazú River, for approximately 22 kilometers. This river has narrow and very shallow sectors, making the crossing dynamic on foot, on horseback and even in vehicles possible. There are no direct roads that allow, from the Argentine side, to conduct agile controls throughout that sector. On the other hand, the thick vegetation acts as a natural barrier, complicating the arrival and distance vision. All these characteristics, known by the Brazilian offender, allow for constant illegal crossing into Argentine territory to carry out three illegal actions: illegal hunting, logging and agriculture poaching.

Illegal hunting poses the greatest threat, as it is driven by commercial rather than recreational motives. Numerous individuals of certain species, particularly those that are endangered, are illegally hunted and sold at significant prices on the Brazilian market.

The Brazilian hunter enters well-equipped, with good weapons and ammunition, setting up base camps that serve as a shelter and geographical reference. From the criminological point of view, they are aggressive, firing shots in case they are surprised but the authorities. Moreover, it has been seen that when their illegal activity is conditioned, they respond with different counterattacks to our controls, such as sabotage of roads and placing different traps, like nails scattered to destroy the tires.

Logging is concentrated adjacent to the perimeter, not entering the central body of the property. They generally look for native, hard wood for the production of furniture and poles. The species: Anchico Colorado, Lapacho, Guayubiras, Guatambúes, Grapias, Incense, Black Parrot, Marmelero among others. The Brazilian logger does not generally enter with firearms and is not usually aggressive if surprised.

Illegal agriculture activities generate significant damage, not only affecting native vegetation, but also altering fauna, especially birds and certain invertebrates (spiders and butterflies), as well as the forest floor. The activity can generate dangerous forest fires as, taking advantage of the characteristics of the place, they destroy hectares of vegetation by slash and burn in order to carry out different crop plantations (corn, beans, pumpkin, among others). This could potentially lead to fire spreading to the rest of the forest.

Bearing in mind these human-induced risks, one of the main project's activities planned till 2025 is the installation of monitoring technology, including monitoring towers with state-of-the-art cameras and the use of drones with photogrammetric cameras, for the entire area to be monitored, controlling fires and illegal logging. These devices will be monitored 24/7 all year round from the Ecological Monitoring Center (EMC) to be constructed in one of the points of access to the natural reserve on National Route No. 14.

In the meantime, different actions, in line with the project's Contingency Plan¹⁸, have taken place such as improving communication and coordination mechanisms with other security authorities aiming for a merged effort to reduce risks. To efficiently develop and subsequently apply contingency plans, the following institutions will provide support: Border Patrol, monitoring personnel, park rangers, and regional (provincial) firefighters. The contracting modality is that of "additional cost for services to private persons" for public institutions and "employer-employee relationship" for scheduled monitoring tasks. During this monitoring period, bilingual signs were placed (Spanish - Portuguese) informing of the illegal entering if trespassing.

More information on risks and mitigation actions detailed in Appendix 1), and financial viability. In this section it can be seen that the project depends on the carbon credits to reach a positive NPV.

2.2.7 Benefit Permanence (G1.11)

Since the last CCB validation, we have taken several strategic steps to ensure that the climate, community, and biodiversity benefits of our project are sustained and enhanced well beyond its active lifespan.

We have maintained and expanded our reforestation efforts and other forest restoration practices such as ongoing analysis of forest degradation and its current capacity for natural regeneration. We are moving forward with continuous improvement practices in strategies for clearing invasive species, distributing species for enrichment, and releasing climbers seed trees. We have also identified and prioritized degraded areas on which to focus our efforts during the first years of the project and have made agreements with seedling suppliers to ensure the long-term availability of suitable specimens for forest recovery. To continue supporting carbon sequestration and climate resilience, we have strengthened our partnerships with local and national authorities, ensuring strong enforcement and support for sustainable practices. In addition, we are investing in cutting-edge technologies to monitor forest health and carbon stocks more effectively.

We have intensified our biodiversity monitoring efforts by increasing the frequency of inventories and leveraging advanced technologies such as satellite imagery and Lidar. Our

¹⁸ Available to VVB during verification

conservation activities include the continued restoration of degraded areas, active management of invasive species, and enhancement of green corridors to connect fragmented habitats. We also continue to work closely with conservation organizations and expand our partnerships with new ones to develop and implement adaptive strategies to address emerging threats to biodiversity.

Regarding community benefits and risks, the project included communities from the beginning of the project design for them to identify risks and needs and get to know and understand the project. The community social and economic development projects are being designed to be continued by the community throughout the project lifetime. For example, in the case of the housing project for the Tekoa Alecrín community, the community is the one overseeing the design and construction of the houses, while Nideport provides training and materials.

There is a commitment to the investors and community to continue the projected activities. Once the project's crediting period is over, the area will remain as a conservation area, assuring the permanence of the main climate, community and biodiversity benefits.

These comprehensive measures are aimed at preserving and amplifying the project's positive impacts on climate, community, and biodiversity long after the project concludes. By continuously refining our approaches and leveraging technological advancements, we are committed to ensuring that these benefits endure and evolve to meet future challenges.

2.3 Stakeholder Engagement

2.3.1 Stakeholder Access to Project Documents (G3.1)

A Free, Prior and Informed consultation with social impact assessment is a fundamental axis of the project.

In this instance, the surrounding communities (Cruce Caballero, Paraje Piñeyro, Paraje Alegría, Paraje Gentile and Tobuna) were invited to the Public Consultation where the main objectives, risks and benefits of the project were presented, with open instances to comment on them.

As for Tekoa Alecrín, all interested parties have access to FPIC procedures and documents in Spanish and Mbya Guaraní, both in digital and physical versions, as well as to the survey and project documents, bylaws, CCB and VCS, statutes, CCB and VCS regulations, etc.

Access to information throughout the life of the project will be provided through a strategy that includes NIDEPORT's news web portal and social networks, local radios and newspapers, and face-to-face briefings with stakeholders during the verification stages. In addition, the installation of a Local Community Relations Office (RCC, for its acronyms in Spanish) in Cruce Caballero is planned in the short term. It will operate with open hours in order to allow communities to approach. In addition, the mail for queries and claims and a WhatsApp contact number are operational. In addition, part of the project documentation is available on the CCB and VCS websites, and on the NIDEPORT website with project details.

During the monitoring period, information regarding the follow-up and monitoring of the SPVN GS1 project and the projects developed jointly with the communities (milestones, monitoring of variables, executive progress, unexpected problems, etc.) has been shared and socialized with the population of Cruce Caballero, Paraje Piñeyro, Paraje Alegría, Paraje Gentile, Tobuna and Tekoa Alecrin through face-to-face meetings with stakeholders and documentation on paper, Whatsapp, in addition to the publication of executive reports on Nideport's website <https://news.nideport.com/en/homepage-en/>

2.3.2 Dissemination of Summary Project Documents (G3.1)

During the monitoring process, the project documentation has been made accessible (the SPVN GS1 project and the projects developed jointly with the communities), reporting progress and results in a simple and inclusive Spanish language. This point includes the acceptance by the Tekoa Alecrin to receive the written material of the projects and their progress in Spanish, and the minutes of the FPIC in Spanish and Mbya Guaraní.

These documents were delivered on paper to the stakeholders, NIDEPORT website, WhatsApp messages and briefings with stakeholders during the follow-up instances.

The briefings with communities and other stakeholders, accessible on Nideport's website, are disseminated with the communities via whatsapp.

2.3.3 Informational Meetings with Stakeholders (G3.1)

In order to guarantee the full and effective participation of the parties the project has developed its own Consultation Plan¹⁹. Different stakeholder consultations were conducted taking into consideration special procedures needed in order to include the indigenous community Tekoa Alecrín. In this line, in order to coordinate the meeting, between December 2020 and February 2021 prior investigation was carried out in meetings with the Tekoa Alecrín community, as well as with the Council of Authorities of Tekoa.

Then, two meetings were held. In the first one, the corresponding presentations were made between the members of the company NIDEPORT and the Council of Authorities. The second meeting, in the framework of a General Assembly, with the participation of elders, women, adolescents, adults and children, allowed the team to tour the village with the Council of Authorities and several members of the Tekoa Alecrín community (2 adult women, 3 adult men, 5 young men, 1 girl and 3 or 4 boys). At the General Assembly it was agreed to carry out a FPIC process in order to jointly identify benefits, costs, risks and define projects that focus on the problems that Tekoa Alecrín considers to be of primary importance.

In the case of rural communities (Cruce Caballero, Tobuna, Paraje Piñeiro, Colonia Alegria and Paraje Gentile) before the public consultation with the interested parties, different communication meetings were held in which the project was actively disseminated. After the public consultation, the project documentation was shared with the communities and made available on the company's website. At the end of the public consultation, a satisfaction survey was conducted on the participatory methodology and the information provided; the results of the survey were very satisfactory.²⁰

1. Cruce Caballero Sports, Cultural and Recreational Commission: Two face-to-face meetings. Date: both meetings in November 2021. Meeting place: Cruce Caballero Community Room
2. Local Evangelical Church: One face-to-face meeting. Date: November 2021. Meeting place: Pastor's Home.
3. E.P.E.T N°31 of Cruce Caballero "Escuela Provincial de Educación Técnica": Two face-to-face meetings. Date: May 2021 and November 2021. Meeting place: one in the High School Principal's House and the other one in the educational establishment.
4. EP N° 482 of Cruce Caballero "Escuela Primaria" (Elementary School N° 482 of Cruce Caballero): Two face-to-face meetings. Date: May 2021 and November 2021. Meeting place: educational establishment.
5. La Nueva Esperanza Cooperative: Five face-to-face meetings. Dates: one in August 2021, one in September 2021, two in October 2021, and the last one in November 2021. Meeting place: All meetings were held in the cooperative.
6. Cooperativa Nuevo Arco Iris LTDA: Six face-to-face meetings. Dates: one in February 2021, one in April 2021, two in June 2021, one in October 2021, and the last one in November 2021. All meetings were held in the cooperative.
7. Residents of Cruce Caballero, Paraje Piñeiro, Paraje Gentile, Paraje Alegría and Tobuna: face-to-face meetings within the framework of the random census of rural households by cluster, the public was informed about the citizen consultation, and project documentation was shared with the members of the households according to clusters, including dispersed rural areas. Posters and infographics of the consultation process were also posted in stores, health units, schools and community infrastructure points. Communication through WhatsApp, radio and radio announcements from local radio stations (from October to November 2021), in order to inform and invite to the public consultation to be held on Friday, November 26, 2021. These communications clarified the nature of the public consultation and relevant information on the nature of the project, its duration, benefits, impacts, costs and risks.

2.3.4 Community Costs, Risks, and Benefits (G3.2)

A Public Consultation was held on November 26th of 2021 in the Community Hall. In this opportunity the public was provided with relevant information on the environmental and community benefits of the project, with special emphasis on costs and risks as well as

¹⁹ Infographic is available in the following link, Spanish and English version:
<https://news.nideport.com/2022/04/13/consulta-ciudadana-las-comunidades-locales-y-el-proyecto-de-nideport/>,
<https://news.nideport.com/en/2022/05/12/publicconsultation/>

²⁰ Newspaper public communication of stakeholder consultation available for VVB during validation

opportunities²¹. It summarized the main guidelines of the projects, their scale, costs and risks. The participants were able to ask questions about the financial health of the project, employment opportunities, external threats and risks, and the continuity of information meetings and monitoring and evaluation of the projects, including verification and monitoring bodies.

In addition, following the consultation, a participatory mapping of HCV identification and risk and threat estimates was carried out, as well as a focused focus group of women to assess the differentiated impact on their role in society, considering gender safeguards in the areas of division of labor, access to resources and substantive participation.

In the case of Tekoa Alecrín, a FPIC took place, where a SWOT analysis, HCV identification and project formulation workshops took place²². This included a workshop on gender perspectives regarding the benefits of the project.

2.3.5 Information to Stakeholder on Verification Process (G3.3)

The information on the validation and verification process of CCB and VCS was informed at the public consultation meetings and the FPIC in Alecrín. This has been recorded and is accessible on the web (referenced in section 2.3.4). In addition, the various monitoring and verification milestones during the life of the project will be reported in advance through newsletters, printed documents and briefings.

2.3.6 Site Visit Information and Opportunities to Communicate with Auditor (G3.3)

Information on the auditor's visits will be made 15 days in advance through the Web site, Newsletters, posters and face-to-face communication through written notification and oral communication. The auditor shall be provided with all relevant contact lists necessary for his or her development and shall ensure adequate space for meetings.

2.3.7 Stakeholder Consultation (G3.4)

Different stakeholder consultations were conducted taking into consideration special procedures needed in order to include the indigenous community Tekoa Alecrín. In this line, the Tekoa Alecrín has been consulted and has influenced the design of the projects through a FPIC.

By special procedures, we understand: (A) the development of a specific consultation process for the Tekoa Alecrín and independent of the public consultation with the other communities (Cruce Caballero, Colonia Alegría, Paraje Piñeiro, Paraje Gentile and Tobuna) held on November 26, 2021, in the community hall of Cruce Caballero. (B) that the meetings of said FPIC take place in the Tekoa territory itself and within said territory in the specific places designated by the Alecrín community. (C) that all the oral interventions of the FPIC process be translated into the Mbya Guaraní language at the same time as the face-to-face meetings with the community, by means of a translator designated by the community, to guarantee the understanding of the project information by all the members of the Tekoa attending the meetings.

Regarding how the members of the Mbya Guaraní community have influenced project decisions, this influence is found in the identification of benefits, in the choice of projects that embody these benefits, in the prioritization of execution of these projects and in the consensus of the variables used to measure the management and impact of these projects. Between December 2020 and February 2021, prior investigation was carried out in meetings with the Council of Authorities of the Tekoa Alecrín community, as well as with other members of the community that wanted and could be part of them.

On January 26th, it was agreed that a FPIC would take place to identify the main community's problems.

On February 22nd, a meeting took place to inform the FPIC methodology, at which point the First Chief states that, for reasons of internal organization and tradition, the FPIC will not be carried out with all the members of the community, but that the Council of authorities is

²¹ Public consultation audio and presentation available on the web:

<https://news.nideport.com/2022/04/13/consulta-ciudadana-las-comunidades-locales-y-el-proyecto-de-nideport/>

²² The different documentation (SWOT analysis, HCV workshop material and results) available for VVB during verification

empowered to listen and speak on behalf of the whole Tekoa Alecrin community.

On May 19, during an assembly with all members of the Alecrin community, an agreement was reached with the Council of Authorities on a housing improvement and construction project, as this problem is the most urgent and pressing for the community, followed by access to seeds for vegetable gardens. In both cases, the monitoring plan was jointly designed with the impact variables to be measured.

On June 3, 2021, in an assembly, the signing of the Act of Agreement took place between the Tekoa Alecrin and NIDEPORT, where the community stated its agreement with the FPIC procedure, with the Oga and Ra'yi projects, but not with the main SPVN GS1 project, since the distances between the Tekoa territory and the project area do not limit the access of the Mbya Guaraní community to the forest, resources and forest products.

On November 24, 2021, the community members of Tekoa Alecrin jointly designed flip charts with the agreed projects (training and housing materials: "Oga" and "Huerta Comunitaria" projects). Also, through a SWOT self-diagnosis mapping, the strengths, opportunities, weaknesses and threats of the community's capacities for the management of the projects were jointly evaluated. In addition, a participatory diagnostic workshop was held to determine the HCVs for the Tekoa Alecrin community, and a gender workshop was held with 8 female participants of different ages, using a "focus group" methodology. This focused on the needs of women based on a series of triggering questions that considered:

1. Opinion on the proposed projects.
2. Their interest in training in housing construction.
3. Their interest in training to improve your knowledge of crops.
4. Needs which they indicate to be specific to women.

The consultation with the communities of Cruce Caballero, Tobuna, Paraje Alegría and Paraje Piñero took place on November 26th of 2021, at the Community Hall of Cruce Caballero with more than 70 participants²³.

Within the framework of the Legal Personality C.I. 64 granted by the Provincial Direction of Guaraní Affairs of the Province of Misiones to the Tekoa Alecrin; the 1st Cacique provided the NIDEPORT team with a copy of the minutes of the "Assembly of the totality of the members of the Aboriginal Community Alecrin on the ratification of the continuity of the Cacique and Renewal of Legal Representatives of March 5, 2021" and the minutes of "Inscription in the Registry of the Communities to the Community Alecrin, recognized by provision N° 05/2003 of the registry of the Direction of Guaraní Affairs, under registration N° C. I. 064 of the respective book". These elements legitimize from the institutional framework and from the law the role and legitimacy of the Council of Authorities in the representation of the community and decision making.

In turn, in the framework of the meetings and assemblies carried out within the framework of the FPIC, the First Cacique ratified and recorded in the minutes of the meeting, in front of the participating community members, the role and legitimacy of the Council of Authorities in the representation of the community and decision making. Finally, our ethnographic field observation has verified that the Council of Authorities expresses the civil and political leadership of the Tekoa. In addition, following the consultation, a participatory mapping of HCV identification and estimate of risks and threats was carried out, as well as an oriented focus groups of women to assess the differentiated impact on their role in society, considering gender safeguards in the areas of division of labor, access to resources and substantive participation.

Communication and consultation with stakeholders have continued during the follow-up period by virtue of the implementation and monitoring of ongoing projects. Each progress has been preceded by working meetings to jointly establish aspects of stakeholder participation and responsibilities, organization and coordination, procurement processes, etc., and to carry out management evaluations according to the jointly chosen impact indicators.

Table 1: List of participants in the stakeholder consultation and FPIC by community groups

²³ More evidence of the meeting available for VVB during validation

Stakeholder Categories	Citizen Consultation:	Free, Prior and Informed Consent (FPIC):
Women	Residents of Cruce Caballero, Paraje Piñeiro, Paraje Gentile, Paraje Alegría and Tobuna. Participating women from institutions in the Project boundary	Elderly, adult and young women of Tekoa Alecrin
Indigenous population	-----	Tekoa Alecrin members
Vulnerable population	Residents of Cruce Caballero, Paraje Piñeiro, Paraje Gentile, Paraje Alegría and Tobuna. Participants from institutions in the Project boundary	Tekoa Alecrin members

2.3.8 Continued Consultation and Adaptive Management (G3.4)

Access to information throughout this monitoring period has taken place through a strategy that includes Web portal and project social networks, local radios and newspapers, face-to-face briefings with stakeholders during verification instances and assemblies. Moreover, the installation of a local Community Relations Office (RCC, for its acronym in Spanish) in Cruce Caballero, is projected in the short term. It will work with open hours to allow communities to reach out, comment or ask about the different aspects of the project.

In the case of Tekoa Alecrin, projects have continued to be worked using the FPIC methodology (with face-to-face meetings) throughout the period, in line with development projects deadlines and requirements.

Communities have directly impacted the definition and design of the development projects, based on main risks and needs identified through public consultation. Moreover, the communication strategy has been designed based on the first observations of the community; and following an adaptive management it will migrate according to needs.

Regarding biodiversity aspects of the project, Aves Argentina, an NGO who has been participating in the monitoring, provided inputs on mitigation and conservation actions which are taken in consideration by Nideport in the Biodiversity Management and Conservation Plan.

2.3.9 Stakeholder Consultation Channels (G3.5)

To guarantee extended communication of stakeholder consultation, radio spots and advertisements were broadcast in provincial newspapers according to the deadlines stipulated in the Consultation Plan and a communication campaign was carried out, with posters in shops, churches, community infrastructure, educational establishments and service stations and through oral communication in more than 150 households in the project's area of influence during census (10/2021).

In the case of the Tekoa Alecrin community, direct communications took place with the Council of Authorities who represented the community and committed to inform the community of meetings and discussions and include them in the community's conclusions.

Moreover, the mail of queries and claims is operational as well as a public WhatsApp contact number. Recordings of the meetings, presentations and meeting minutes with information provided are all evidence available for VVB during verification.

2.3.10 Stakeholder Participation in Decision-Making and Implementation (G3.6)

To ensure effective participation of the entire community, including community groups, the following measures have been implemented:

1. Access to information: in all cases, an open process of communication and

dissemination of all the actions to be performed has been carried out, along with the possible costs, risks and benefits for communities. In some cases, printed materials have been used. In addition to this, simple language has been implemented, avoiding excessively technical terminology.

2. Stakeholder consultation process: consultation of stakeholders has been ensured through a FPIC process in the Tekoa Alecrín, conducted based on interviews with community authorities, participatory rural diagnostic techniques and targeted discussion groups. In the case of Cruce Caballero, Tobuna, Paraje Alegría and Paraje Piñero a public consultation and interviews of maximum variation took place. Thus, the parties involved have participated in the design of the project activities and their implementation (except for the project activities that have not yet been implemented), respect for the rules on their rights, local culture, values, representatives and institutions and maintaining HCV. This strategy focuses on ensuring that all relevant groups are represented and have the freedom to express their ideas and opinions. At the same time, it recognizes the diversity of the parties, including the most vulnerable groups. These consultations have been documented and can be reviewed in a next section.
3. Intercultural approach: ethnic differences have been considered, and the vision of these communities and their language were respected. In the case of the community of Alecrín, from the beginning, dialogue was initiated with the indigenous authorities, thus respecting the structure of representation. The translation of dialogues with indigenous authorities at meetings with the community has been promoted and the official FPIC document translated into the Mbya language to ensure access to information for the entire community. Information has been shared with communities in advance of consultations and in appropriate formats to facilitate understanding.
4. Gender approach: gender balance has been considered in terms of the number of participants in the meetings convened with stakeholders. The opinions, experiences and priorities of men and women have been considered equally in the design, decision-making and implementation of the project.

Other necessary measures under way are:

- Communicate to communities and stakeholders about the auditor's visit to the site prior to the event and to facilitate direct and independent communication between the VVB and the community or its representatives.
- Capacity building through training, workshops, courses or other collaborative instances that allow not only technical training but also a greater capacity for resource management and improvement of the understanding of strategies and projects that benefit the community.

2.3.11 Anti-Discrimination Assurance (G3.7)

To ensure that project proponents and stakeholders are not involved in or complicit in any form of discrimination or sexual harassment with respect to the project activities, the following measures have been implemented²⁴:

- For each project activity, the project beneficiaries were provided with means of contact with the human resources area to communicate any act of discrimination and to activate the corresponding protocols.
- The company has a Code of Conduct²⁵ which establishes in its Article 1 the rule of "Non-discrimination" rule, both within the company and towards clients, suppliers, job applicants or other parties, whether based on ethnicity, color, religious belief, gender, national origin, age, disability, sexual orientation, language or any other characteristic protected by law. Article 2 also establishes the norm of "No harassment" such as verbal or written harassment, sexual harassment, comments referring to physical appearance, sexual innuendo, jokes, statements or threats that refer to ethnic status, gender, sexual orientation, religious belief, nationality, religious belief, age, etc.
- A question was also implemented in the self-reported household survey on cases of discrimination experienced by the respondent in order to detect possible points to work on in this subject.

Moreover, during stakeholder consultation, both in the FPIC and in the public consultation,

²⁴ More information available for VVB specifying the anti-discrimination methods used in each project.

²⁵ Code of conduct available to VVB during verification

moderators for the meetings were included to provide an opportunity for those who wanted to express their opinion and ideas, also acting as mediators in situations of discussion between participants.

2.3.12 Grievances (G3.8)

The reception of grievances and comments are done both through face-to-face (during communication meetings) and digital communication channels, such as email and project's WhatsApp publicly available to stakeholders²⁶.

Within the Grievance Procedure²⁷, it is established that complaints and comments are dealt with within 72 hours. This period includes the first contact with stakeholders involved in the complaint received and, if possible, a first resolution attempt. If not resolved a mediation is determined, taking into consideration the type of complaint/action and stakeholder involved, meaning community, investor, other stakeholders, etc. This may include the need for the arbitration of security agents in the case of illegal activity²⁸.

In the case of communities in the project zone, due to the problems of periodic intermittency of electricity service and, as a result, intermittency in 4G data connectivity and Wi-Fi, added to the presence in many cases of only one cell phone per family, lack of computers, lack of a digital and registry culture that discourages the approach by electronic means and use of ICT'S, we have relied on a strategy of proximity through face-to-face briefings mainly, where opinions, inquiries, complaints and claims are recorded, both as an early warning system of conflicts and registration of them. In this case, complaints and claims are recorded in minutes and referred internally by e-mail to the corresponding areas.

During the year 2022 inquiries were predominantly registered for: 1) jobs for communities; 2) delays in project execution. The expectations of a certain segment of the population are an impact not because of Nideport's operations, but because of the unforeseen delays, and it is not necessary to mitigate the labor impacts of external and foreign ventures, but to have a plan for the correct management of expectations with respect to the company's own goals. These were addressed by further updating communities on the project milestones both face-to-face and digitally, with progress reports.

2.3.13 Worker Training (G3.9)

The measures needed and taken to provide orientation and training to project workers are:

Induction

Every person who joins the project receives an Induction instance where general characteristics of the organization, its mission, values and the Code of Conduct (7.5.1-POE-01-Reg-01 Code of Conduct) are shared. The Employee must read it and then complete the Code of Conduct Certification (7.5.1-POE-01-Reg-02 Code of Conduct Certification). Then, the person in charge of the sector notifies him/her about the correct use of the facilities, as well as the internal rules and regimes.

On-the-job training and coaching

Upon joining, transfer or promotion, the sector manager draws up the On-the-Job Training Plan for the person starting to work in the sector. The plan is recorded on Form 7.5.2-POE-01-Reg-03 "On-the-job training and coaching". This form contains the training plan for the position, the estimated duration and the result of the evaluation at each point of the training.

In this way, the organization ensures that the person who begins to provide services / is transferred / is promoted, receives training in all organizational issues that must be mastered, according to the position in which the person is going to collaborate.

The period for this training stage is a maximum of 3 months from the date of commencement of service. Once this period has expired, it is the responsibility of the immediate superior of the person who was transferred or promoted to submit (to the human resources area) the

²⁶ [Information available to VVB during validation](#)

²⁷ Document available to VVB during verification

²⁸ [Procedure for solving conflict document available to VVB](#)

training record, to be filed in the employee's folder.

Request for Technical Training

In addition to the above, the sector manager may request any technical training courses/project activities he/she requires for his/her employees by completing a request form²⁹ to be sent to the human resources area 15 days in advance. This form should detail the person applying for the course, the training activity requested (fees, location of classes, consultant, etc.), the reasons why the employee should attend the activity, and what changes are expected in his/her work activity once the course has been completed.

The human resources area receives the "Request for Technical Training" form. If the form has the required levels of authorization and the budget for the activity is available, it proceeds with the recruitment/enrolment process. And, if the budget is not available, it submits it for approval by the General Management.

Training Activity Measurement Tools

The following measurement tools are implemented in order to evaluate the activities. Namely:

- Attendance Form where the record of each of those who participated in the training is recorded (Form 5.2-POE-01-Reg-02).
- Knowledge assessment. If the participants cannot read/write, the incorporation of content can be assessed by means of oral questions and a show of hands for the answer.

Records of training activities

All internal training activities are recorded on a form prepared for this purpose (7.5.2-POE-01-Reg-02- "Training Activity"). It details the topics covered, date of the activity, duration of the activity, name and signature of the Instructor/Trainer, etc. This form is filed in the training folder. Training can also be documented by means of a photographic/film record while the training is taking place.

In addition, for the operation of its processes, all project collaborators have access to the Teams tool³⁰, where all the current and validated policies and procedures of each of the sectors of the organization are published. This provides the possibility for each collaborator to browse through the procedures of all the sectors, access manuals, registers, etc.³¹.

Regarding the community, during this monitoring period, different training and capacitation have taken place within the project activities, especially as part of the development projects in place:

- Óga project: training on housing construction and materials has begun within the Oga project at Tekoa Alecrin community (July 2022). The project's representative for the community is trained and will later take the information back into the community, while other 2 people were capacitated in wood aestivation. Moreover, 15 women have been trained within the project activity as well.
- Nursery for native medicinal species: during May 2022, training on thesis writing and nursery site preparation started for the person in charge of the nursery project: Gustavo Pedrozo. The aim is to use the thesis and training to record ethnobotanical knowledge. The training included the provision of necessary materials such as a notebook, working equipment, first aid kit, proof of insurance for the activities involved.

The training modules include:

1. Training in pre-project thesis writing.
2. Training in elaboration and writing of university thesis.
3. Training in maintenance and conditioning of nursery spaces.

²⁹ The form is the "Technical Training Request" form (7.5.2-POE-01-Reg 04), available to VVB during validation.

³⁰ Teams: NIDEPORT Total Team. Revised Procedures Folder available for VVB during validation

³¹ Access to all revised and current company procedures available for VVB during validation

- General public: a workshop on curriculum vitae writing was conducted for those who did not have access to one. The workshop was accessible throughout 15 to 22 of May 2022 during the morning (9-12hs), on demand. 34 neighbors participated.
- Women from the Cooperativa Nueva Esperanza (11) have received training on the use of the new equipment provided.

2.3.14 Community Employment Opportunities (G3.10)

The project includes the generation of new 50 direct job opportunities for communities, of which 50% are expected to be women. The position includes training on the different tasks included based on the processes detailed in the previous section. As described in the PDD of the project, there is a procedure in place on how workers are selected for the positions to demonstrate that they have a fair chance of filling those. This includes a first internal search, followed by an external one. If the pre-selection carried out was not satisfactory for the applicant sector, human resources must restart the search, and once new candidates have been obtained, it must carry out the same procedure as indicated in the previous points.

Human Resources, together with the Applicant sector, are responsible for making the decision on the choice of the candidate to join based on:

- Background check
- Interview evaluations
- Technical evaluations
- Psycho-technical evaluations
- Adjustment to the required profile

For the regeneration activities, a first job search was carried out, focusing on the area of influence of the project. For this purpose, job search posters³² were placed in: Cruce Caballero fuel station, Piñeiro School, Premises at Cruce Caballero, School at Cruce Caballero, Women's Police Station in Tobuna, Cashier in Tobuna and Paraje Piñeiro. In order to ensure everyone's opportunity, for those who did not know how to write a CV, during the week of May 15-22nd of 2022, Nideport held a CV writing workshop every day from 9 a.m. to 12 p.m., in addition to receiving CVs, so that applicants could write their CVs in situ.

2.3.15 Relevant Laws and Regulations Related to Workers Rights (G3.11)

The legal activity conducted by the project is in line with laws and regulations related to worker's rights in the country. All laws and regulations that cover workers' rights in the country and provided are listed and evidence to ensure that the project meets or exceeds each of them are mentioned, with documentation available to VVB during verification:

National laws:

- Law 20.744 on Employment Contracts and its amendments.
- Law 24.013 on Employment.
- Law 24.557 on Labor Risks.
- Law 26.390 on Prohibition of Child Labor and Protection of Adolescent Labor.
- Law 19.587 on Hygiene and Safety at Work.
- Law 11.544 on Working Hours
- Law 26.727 on the agricultural labor regime.
- Law 23.551 on trade union associations
- Law 24.365 on compulsory conciliation

Provincial regulatory framework:

Provincial Constitution of Misiones. Art. 30 to 36 inclusive: Right to work, without distinction of sexes: dignified and equitable working conditions; limited working hours, rest and paid

³² Evidence available for VVB during verification

holidays; fair remuneration: minimum living wage; equal remuneration for equal work; participation in the profits of companies, with control of production and collaboration in management; protection against arbitrary dismissal; the right to strike and all labor legislation. Free choice of occupation; regulation and control of night and unhealthy work; women's and minors' work; safety at work and the right to hygienic and decent housing. Free and democratic organization of trade unions. The right to comprehensive and inalienable social security rights. Free procedures before the labor courts and administrative bodies.

Evidence of working rights and law compliance can be demonstrated via the formal contracts with the employees, and their health and risk insurance inscription. The project has a Human Resources area in charge of the follow up on the compliance for the different working conditions like working hours, security elements available, training, working environment conditions, etc. Moreover, there is a person in charge of monitoring, and meeting all workers' needs and demands if applicable. In terms of communication, the measures necessary and designed to inform employees of their rights was designed by several procedures that were disseminated and delivered to each employee³³.

In the case of community members who do not have access to electronic devices and connectivity, who cannot read and write, or who speak the Mbya Guaraní language, face-to-face meetings will be held, using a translator and/or developing oral transmission techniques, using an ethnographic approach to ensure understanding of the meaning and to generate reports on content and degree of understanding of the content of the subjects participating in the informative and training meetings.

2.3.16 Occupational Safety Assessment (G3.12)

In line with working safety legislation, a Job Risk Assessment was conducted, identifying the main risks for the different job positions and mitigation actions defined. The necessary training and security equipment³⁴ are provided accordingly:

Security: for those responsible for the area of physical and property security, the risks include the hypothesis of "armed confrontation, especially with poachers", who carry firearms. These encounters may be expected during the various tours of the property for the purpose of supervision of different sectors. In this instance, the security team of the GS1 does not have the necessary protective equipment, such as bullet-proof waistcoats and firearms, among other things. However, organized patrols are carried out with three security forces, the National Gendarmerie, the Provincial Park Rangers and the Misiones Police, so that police power is outsourced, without exposing the reserve's own personnel to such risks.

Forestry personnel: regarding personal safety when moving in the forest and when pruning, thinning and dismantling camps, the major risks identified are snake, insects and mites' bites (e.g., mosquitoes, spiders, bees, wasps, etc.), secondly falls, sunstroke, and dehydration, among others. Mitigation actions include training on main threatening species identification as well as the provision of basic equipment required, such as high-top rubber boots, high top boots, gloves, goggles, and fireproof waistcoats. The equipment is complemented with a first aid kit containing general and specific elements such as anti-ophidic serum, immobilizing splints, creams for burns, sun protection creams, anti-allergic and anti-inflammatory creams as well as injectable corticoids, among others.

Regarding the containment and fighting of forest fires, in this case, the major risks are burns, asphyxia, suffocation, falls of trees, falls from miscellaneous grounds (fractures, traumatismos, injuries).

In conclusion, the measures to be implemented in relation to work safety include:

1. Provide information on the general regulations in force on conduct at work, as well as in each specific area to the personnel.
2. To apply the personal protection rules and to train personnel in their proper use.
3. To train personnel in the correct use of resources.
4. To develop accident procedures and train personnel in accident prevention and procedures.
5. Training in fire prevention and immediate fire procedures.

³³ Document available to VVB during verification

³⁴ Evidence is available in reference folder

6. First aid training
7. To train staff in waste treatment
8. To provide security equipment
9. To provide first aid equipment

2.4 Management Capacity

2.4.1 Required Technical Skills (G4.2)

The technical skills required for implementing and maintaining the project activity are related to the project activities involving carbon pools, communities, and biodiversity.

The project proponent's technical and administrative team is responsible for: (i) supervising and managing the activities conducted by third parties; (ii) interacting and conducting activities with surrounding communities; (iii) centralizing and storing all the data regarding carbon pools, communities, and biodiversity; (iv) securing the area and managing any natural or human-induced risks that could impact negatively in the project.

Third party organizations were hired to implement and manage other activities. For conducting the forest inventories, and the enrichment planting and forest regeneration interventions, the project proponent hired Fotosíntesis, a company specialized in forest plantation, sustainable management, and certification. For bird inventory, the project proponent hired Aves Argentinas, an organization with more than 100 years of experience in bird conservation. They have conducted the biodiversity inventory and act as an external advisor for the monitoring plan elaboration.

As mentioned, the PP has a coordination team which works together with other experts in the subject hired specifically for the task. In this line Fotosíntesis is the consultancy hired to assist the project's proponent in the monitoring of climate section, conducting the forest inventories and assisting in the action plan design.

In terms of biodiversity monitoring, the project allied with Aves Argentina for its consultancy service on biodiversity monitoring and they assisted on the project's design in this area. The monitoring facilities will allow researchers to execute their work, and access 24/7 monitoring information.

EcoSecurities and ProSustentia are the consultancies hired to assist on the validation and verification process, with the PD and MR documentation, carbon calculations, among others³⁵.

This is repeated throughout the project crediting period for all monitoring reports according to PP needs regarding knowledge and expertise.

In terms of community, Nideport has an experienced team dedicated to the implementation and monitoring in line with the community plan.

2.4.2 Management Team Experience (G4.2)

The knowledge and previous experience of the management team for the implementation of projects is detailed below:

To manage the participation of the community, in the staff of collaborators, there is a Community Relations Officer with a degree in sociology who has experience in Consulting, having been assistant in the implementation of public policies of prevention and security for municipalities (2016-2019). He has experience in carrying out diagnostics, coordinating intersectoral working groups and elaborating suggestions for the efficient implementation of public policies in local governments. He also has experience in public management, working as Head of Social Work Coordination Division in the Secretariat of Human Development and Social Promotion in the Municipality of Zárate (2009-2010) and municipal referent of the shared social responsibility project activity for young people in vulnerable situations "Envió". Finally, the team participated in the coordination table for tackling gender violence. Coordination of the interdisciplinary Gender and Family team.

The Community Relations Unit carries out: ethnographic approach and intercultural dialogue with local communities, including Mbya Guaraní villages; gender focus in forest management

³⁵ All contracts, CVs and consultancy experiences available in the Drive Folder

and community strengthening; surveys, interviews and production of reports; design of appropriate methodology for projects according to CCB standards, Verra 3.1. The unit is integrated by:

A member graduated in Anthropological Sciences. Member of the university extension project called "Consolidating educational social practices. Indigenous people in the city: visibilization and ethno-political organization in the framework of recent transformations". She has also carried out Methodology and field research techniques. Research work in the feminist self-defense workshop "Manifiesto".

A teacher of philosophy and psychology in numerous secondary schools in Campana (Province of Buenos Aires). Also, co-director of the sociocultural and interdisciplinary project "Al Ciervo de los Pantanos". Interdisciplinary work project in articulation with the Deer of the Marshes National Park aimed at generating processes of aesthetic and socio-cultural valorization of the local and regional environmental heritage of the city of Campana and its surroundings. He carries out functions such as cartography and digital mapping; socio-community and anthropological surveys and mapping; theoretical advice; bibliographic and multimedia research on the town of San Pedro and its surroundings; bibliographic and multimedia research on the Mbya-Guaraní communities; development of transdisciplinary approaches to the local community.

A member graduated in Political Science. Magister in course (Government Magister) (UBA). To manage the Biodiversity Assessment, the staff of Collaborators includes:

A person in charge of Forest Management, graduated as Agronomist Engineer, with prior experience on crop monitoring, supervision of logistics and operations. He is also certified by INASE for the inspection and certification of seed production and classification, among others.

For carbon measurement and monitoring, the staff of collaborators includes a certification and sustainable development manager who has a lawyer degree with institutional activity as President of the Sustainability Commission of the French-Argentine Industrial Chamber, Member of the Environment and Sustainability Commission of UIPBA Circular Economy Club Buenos Aires, and has been a participant and speaker at the Climate Change Conferences held in: COP 24 Katowice, COP 23 Bonn and COP 22 Morocco.

In terms of biodiversity monitoring, the project allied with Aves Argentinas for its consultancy service on biodiversity monitoring. The monitoring facilities will allow researchers to execute their work, and access 24/7 monitoring information.

2.4.3 Project Management Partnerships/Team Development (G4.2)

Involved entities collaborating in the design and implementation of the project include:

Fotosíntesis, a consultant firm whose mission in the project is to carry out the inventory and calculation of biomass (carbon) baseline for Forestal Belga's properties.

Aves Argentinas, an NGO hired for the biodiversity inventory and as an external advisor for the monitoring plan elaboration.

2.4.4 Financial Health of Implementing Organization(s) (G4.3)

Nideport is a financially healthy company belonging to Heimdall Corp US. Finance is provided by investors with activities periodically audited internally.

Evidence of financial health is available in the form of accounting balances for the project external auditing.

2.4.5 Avoidance of Corruption and Other Unethical Behavior (G4.3)

The project developer, and the other entities involved are legally registered companies in the USA and Uruguay. None of them were involved in or complicit in any form of corruption such as bribery, embezzlement, fraud, favoritism, cronyism, nepotism, extortion, or collusion.

As legally registered companies, the project proponent and other involved entities have the obligation to comply with relevant regulations, including anti-corruption law. The annual audit

by the correspondent governments makes sure that they operate with full compliance with national law and regulations.

This project has a whitepaper Forest Management General Manual³⁶ where it is clearly explained that corruption and other unethical behaviors are totally forbidden.

Moreover, the project's legal notice describes actions and regulations in terms of fraud, corruption or other illegal action towards users regarding the use of the NIDEPORT platform³⁷, as well as commission schemes³⁸.

2.4.6 Commercially Sensitive Information (Rules 3.5.13 – 3.5.14)

No information is considered commercially sensitive. Only in the case of species surveys, for endangered species and species with illegal hunting pressure, the exact location where it is seen is not reported in public documents but is available to VVB upon request.

2.5 Legal Status and Property Rights

2.5.1 Recognition of Property Rights (G5.1)

Since these lands are private, the ownership is clear, and there is no dispute over land ownership in the project site. The project proponent has the legal right to conduct the proposed project activities inside the project area through a legal agreement with Forestal Belga, the company that owns the land³⁹. The corresponding public consultation took place, and no claims arose regarding land ownership and rights.

2.5.2 Free, Prior and Informed Consent (G5.2)

Since prior to the project initiation, all the project land has been owned by Forestal Belga. To ensure the successful development of the project, the project proponent, which has legal authorization over the land, has made the corresponding research on the lands by requesting government authorizations and certifications⁴⁰. So, the project will not encroach uninvited on private property, community property or government property.

Moreover, there is not any community, individual or group of people living in the project area and the project land is privately owned.

The corresponding public consultation which took place during 2021 did not raise any complaints regarding property rights, nor did the FPIC with native communities.

2.5.3 Property Right Protection (G5.3)

There are no communities, individuals or groups of people living in the project area and the project land is privately owned. Activity relocation will only occur to those related to biodiversity threats (illegal hunting), while providing alternatives and productive projects to access basic family baskets to those communities that use the area for illegal hunting, gathering (fruits and wood). There are also communities using the area for recreational/cultural use. It must be emphasized that the reliance of the local communities on the forest of the project area for their livelihoods is not significant, not depending exclusively on living biomass, deadwood, or litter for heating and cooking but within forest of the project zone and nearer to their homes.

Moreover, the project will generate job positions to be filled by the local community (seedling production, native species plantation), allowing the population to improve well-being with formal forms of jobs.

2.5.4 Identification of Illegal Activity (G5.4)

The planning of security actions is based on three fundamental pillars: early warning, management of institutions and crime map.

³⁶ Document available in reference folder

³⁷ Detailed in Nideport's webpage and available to VVB during verification

³⁸ NIDEPORT whitepaper available to VVB during verification

³⁹ Available to VVB during verification

⁴⁰ Authorizations and land tenure certifications available for VVB

In the context of situational prevention, the integral nature of the approach considers different conflict scenarios, which, with due diligence and multi-agency collaboration, may lead to a positive result.

Early Warning

According to the Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis, carried out on the ground (remote pre-diagnosis), the necessary technological and human means (cameras, sensors, drones, operators, etc.) will be available to detect, in due time and manner, any activities evidencing the following problems:

- Forest fires (intentional or not).
- Deforestation.
- Poaching.
- Illegal trafficking (in any of its variants).
- Illegal agriculture due to usurpation of land.

A Contingency Plan has been developed to address each of the problems outlined above.

In order to efficiently develop and subsequently apply contingency plans, the following institutions will provide support: Border Patrol, monitoring personnel, park rangers, and regional (provincial) firefighters. All institutions are in the process of agreement with the adherent company Global Seven SAS.

The contracting modality will be that of "additional cost for services to private persons" for public institutions and "employer-employee relationship" for monitoring tasks. In both cases, the participation in social areas will be of the essence to comply with the tenets of integration of indigenous peoples and local citizens.

Crime map

Intervention strategies are designed based on the reports provided by the local community (police, border patrol, Municipality of San Pedro, neighbors, etc.), who by maintaining fluid local communication, allow one to be aware of any activity of interest within the property and its surroundings and to be able to evaluate the evolution of the place in the last two years as regarding the main threats identified: Drug trafficking; Poaching; Illegal logging. Later, the information provided by the analysis of monitoring control tower images will allow further definition and redesign of the intervention strategies.

Some equipment to be used includes:

- Thermographic cameras: to be installed in the towers to allow automatic detection of fires as well as people's presence.
- Drones: For automated patrol in predetermined routes, especially project area borders, with constant operator supervision.
- Peripheral sound system: it will allow personnel to identify different situations to be managed from the monitoring center. Impulsive sound detection, both through cameras and microphones, will allow gunshots, shouts or other sounds indicating threats, to be identified and triangulated in order to identify location.
- LoRaWan net: installation for the interconnection of appliances and equipment, such as meteorological centers with different sensors to measure environmental variables or others. The information provided and analyzed will allow us to anticipate, for example, fire threats due to dry days, flooding, etc. and execute early warnings.

2.5.5 Ongoing Disputes (G5.5)

The land is privately owned. There are no identified or ongoing conflicts over land rights, nor were there. There are no permanently settled local communities with customary land rights

within the land.

On the other hand, there are illegal activities and uninvited entering of people from the bordering country Brazil in the eastern side of the property. These activities are not within a legal right for land request of conflict, but entirely as illegal activities, with natural resources extraction and degradation. For this reason, this conflict is being handled by national security authorities and is frequent along the whole political border in the region (see more detail in section 2.2.6).

2.5.6 National and Local Laws (G5.6)

The project is in compliance with all national and local laws and regulations in the host country that are relevant to the project activities. As described below:

National Constitution. Art. 14.- Right to work. Art. 14 bis. - Right to decent and equitable working conditions, limited working day; paid rest and holidays; fair remuneration; minimum living wage; equal pay for equal work; participation in the profits of enterprises, with control of production and collaboration in management; protection against arbitrary dismissal; stability of public employees; free and democratic trade union organization, recognized by simple registration in a special register. Trade unions are guaranteed: the right to conclude collective labor agreements; recourse to conciliation and arbitration; the right to strike. Trade union representatives shall enjoy the guarantees necessary for the performance of their trade union duties and those related to the stability of their employment. Social security benefits. Art. 19: Provide for human development for employment generation, vocational training of workers.

National laws:

- Law 20.744 on Employment Contracts and its amendments;
- Law 24.013 on Employment.
- Law 24.557 on Labor Risks.
- Law 26.390 on Prohibition of Child Labour and Protection of Adolescent Labour.
- Law 19.587 on Hygiene and Safety at Work.
- Law 11.544 on Working Hours
- Law 26.727 on the agricultural labor regime.
- Law 23.551 on trade union associations
- Law 24.365 on compulsory conciliation

Provincial regulatory framework:

Provincial Constitution of Misiones. Art. 30 to 36 inclusive: Right to work, without distinction of sexes: dignified and equitable working conditions; limited working hours, rest and paid holidays; fair remuneration: minimum living wage; equal remuneration for equal work; participation in the profits of companies, with control of production and collaboration in management; protection against arbitrary dismissal; the right to strike and all labor legislation. Free choice of occupation; regulation and control of night and unhealthy work; women's and minors' work; safety at work and the right to hygienic and decent housing. Free and democratic organization of trade unions.

Further evidence is provided for VVB during verification, which presents the following conclusions regarding regulation for this project:

The activity developed has the due international, national and local regulatory support, which refers to the action of remediation, restoration, mitigation and protection of carbon sinks, which cannot be restricted, with the due legal guarantees and expeditious legal actions available.

The regulations establish the minimum budgets with the character of public order prevailing

over the norms that contemplate protection and restoration.

The regulations concerning fiscal incentives and non-refundable contributions establish native forest exploitation as a requirement.

Its legal composition is contradictory in that it defines preservation as an objective but establishes legal requirements for native forestry activities.

Forest exploitation has the current regulations and the political will for timber extraction, with a view to the sophistication and improvement of processes.

Native lands have a high risk of degradation as long as the classification of prohibition of exploitation is only reserved for national and provincial parks.

3 CLIMATE

3.1 Monitoring GHG Emission Reductions and Removals

Stratum	Area (ha)
Closed Canopy (FCC)	2,711.33
Open Canopy (FOC)	13,517.80
Scattered Canopy (FSC)	6,069.66
Scrubland (S)	298.20
Shifting agriculture	281.5
TOTAL	22,878.5

3.1.1 Data and Parameters Available at Validation

Data / Parameter	A_i														
Data unit	Ha														
Description	Area of stratum i														
Source of data	Equation (2)														
Value applied	<table> <tr> <th>Stratum</th><th>Area (ha)</th></tr> <tr> <td>Closed Canopy (FCC)</td><td>2,711.33</td></tr> <tr> <td>Open Canopy (FOC)</td><td>13,517.80</td></tr> <tr> <td>Scattered Canopy (FSC)</td><td>6,069.66</td></tr> <tr> <td>Scrubland (S)</td><td>298.20</td></tr> <tr> <td>Shifting agriculture</td><td>281.5</td></tr> <tr> <td>TOTAL</td><td>22,878.5</td></tr> </table>	Stratum	Area (ha)	Closed Canopy (FCC)	2,711.33	Open Canopy (FOC)	13,517.80	Scattered Canopy (FSC)	6,069.66	Scrubland (S)	298.20	Shifting agriculture	281.5	TOTAL	22,878.5
Stratum	Area (ha)														
Closed Canopy (FCC)	2,711.33														
Open Canopy (FOC)	13,517.80														
Scattered Canopy (FSC)	6,069.66														
Scrubland (S)	298.20														
Shifting agriculture	281.5														
TOTAL	22,878.5														
Justification of choice of data or description of measurement methods and procedures applied	The stratification was carried out by interpreting and processing Sentinel-2 satellite images using the Google Earth Engine platform. Two multi-temporal mosaics were used for this; the first is from the year 2020 (144 Sentinel-2 images) and the second from 2021 (88 Sentinel-2 images). From these two mosaics, the median of the values at the pixel level was calculated, hoping that it represents the state of the coverage at that level. In addition, NDVI vegetation indices, terrain elevation and the Random Forest algorithm were used.														

Purpose of the data	Determination of baseline scenario Calculation of baseline emissions Calculation of project emissions
Comments	-

Data / Parameter	GHG_{BSL-E}
Data unit	$t\ CO_2^{e-1}_{yr}$
Description	Greenhouse gas emissions as a result of relogging within the project boundary in stratum i
Source of data	Equation (2)
Value applied	36,493 for the first monitoring period (until July 2022)
Justification of choice of data or description of measurement methods and procedures applied	Calculated per logging plans and permits.
Purpose of the data	Calculation of baseline emissions
Comments	-

Data / Parameter	$A_{REL,i}$
Data unit	Ha
Description	Area relogged in baseline stratum i
Source of data	Equation (17); Equation (3)
Value applied	1,486,6
Justification of choice of data or description of measurement methods and procedures applied	The relogged area was estimated as one fifteenth of the total project area subject to harvesting (22,298.9 ha), based on the baseline management plan which established a 15-year logging rotation. This results in an annual relogging area of 1,486.6 ha, reflecting the portion harvested each year under the assumed rotation cycle. ⁴¹
Purpose of the data	Calculation of baseline emissions Calculation of leakage
Comments	Derived from the application of Equation (17), as presented in the "Logging Rate" subsection of Section 3.2.1 (Baseline Emissions) in the PD. Reflects the annual relogged area projected under the baseline scenario, based on a 15-year harvesting rotation established in the forest management plan of Forestal Belga.

Data / Parameter	$C_{harvest,i}$
Data unit	$t\ C\ ha^{-1}$
Description	Carbon stock in harvested timber in stratum i

⁴¹ Forestal Belga SA, Forest Fagagement Planning Document - Page 54
<https://drive.google.com/file/d/1UpL488PrXUTliCHur1kbiWp-Gh2QBb0M/view?usp=sharing>

Source of data	Equation (4)
Value applied	9.89 for the first monitoring period (until July 2022)
Justification of choice of data or description of measurement methods and procedures applied	GHG emissions were calculated based on timber volumes, not area logged. Total carbon stocks were divided by the logged area (1,486.6)
Purpose of the data	$C_{\text{harvest},i}$
Comments	-

Data / Parameter	$C_{\text{WP100},i,t}$
Data unit	t C ha^{-1}
Description	Post-relogging carbon stock stored in long-term wood products (stock remaining in wood products after 100 years) in the baseline scenario in stratum i
Source of data	Equation (3), (7a) and (8)
Value applied	-1.11 for the first monitoring period (until July 2022)
Justification of choice of data or description of measurement methods and procedures applied	According to VM0005 requirements, we used the waste wood fraction value of 0.24, adequate for developing countries in the calculations.
Purpose of the data	Calculation of baseline emissions Calculation of leakage
Comments	-

Data / Parameter	$C_{\text{WP20},i,t}$
Data unit	t C ha^{-1}
Description	Post-relogging carbon stock stored in short-term and medium-term wood products (stock is expected to be emitted over 20 years with a linear decay function) in the baseline scenario in stratum i at year t
Source of data	Equation (3), (7b) and (8)
Value applied	8.62 (for the first monitoring period (until July 2022)
Justification of choice of data or description of measurement methods and procedures applied	According to VM0005 requirements and forest management plans and permits, wood extracted is used as sawn wood.
Purpose of the data	Calculation of baseline emissions Calculation of leakage
Comments	-

Data / Parameter	$V_{\text{harvest},j,i}$
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Data unit	$\text{m}^3 \text{ha}^{-1} \text{yr}^{-1}$
Description	Volume of timber harvested in the baseline scenario of species j in stratum i
Source of data	Equation (4)
Value applied	29.59 for the first monitoring period (until July 2022)

Justification of choice of data or description of measurement methods and procedures applied	Forest management plan and permits
Purpose of the data	Calculation of baseline emissions Calculation of leakage
Comments	-

Data / Parameter	D_j
Data unit	t d.m. m^{-3}
Description	Basic wood density for species j
Source of data	Equation (4)
Value applied	0.70
Justification of choice of data or description of measurement methods and procedures applied	The value represents a weighted average of the density of all timber species identified in the inventory. This value is used exclusively for EX ANTE calculations. Specific information available in point 7, ADDITIONAL PROJECT IMPACT INFORMATION
Purpose of the data	Calculation of baseline emissions
Comments	Maggio, A.D. & Cellini, J.M. 2016. Recopilación de ecuaciones de volumen y biomasa de especies forestales de la República Argentina. Ministro de Ambiente y Desarrollo Sustentable de la Nación. https://libros.unlp.edu.ar/index.php/unlp/catalog/book/606#accordion-1

Data / Parameter	CF
Data unit	t d.m.^{-1}
Description	Carbon fraction of dry matter
Source of data	IPCC
Value applied	0.47 t d.m.^{-1}
Justification of choice of data or description of measurement methods	The value used was indicated by the methodology.

and procedures applied	
Purpose of the data	Calculation of baseline emissions Calculation of project emissions
Comments	-

Data / Parameter	f_{damage}
Data unit	Dimensionless
Description	Factor for damage to the residual stand caused by relogging
Source of data	Equation (5)
Value applied	3.71
Justification of choice of data or description of measurement methods and procedures applied	A value of 1.23 Mg C/m³ from Pearson et al. (2014) ⁴² is applied, reflecting similar forest conditions and ensuring a conservative estimate due to less controlled logging practices in the SPVN baseline scenario.
Purpose of the data	To estimate collateral carbon losses (non-commercial biomass) associated with selective logging, including damage to residual trees, understory, and infrastructure clearing, as required by Equation 22 of VM0005 v1.2.
Comments	The value is sourced from Pearson et al. (2014), based on field measurements in Bolivian tropical forests. Its use is conservative given the less controlled logging observed in the SPVN baseline scenario. A comparative technical assessment confirms high ecological and operational similarity between the Bolivian site and the SPVN project area, with the SPVN baseline scenario reflecting less controlled and potentially more impactful harvesting practices. ⁴³

Data / Parameter	$C_{\text{XB},\text{ty},i}$
Data unit	t CO ₂ -e ha ⁻¹
Description	Mean stock of extracted biomass carbon by class of wood product ty from stratum i
Source of data	Equation (6)
Value applied	36.25 for the first monitoring period (until July 2022)
Justification of choice of data or description of measurement methods and procedures applied	Forest management plan and permits. Extracted wood is for sawn wood.
Purpose of the data	Calculation of baseline emissions

⁴² Pearson, T. R. H., Brown, S., Murray, L., & Sidman, G. (2014). Carbon emissions from tropical forest degradation caused by logging. Environmental Research Letters, 9(3), 034017.
<https://doi.org/10.1088/1748-9326/9/3/034017>

⁴³ Comparative Technical Report for factor damage - Pearson et al 2014
https://drive.google.com/file/d/17VPJw6PIS0MpiH50YvBR0mGvIMWXZFsG/view?usp=drive_link

	Calculation of leakage
Comments	-

Data / Parameter	$V_{ex,ty,j,i}$
Data unit	m ³
Description	Volume of timber extracted from within stratum i (does not include slash left onsite) by species j and wood product class ty
Source of data	Equation (6)
Value applied	43,993 (year 2022 up to July) for all species and wood product class sawn wood
Justification of choice of data or description of measurement methods and procedures applied	Forest management plan and permits. Data for the entire project area to be extracted in 2022
Purpose of the data	Calculation of baseline emissions Calculation of leakage
Comments	-

Data / Parameter	ty
Data unit	Dimensionless
Description	Wood product class (e.g., sawnwood, wood-based panels, other industrial roundwood, paper and paper board, and other)
Source of data	Equation (6)
Value applied	Sawnwood

Justification of choice of data or description of measurement methods and procedures applied	Wood class product informed by the project proponent.
Purpose of the data	Calculation of baseline emissions
Comments	-

Data / Parameter	ww_{ty}
Data unit	Dimensionless
Description	The fraction immediately emitted through mill inefficiency
Source of data	Equation (7a)
Value applied	0.24

Justification of choice of data or description of measurement methods and procedures applied	Value applicable to developing countries as per VM0005 recommendations.
Purpose of the data	Calculation of baseline emissions
Comments	-

Data / Parameter	slp_{ty}
Data unit	Dimensionless
Description	Fraction of wood products that will be emitted to the atmosphere within 5 years of timber harvest
Source of data	Equation (7b)
Value applied	0.2
Justification of choice of data or description of measurement methods and procedures applied	Applicable to sawnwood as per VM0005 guidance
Purpose of the data	Calculation of baseline emissions
Comments	-

Data / Parameter	fo_{ty}
Data unit	Dimensionless
Description	Fraction of wood products that will be emitted to the atmosphere between 5 and 100 years of timber harvest
Source of data	Equation (8)
Value applied	0.84
Justification of choice of data or description of measurement methods and procedures applied	Applicable to sawnwood as per VM0005 guidance
Purpose of the data	Calculation of baseline emissions
Comments	-

Data / Parameter	$E_{biomass}$
Data unit	$tCO_2-e\ yr^{-1}$
Description	Emissions due to the removal of the biomass itself at year t
Source of data	A reported percentage typical for the area is used, based on Pulkki (1997), who estimated a 12% infrastructure impact under

	conventional logging in evergreen tropical forests. This is multiplied by the average carbon stock per hectare to estimate emissions
Value applied	35,279.35
Justification of choice of data or description of measurement methods and procedures applied	Conservatively assumed following the methodological approach proposed by Pulkki (1997), ensuring consistency with standard estimates for biomass removal during logging operations, which are consistent with field conditions observed at the project site.
Purpose of the data	Calculation of baseline emissions
Comments	-

Data / Parameter	E_{felling}
Data unit	$\text{tCO}_2\text{-e yr}^{-1}$
Description	Emissions due to the use of equipment for removal of the biomass on the area dedicated to infrastructure
Source of data	Equation (24)
Value applied	48.27
Justification of choice of data or description of measurement methods and procedures applied	Conservatively assumed using default values proposed by the methodology, which are consistent with field conditions observed at the project site.
Purpose of the data	Calculation of baseline emissions
Comments	-

Data / Parameter	E_{grading}
Data unit	$\text{tCO}_2\text{-e yr}^{-1}$
Description	Emissions due to road grading
Source of data	Equation (25)
Value applied	26.498
Justification of choice of data or description of measurement methods and procedures applied	Conservatively assumed using default values proposed by the methodology, which are consistent with field conditions observed at the project site.
Purpose of the data	Calculation of baseline emissions
Comments	The fuel consumption factor for road grading equipment (FC_{grader}) applied in this calculation is based on the default value specified in VM0005 v1.2 for old and inefficient machinery, set at 1.73 liters of fuel per cubic meter of harvested timber. This default factor was multiplied by the total harvested volume in the baseline scenario

	(43,993 m ³) and divided by the harvested area (1,486.6 ha), yielding a value of 51.20 liters per hectare. This parameter is subsequently used in the relevant VM0005 equations to estimate fossil fuel emissions from road grading activities in the baseline scenario.
--	--

Data / Parameter	E _{harvesting}
Data unit	tCO ₂ -e yr ⁻¹
Description	Emissions due to harvesting
Source of data	Equation (26)
Value applied	221 for the first monitoring period (until July 2022)
Justification of choice of data or description of measurement methods and procedures applied	Calculated using timber volumes harvested as well as default parameters provided by VM0005
Purpose of the data	Calculation of baseline emissions
Comments	-

Data / Parameter	E _{extraction}
Data unit	tCO ₂ -e yr ⁻¹
Description	Emissions due to extraction of timber from the forest to the log landings
Source of data	Equations (27), (28) and (29)
Value applied	17
Justification of choice of data or description of measurement methods and procedures applied	Calculated using timber volumes harvested, distance traveled as well as default parameters provided by VM0005
Purpose of the data	Calculation of baseline emissions
Comments	-

Data / Parameter	E _{transport}
Data unit	tCO ₂ -e yr ⁻¹
Description	Emissions due to the transport of the timber from the log landings to point of onward sale/transport
Source of data	Equations (30), (31) and (31)
Value applied	912

Justification of choice of data or description of measurement methods and procedures applied	Calculated using timber volumes harvested, distance traveled as well as default parameters provided by VM0005
Purpose of the data	Calculation of baseline emissions
Comments	-

Data / Parameter	BEF
Data unit	Dimensionless
Description	Biomass expansion factor for the conversion of annual net increment (including bark) in stem biomass to total above-ground tree biomass increment for species j
Source of data	Table 3A.1.10 of the GPG-LULUCF (IPCC 2003)
Value applied	1.15
Justification of choice of data or description of measurement methods and procedures applied	To be conservative, the lower value was used
Purpose of the data	Calculation of project emissions
Comments	-

Data / Parameter	R
Data unit	t root d.m. t ⁻¹ shoot d.m.
Description	Root:shoot ratio appropriate to species or forest type / biome
Source of data	Table 3A.1.18 of the GPG-LULUCF (IPCC 2003)
Value applied	0,2
Justification of choice of data or description of measurement methods and procedures applied	Used in forest inventories. Most conservative value was used
Purpose of the data	Calculation of project emissions
Comments	-

Data / Parameter	f _i (X,Y...)
Data unit	t d.m. tree ⁻¹
Description	Allometric equation for species j linking, for example, diameter at breast height (DBH) and tree height (H) to above-ground biomass of living trees
Source of data	Used in Equation (39). Species specific equations were

	used whenever available.
Value applied	Provided in the forest inventories and in Appendix 4 of the PD
Justification of choice of data or description of measurement methods and procedures applied	Most specific equations were selected.
Purpose of the data	Calculation of project emissions
Comments	-

Data / Parameter	LF_{ME}
Data unit	Dimensionless
Description	Leakage factor for market-effects calculations
Source of data	Analysis of issuance of new concessions being assigned within the national boundaries and associated annual extracted volumes. Used in Equation (44).
Value applied	0.4
Justification of choice of data or description of measurement methods and procedures applied	Since C_{BSLpre} falls within the $\pm 15\%$ range of the NCS (i.e., 78.08 tC/ha is between 72.87 and 98.59 tC/ha), the methodology requires the application of the default 40% market leakage adjustment factor.
Purpose of the data	Calculation of leakage
Comments	-

Data / Parameter	NCS
Data unit	t CO ₂ -e ha ⁻¹
Description	The mean national forest carbon stock
Source of data	FAO (2020). <i>The State of the World Forests</i> . Informe Argentina
Value applied	314.34
Justification of choice of data or description of measurement methods and procedures applied	
Purpose of the data	Calculation of leakage
Comments	www.fao.org/3/cb0096es/cb0096es.pdf

3.1.2 Data and Parameters Monitored

Data / Parameter	D_j
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Data unit	t d.m. m ⁻³
Description	Basic wood density for species j
Source of data	Equation (4)
Value applied	The specific density value is provided in Section 7. If a specific density is unavailable, the weighted average for all species, which is 0.71 for the monitoring period, is applied.
Justification of choice of data or description of measurement methods and procedures applied	This parameter was calculated based on the weighted average of all species present during the monitoring period. For individual tree calculations, the specific density value was used if available. If not, the resulting weighted average value was applied. EX POST Specific information available in point 7, ADDITIONAL PROJECT IMPACT INFORMATION
Purpose of the data	Calculation of project emissions
Comments	Maggio, A.D. & Cellini, J.M. 2016. Recopilación de ecuaciones de volumen y biomasa de especies forestales de la República Argentina. Ministro de Ambiente y Desarrollo Sustentable de la Nación. https://libros.unlp.edu.ar/index.php/unlp/catalog/book/606#accordion-1

Data / Parameter	$\Delta C_{\text{tree-exist},i,t}$
Data unit	t CO ₂ -e yr ⁻¹
Description	Net carbon stock change in existing tree vegetation in the baseline scenario in stratum i
Source of data	Equation (2)
Description of measurement methods and procedures to be applied	As established by the methodology, estimates of changes in carbon stocks due to regrowth of tree biomass in the baseline can be derived from a reference area that has not been relogged. Accordingly, a representative reference area was identified to reflect the baseline regeneration conditions of the project area.
Frequency of monitoring /recording	The monitoring interval in the reference area was 14 years, and the annual average carbon accumulation was used to estimate the growth rate. A methodology deviation related to this monitoring frequency was formally requested in Section 2.2.2.
Value monitored	4,615
Monitoring equipment	The same field equipment and measurement protocols used in the with-project monitoring were applied in the reference area, ensuring consistency and comparability of results.
QA/QC procedures to	-

be applied	
Purpose of the data	Baseline emissions
Calculation method	Carbon stock change in the reference area is calculated by comparing aboveground biomass measurements taken in permanent sample plots between two monitoring events (2008 and 2022). Tree-level biomass is estimated using allometric equations based on DBH (≥ 10 cm), applying a 0.47 carbon fraction. The net carbon accumulation is then annualized over the 14-year interval and expressed in t C/ha/year. This average growth rate is used in Equation 19 of VM0005 v1.2 to estimate $\Delta C_{\text{tree-exist},i,t}$ in the baseline scenario.
Comments	A validated reference area was selected in Lot 6 of the Harriet S.A. property, within the same ecoregion. Installed in 2008 and remeasured in 2022, its ecological and structural similarity supports its use for estimating the net carbon stock change in existing tree vegetation in the baseline scenario. See ' Reference Area Justification Report ' for full details.

Data / Parameter	$A_{i,t}$	
Data unit	Ha	
Description	Area of stratum i at year t	
Source of data	Geographical Information System (GIS). Used in Equation (35)	
Description of measurement methods and procedures to be applied	The stratification was carried out by interpreting and processing Sentinel-2 satellite images using the Google Earth Engine platform. Two multi-temporal mosaics were used for this; the first one is from the year 2020 (144 Sentinel-2 images) and the second one from 2021 (88 Sentinel-2 images). From these two mosaics, the median of the values at the pixel level was calculated, hoping that it represents the state of the coverage at that level. In addition, NDVI vegetation indices, terrain elevation and the Random Forest algorithm were used.	
Frequency of monitoring/recording	Each time verification is conducted	
Value monitored	Stratum	Area (ha)
	Natural Forest with Close Canopy (FCC)	2.711,3
	Natural Forest with Open Canopy (FOC)	13.517,8
	Natural Forest with Scattered Canopy (FSC)	6.069,7
	Scrubland (S)	298.2
	Shifting Agriculture (SA)	281.5
	TOTAL	22,878.5
Monitoring equipment	GIS and Remote sensing data	
QA/QC procedures to	Stratification is conducted every forest inventory by an	

be applied	experienced technical team. Variables considered for the GIS analysis included: coloration, texture, crown density and reflectance of the plant cover, among others. The parameters considered for the separation of strata included: type of forest mass (plantations or native forest), past disturbances, crown density, among others.
Purpose of the data	Calculation of project emissions.
Calculation method	-
Comments	-

Data / Parameter	$A_{sp,i}$	
Data unit	Ha	
Description	Total area of all sample plots in stratum i	
Source of data	Field measurements provided in the forest inventories. Used in Equation (38).	
Description of measurement methods and procedures to be applied	Permanent circular plots (radius of 17.8 m) were used. Each sampling plot will have 3 subplots (A, B and C) with different radius where all woody individuals that met the BDH and DBH requirements defined for each type of plot were recorded.	
Frequency of monitoring/recording	Every time verification is conducted	
Value monitored	Stratum	Sample plots area (ha)
	Natural Forest with Close Canopy (FCC)	2.13
	Natural Forest with Open Canopy (FOC)	5.77
	Natural Forest with Scattered Canopy (FSC)	3.26
	Scrubland (S)	1.13
	Shifting Agriculture (SA)	1.00
	TOTAL	13.30
Monitoring equipment	All the permanent plots were properly numbered, geo- referenced, and located within a coverage/layer map of the project area.	
QA/QC procedures to be applied	To verify that plots have been installed and the measurements taken correctly, a minimum of 10% of randomly selected plots will be re-measured by a supervisor with a team that was not involved in the initial measurement sampling	
Purpose of the data	Calculation of project emissions.	
Calculation method	Measurement	
Comments	-	

Data / Parameter	DBH
Data unit	cm
Description	Diameter at breast height of tree
Source of data	Field measurement in sample plots
Description of measurement methods and procedures to be applied	Tree diameter is measured over bark and breast height, 1.3m above the ground, with some exceptions. The measurement may be carried out with a diameter tape or with the use of a caliper. The field data collected will be recorded using specifically designed forms and recorded on paper and digitally.
Frequency of monitoring/recording	Each time verification is conducted
Value monitored	The forest inventory database is provided separately.
Monitoring equipment	Diameter tape or caliper
QA/QC procedures to be applied	Calculations and results checked by different team members
Purpose of the data	Calculation of project emissions.
Calculation method	Measurement
Comments	-

Data / Parameter	H
Data unit	m
Description	Height of tree
Source of data	Field measurement in sample plots
Description of measurement methods and procedures to be applied	Height measurements will be taken with a clinometer and the process for measuring tree heights is: (i) A point is chosen from which the person measuring the tree can see its crown. (ii) Measure of the horizontal distance (HD) from the point chosen, to the base of the tree. Slope corrections must be applied when needed. The field data collected will be recorded using specifically designed forms and recorded on paper and digitally.
Frequency of monitoring/recording	Each time verification is conducted
Value monitored	The forest inventory database is provided separately.
Monitoring equipment	Clinometer

QA/QC procedures to be applied	To verify that plots have been installed and the measurements taken correctly, a minimum of 10% of randomly selected plots will have some trees re-measured by a supervisor with a team that was not involved in the initial measurement sampling
Purpose of the data	Calculation of project emissions.
Calculation method	Measurement
Comments	-

Data / Parameter	$\Delta C_{P,i,t}$
Data unit	t CO ₂ -e yr ⁻¹
Description	Net carbon stock change due to forest regrowth and silvicultural interventions in the with-project scenario in stratum i at year t
Source of data	Used in Equation (34)
Description of measurement methods and procedures to be applied	-
Frequency of monitoring/recording	Once for each monitoring period-
Value monitored	21,607
Monitoring equipment	-
QA/QC procedures to be applied	-
Purpose of the data	Calculation of project emissions.
Calculation method	The GHG emissions measured in the forest inventories during the beginning and the end of the monitoring period were subtracted.
Comments	-

Data / Parameter	$\Delta C_{AGB,i,t}$
Data unit	t CO ₂ -e yr ⁻¹
Description	Net carbon stock change in above-ground tree biomass in the with-project scenario in stratum i at year t
Source of data	Used in Equation (34) and (35)

Description of measurement methods and procedures to be applied	-
Frequency of monitoring/recording	Once for each monitoring period
Value monitored	18,005
Monitoring equipment	-
QA/QC procedures to be applied	QA/QC procedures are described in the monitoring plan.
Purpose of the data	Calculation of project emissions.
Calculation method	The GHG emissions of above-ground biomass measured in the forest inventories during the beginning and the end of the monitoring period were subtracted.
Comments	-

Data / Parameter	$\Delta C_{BGB,i,t}$
Data unit	t CO ₂ -e yr ⁻¹
Description	Net carbon stock change in below-ground tree biomass in the with-project scenario in stratum i at year t
Source of data	Used in Equation (34) and (40)
Description of measurement methods and procedures to be applied	-
Frequency of monitoring/recording	Once for each monitoring period
Value monitored	3,601
Monitoring equipment	-
QA/QC procedures to be applied	QA/QC procedures are described in the monitoring plan.
Purpose of the data	Calculation of project emissions.
Calculation method	The GHG emissions of above-ground biomass measured in the forest inventories during the beginning and the end of the monitoring period were subtracted.

Comments	-
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Data / Parameter	$C_{AGB,l,j,sp,i,t}$
Data unit	$t\ C\ tree^{-1}$
Description	Carbon stock in above-ground biomass of tree l of species j in plot sp in stratum i at year t
Source of data	Used in Equation (36), (37) and (39)
Description of measurement methods and procedures to be applied	Measurement methods are described in the forest inventories and in the monitoring plan
Frequency of monitoring/recording	Once in each forest inventory
Value monitored	Provided in the forest inventories
Monitoring equipment	-
QA/QC procedures to be applied	QA/QC procedures are described in the monitoring plan
Purpose of the data	Calculation of project emissions.
Calculation method	-
Comments	-

Data / Parameter	$V_{l,j,sp,i}$
Data unit	$m^3\ tree^{-1}$
Description	Stem volume of tree l of species j in plot sp in stratum i
Source of data	Used in Equation (36)
Description of measurement methods and procedures to be applied	-
Frequency of monitoring/recording	Once in each forest inventory
Value monitored	Provided in the forest inventories
Monitoring equipment	-
QA/QC procedures	-

to be applied	
Purpose of the data	-
Calculation method	-
Comments	-

Data / Parameter	$C_{AGB,sp,i,t}$
Data unit	t C
Description	Carbon stock in trees in plot sp in stratum i at year t
Source of data	Used in Equation (37) and (38)
Description of measurement methods and procedures to be applied	
Frequency of monitoring/recording	Once in each forest inventory
Value monitored	Provided in the forest inventories
Monitoring equipment	-
QA/QC procedures to be applied	QA/QC procedures are described in the monitoring plan
Purpose of the data	Calculation of project emissions.
Calculation method	-
Comments	-

3.1.3 Monitoring Plan

1. Operational and management structure

The operational structure and responsibilities for the project are divided into three basic departments:

- General management
- Technical management
- Operators.

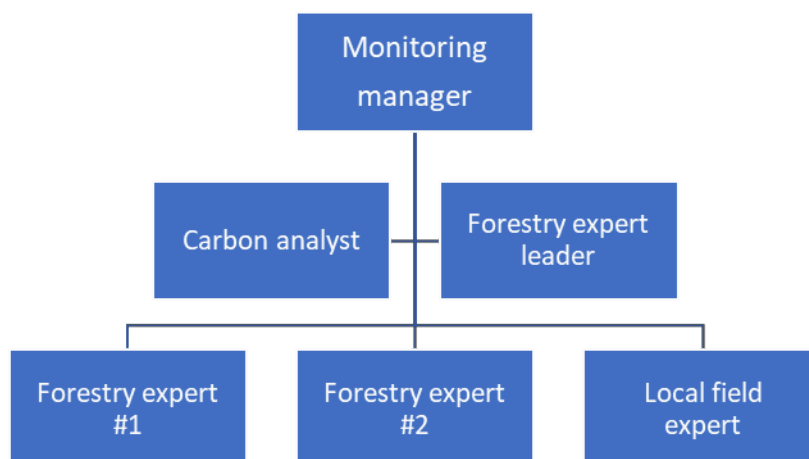


Figure 21: Operational monitoring management structure.

For monitoring purposes, the plantation manager and human resources coordinator will oversee contracting field crews that will carry out the data collection for all the parameters mentioned earlier.

The first phase of data collection is the establishment of groups of work. For these tasks the use of local, experienced staff is preferable. The project proponent is committed to acting responsibly to guarantee the quality of the silvicultural activities performed in the field, and ensure that the environmental aspects, industrial safety and occupational health standards are in line with the development of all the processes, products and projects.

The skills required by the staff to work in the project are as follows:

- Specialized staff: composed of professionals that perform specific technical and administrative tasks that usually have experience with this type of project. The project owners hire this group of people, and many of them belong to the permanent team of workers. The team consists of forestry and agricultural engineers, accountants, business managers, among others.
- Qualified staff: corresponds to the staff who have acquired training and experience in forestry projects through their ongoing work on these projects and that have specialized in a particular task.
- Non-qualified staff: there are workers engaged in unskilled activities that do not require training to perform their duties. The company will prioritize giving these jobs to the local community and other communities in the area where the project is developed.

Once the staff has been contracted for monitoring the project activities, the data collecting process will start. Permanent and temporary plots will be the basis of data gathering. The field crews, of at least four people, will collect data. Additional people may be employed to improve the performance of the field crews when conditions require greater human resources.

The team will be composed of three forestry experts (qualified staff), one of them being the crew leader, and one additional person (qualified or not) that is familiar with the local site, routes, strata, etc. The responsibilities for each member of the team are summarized in the table below.

Crew member	Duties
Monitoring manager	Management and supervision of the entire process
Carbon analyst	Analyzes all inventory data as per the methodology recommendation

Forestry expert (crew leader)	Organizing all the phases of the fieldwork, from the preparation to the data collection. This includes preparing the field work by carrying out bibliographic research, preparing field forms and maps, planning the tasks for the crew, administering of the location of plots, ensuring that field forms are properly filled in and that collected data is reliable, organizing meetings after field work to sum up daily activities, and creation of a work safety plan. When necessary, the crew leader will be responsible for training the team to guarantee the accuracy of the data collection. Additionally, he/she will have to contact and maintain a good relationship with the plantation manager and have an overview of the progress achieved by the fieldwork
Forestry expert #1 (assistant to the crew leader)	Help the crew leader to carry out his/her tasks, standardize necessary measurements and observations, make sure that the team's equipment is always complete and operational, supervise and guide workers.
Forestry expert #2	Measure DBH and height of trees
Local field expert	Help to measure distances, facilitate access and visibility to technicians and inform about access to the strata.

It is important to emphasize that before the teams start the data collection process, the crew leader, together with the plantation manager, must prepare field work (bibliographic research, contact with locals, preparation of the field forms, preparation of the maps and access itinerary, field equipment preparation, etc.). In this phase, it is expected that the crew leaders train the field crews, organize and plan mobilization and the preparation of necessary resources and equipment, such as vehicles, maps with plots location, and prepare and print valid field forms (the form is described in the section "Recording the data"). For this form, some information will be filled-in before going out in the field such as sections for identification of the strata and plot (header of each page), general information about strata location and coordinates of the plots.

The crew leader must ensure that enough forms are available to carry out the planned field data collection. In terms of the maps, they must be prepared to help with orientation in the field, so the maps must contain all the project strata and the location of plots for each one of the strata. The strata limits and plot locations will be delineated on topographic maps and, if available, on aerial photographs/satellite images. The plots in the strata are to be indicated, together with their respective coordinates, in decimal degrees (latitude and longitude), traceable in GPS. The point coordinates of the plots must be entered into the GPS receiver.

The plot visit order for data collection will vary according to accessibility. This is determined during the preparation phase. The plots will have unique IDs following: # (=Stratum number) + # (=Plot number).

Field equipment checklist:

- Compass (360°)
- GPS receiver (Geographic Positioning System) and spare batteries
- 1 self-rolling measuring tapes 30m (metric)
- 1 Self-rolling measuring tapes 5m (metric)
- 2 diameter tapes or caliper (metric)
- 1 clinometer
- 4 ropes 8 mm thick and 18 m long. Marked at 9 and 17.8m
- 50m measuring tape or a 50m wire, marked every 5 meters
- Waterproof bags to protect measurement instruments and forms
- Mobile phone
- Digital camera (or Mobile phone)

- Waterproof boots and outfits
- 1 Hummer
- 1 Machetes
- First aid
- Antiallergic
- Snake Venom Serum
- Topographic maps
- Clipboards to take notes
- Data collections forms
- Field manual
- Permanent markers and pens
- 2 Spray paint
- 1 hazard tape roll
- 1 soil sampling auger
- Nylon bags for soil sample

2. Verification of changes in carbon stocks in the pool selected

This document provides guidance on monitoring and standard operational procedures for the Nideport project activity, to provide credible and accurate monitoring procedures to enable the evaluation of project performance and verification of the net anthropogenic GHG emission removals. The following carbon pools will be monitored in the Nideport project:

- Aboveground tree biomass: All living tree biomass above the soil including stem, stump, branches, bark, seeds, and foliage.
- Belowground biomass: this pool will be estimated using allometric equations for root-to-shoot ratio.

Stratification, number, and location of plots

Due to the heterogeneity of the forest area as well as its state of degradation, a stratification of the total area of the property was carried out.

The stratification of the forest consists of dividing it into internally homogeneous units and increasing the heterogeneity between the different units. This processing is achieved efficiently using satellite images and analysis tools. The variables and parameters that are considered for the analysis are the coloration, the texture, the density of the cups and the reflectance of vegetation cover, among others. The most common result is a map with the different types of forest, being able to also differentiate non-forest strata.

In this way, sample plots are installed and measured within the strata. This method is more efficient when the strata were diagrammed considering the expected forest biomass per hectare. The criteria for the separation of strata included the type of forest physiognomy (plantations or native forest), past disturbances, crown density, among others.

The stratification itself was carried out by interpreting and processing Sentinel-2 satellite images using the Google Earth Engine platform. Two multi-temporal mosaics were used for this; the first is from the year 2020 (144 Sentinel-2 images) and the second from 2021 (88 Sentinel-2 images). From these two mosaics, the median of the values at the pixel level was calculated, hoping that it represents the state of the coverage at that level. In addition, NDVI vegetation indices, terrain elevation and the Random Forest algorithm were used.

In this way, it was possible to obtain strata that are internally more homogeneous than if they were treated as a single stratum. The fundamental advantage of stratification is associated with the smaller number of sampling units to be installed, maintaining a certain degree of certainty in the estimates.

Therefore, the data sampling scheme was designed according to strata defined for the project performed as explained above. The following strata were identified, and all the permanent plots were properly numbered, geo-referenced, and located within a coverage/layer map of the project area (Figure 22).

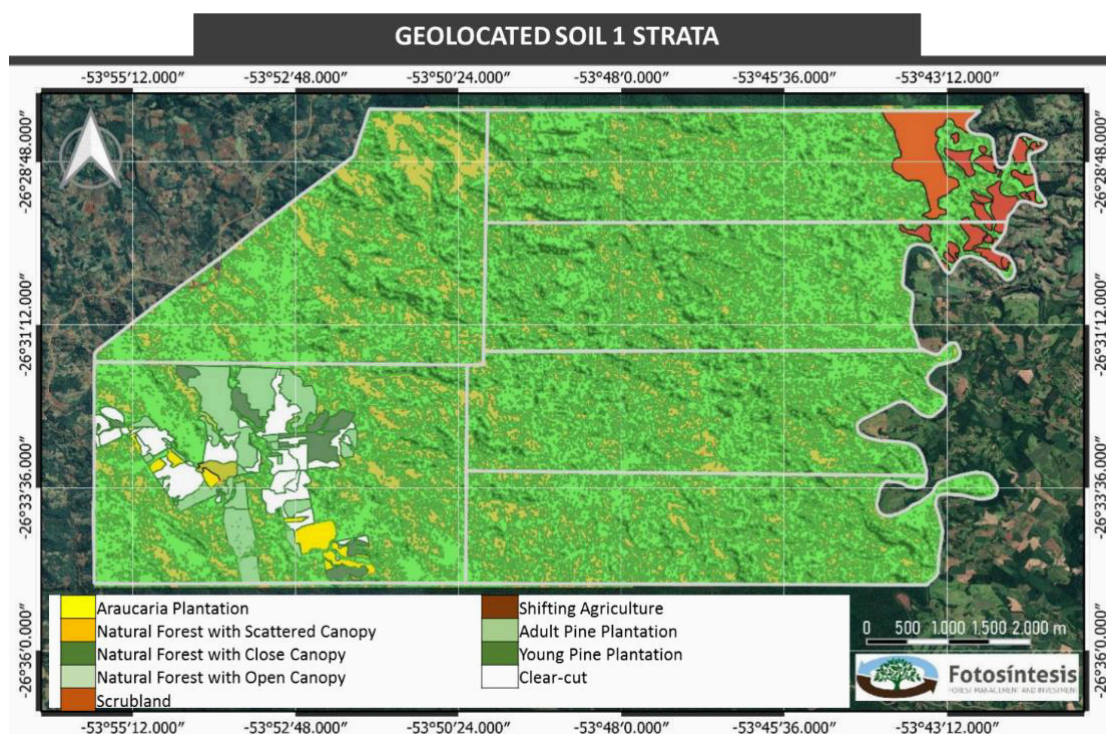


Figure 22: Project area

The number of plots required for measuring the variation within the project boundary and strata were estimated by using the CDM tool “A/R Methodological Tool” for “Calculation of the number of sample plots for measurements within A/R CDM project activities.”

Before each verification event, the strata will be monitored to identify different carbon accumulation patterns inside each stratum that can lead to a more cost-effective stratification and monitoring.

STRATA	AREA (Ha)	NUMBER OF PLOTS (n)	SAMPLING RATE (%)
Natural Forest with Close Canopy (FCC)	2,711.3	17	0.08
Natural Forest with Open Canopy (FOC)	13,517.8	53	0.05
Natural Forest with Scattered Canopy (FSC)	6,069.7	27	0.06
Scrubland (S)	298.2	9	0.38
Shifting Agriculture (SA)	281.48	7	0.31
TOTAL	22,878.5	113	0.06

Plot type and size

Permanent circular plots (radius of 17.8 m) will be used for sampling of carbon stock in all the areas. This type is considered as more efficient statistically because it permits monitoring of carbon stock changes over time (Figure 23). Each sampling plot will have 3 subplots (A, B and C) with different radius where all woody individuals that met the BDH and DBH requirements defined for each type of plot were recorded (Table 4).

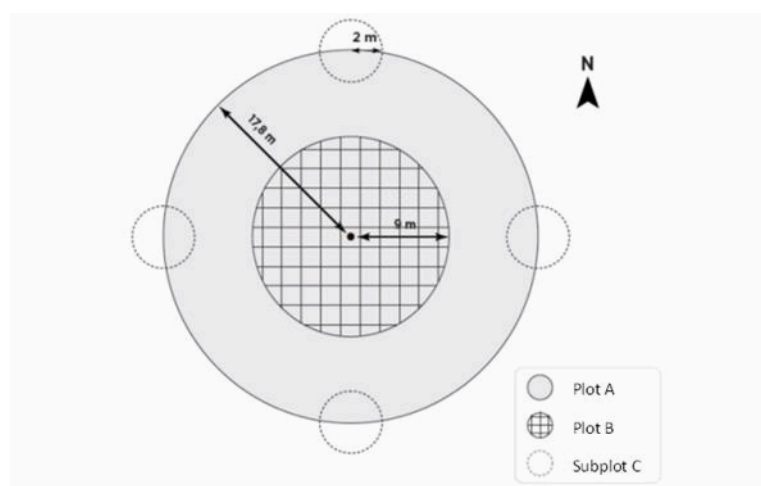


Figure 23: Sampling plot and subplots design.

Table 11 Subplot size and DBH / DB requirements

Subplot	Radius (m)	Area (m ²)	DBH (cm)
A	17.8	1,000.0	DBH $\geq$ 20
B	9.0	255.0	5 $\leq$ DBH < 20
C	2.0	12.5	DBh ⁴⁴ $\geq$ 2

These plots were measured at the start date of the project activity and will be remeasured each verification. The results will be presented as a Forest Inventory Report and the data will be used in the carbon stock changes calculations as per the methodology recommendations and all records will be maintained and stored in a plot file for future reference.

3. Data collection in the field

The data collection begins at the plot starting point and continues in a predefined direction. From the plot center, the northern bearing will be identified (0°), and then trees will be measured in the clockwise direction.

All trees with DBH over 2 cm will be measured according to the subplot sampling scheme (Table 4), and these data will be recorded in a field form. Trees located on the border of the plot will be considered as being inside the plot if at least half of the stem diameter at breast height is within the limit of the plot (Figure 24). Data collected include records of plant species that have been identified (common and scientific name), height and diameter. Tree diameter and height measurement methods are crucial for the accurate reporting of data.

⁴⁴ Diameter at base height

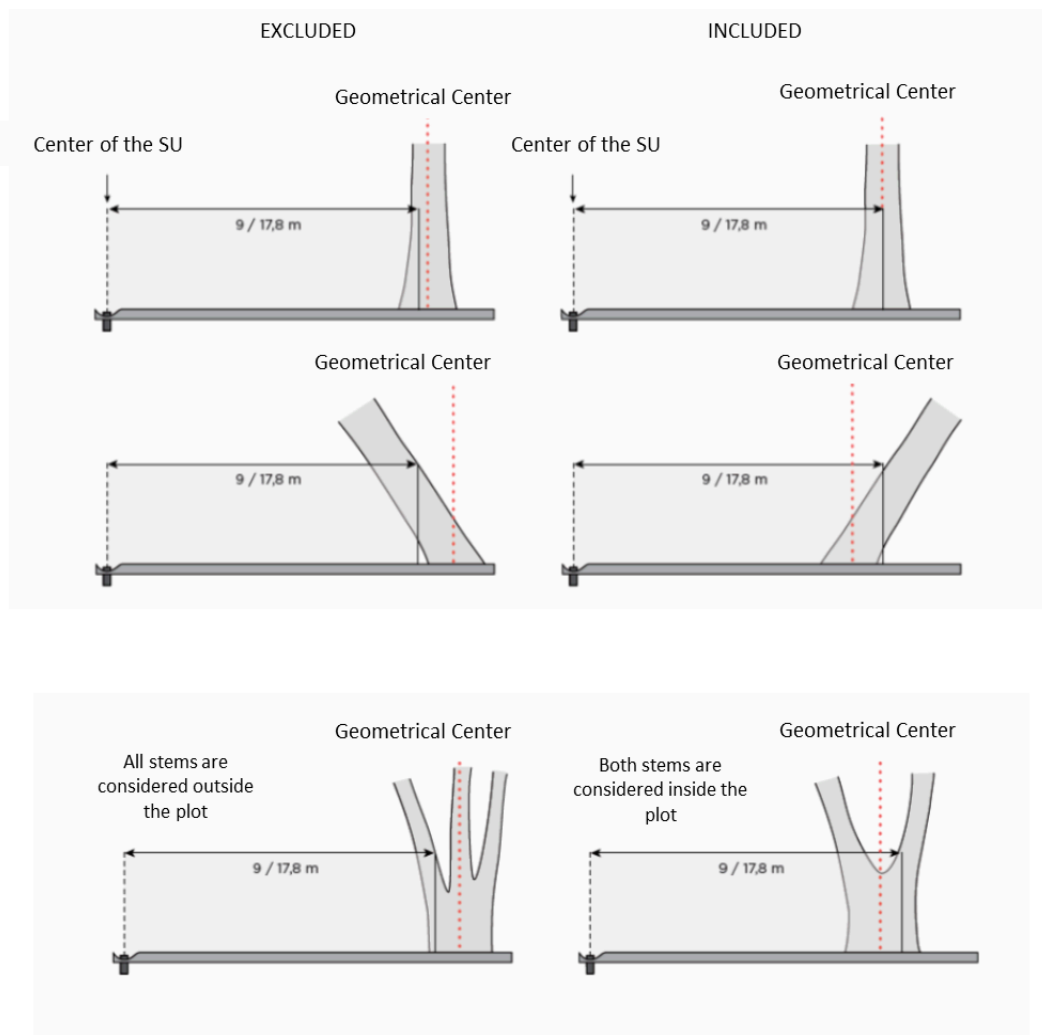


Figure 24: Criteria for tree inclusion in the sampling effort

Tree DBH measurement

Tree diameter is measured over bark at breast height, 1.3 m above the ground except in the cases mentioned below. The measurement may be carried out with a diameter tape or with the use of a caliper.

For forked trees (trees where the stem or trunk divides), measuring varies depending on the point at which the stem forks. If the fork begins below 1.3m height, each stem having the proper diameter will be considered as a tree and will be measured. Diameter measurement of each stem will be taken at 1.3 m height. If the fork begins at 1.3 m or higher, the tree will be counted as a single tree. The diameter measurement is thus carried out below the crotch intersection point, just below the bulge that could influence the DBH.

Trees with an irregular stem at 1.3 m, like trees with bulges, wound, hollows, and branches, etc. at breast height, are to be measured just above the irregular point, where the irregular shape does not affect the stem (20).

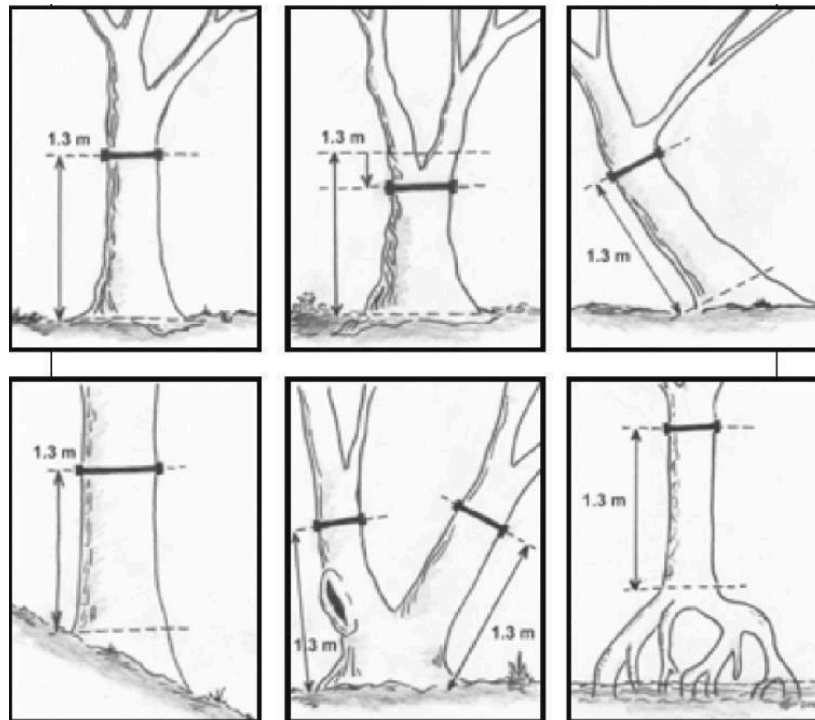


Figure 25: Correct ways for diameter measurement at breast height (Winrock, 2005).

Tree height measurement

Height measurements will be taken with a clinometer and the process for measuring tree heights is:

- A point is chosen from which the person measuring the tree can see its crown.
- Measure of the horizontal distance (HD) from the point chosen, to the base of the tree. Slope corrections must be applied when needed.

Recording the data

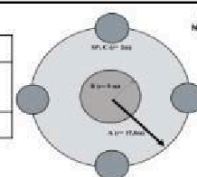
The field data collected will be documented using specially designed forms, both in paper and digital formats. The field form for each plot is shown below, detailing the data collection process.

The data collected, calculations and related outputs will be recorded, and backup copies will be made in cloud services. The variations observed by the field staff are monitored again, thus becoming the subject of new processing and reporting activities.

Table 12 Data collection field form

DATA COLLECTION FIELD FORM								
SP ID		SHEET	/	1 good / 2 regular / 3 bad / 4 no upper canopy				
Date		GPS POINT	/					
Recorder		AZIMUTH (°)	Distance to the center (m)	Time - Start/Finish /				
Soil								
A/B PARCELS								
Record N°	Plot	Azimuth °	Center distance	Species	Shank N°	Perimeter (cm)	Total Heigh (m)	Health
A/B/C	A/B	A/B	A/B	A/B	A/B	A/B	A/B	
1								
2								
3								
4								

C PARCEL							
Record N°	Plot N/E/S/O	Total Heigh (m)	Perimeter (cm)	Species	Fallen material & Bambuceas		
					Plot	Length (cm)	DAP
1							
2							
3							
4							



Monitoring intervals and frequency

According to the VCS rules, the project will be monitored at least once every 5 years. Two monitoring events were already performed at this stage.

Analysis of the monitored data and parameters

The data recorded in the forest inventory (DBH and height) will be the input for allometric equations that will define the total biomass accumulated for the project at the time of monitoring.

For ex-post estimates, the default parameters and equations of the methodology will be the same used for ex-ante, unless there exist better values at the verification time, always looking for compliance with the methodological tools used for carbon stock estimation.

Procedures for internal auditing and QA/QC

The implementing organization will be responsible for centralizing the documentation required for project planning and implementation. Quality assurance (QA) and quality check (QC) procedures will be implemented to ensure that net anthropogenic GHG removals by sinks are measured and monitored precisely, credible, verifiable, and transparently.

The project procedures for QA/QC will be based on the IPCC GPG method to ensure that the inventory estimates and their contributing data are of high quality. Since a QA/QC plan is fundamental to create credibility, one that outlines QA/QC activities with a scheduled time frame from preparation to final reporting has been developed. The QA/QC plan describes specific procedures for both assessments. Here are some abstracts from QA/QC plan:

- Standard Operating Procedures (SOP) will be established for all procedures such as field measurements, data entry, data documentation, and data storage.
- Training will be held for all relevant personnel on all data collection and analysis procedures.
- Sampling data and results will be checked by different team members to develop a credible plan for measuring and monitoring carbon stock change in the project context. The same procedures shall be used during the project life to ensure continuity.

Procedures for internal auditing

The data and calculations will be reviewed by team members preferably not involved in each part of the process, e.g., carbon stocks calculations will be reviewed by staff not directly involved in the field data collection.

Field data collection

The staff involved in the measurement of carbon pools will be fully trained in field data collection and analysis. SOPs will be developed for each step of the field measuring and followed so that measurements are comparable over time. If different interpretations of the SOPs exist among the field teams, they will be jointly revised to ensure clearer guidance. This procedure will be repeated during the field data collection.

To verify that plots have been installed and the measurements taken correctly, a minimum of 10% of randomly selected plots will be re-measured by a supervisor with a team that was not involved in the initial measurement sampling.

The proper entry of data into the data analysis spreadsheets is required to produce reliable carbon estimates. All data sheets will include a "Person in charge" field. Direct communication between all staff involved in measuring and analyzing data will be used to resolve any apparent anomalies before final analysis of the monitoring data can be completed. If there are any problems with the monitoring plot data that cannot be resolved, the plot will not be used in the analysis. Expert judgment and comparison with independent data will be used to ensure that results are in line with expectations. Additionally, field data will be reviewed by the crew leader of the monitoring team (Operational and management structure) further ensuring that the data and analysis are reliable.

Due to the long length of the project and the speed at which technology changes, raw data archiving is essential. Data will be archived in several forms and copies of all data will be provided to each project participant. Original copies of the field measurement (data sheets and electronic files) will be stored in a secure location. Copies of all data analysis and models, the final estimate of the amount of carbon sequestered, any GIS products, and the measuring and monitoring reports, will be stored in a dedicated and safe place (preferably offsite). Electronic copies of all data and reports will be updated periodically and converted to any new format required by future software or hardware. An employee involved in the field measurements will be assigned to implement this updating. The data collected shall be archived for a period of at least two years after the end of the last crediting period of the project activity. The main activities to be developed for the QA/QC process, are described in Table 13.

Table 13 Procedures for internal auditing and QA/QC process

QA/QC activity	Procedures
Check that assumptions and criterion for the selection of emission factors and other estimation parameters are documented.	Cross-check descriptions of project activity, emission factors and other estimation parameters with information on source and sink categories and ensure that these are properly recorded and archived
Check for transcription errors in data input and reference.	Confirm that bibliographical data references are properly cited in internal documentation. Cross-check a sample of input data (either measurements or parameters used in calculations) for transcription errors.
Check that removals are calculated correctly.	Redo a representative sample of removal calculations. Selectively mimic complex model calculations with abbreviated calculations to judge relative accuracy
Check that parameters and units are correctly recorded and that appropriate conversion factors are used.	Check that units are properly labeled in calculation sheets. Check that units are correctly carried through from beginning to end of calculations. Check that conversion factors are correct. Check that temporal and spatial adjustment factors are used

Check the integrity of database files.	Confirm that the appropriate data processing steps are correctly represented in the database. Confirm that data relationships are correctly represented in the database. Ensure that data fields are properly labeled and have the correct design specifications. Ensure that adequate documentation of database and model structure and operation are archived
Check that the movement of inventory data among processing steps is correct	Check that removal data is correctly reported when preparing summaries. Check that removal data is correctly transcribed between different intermediate products
Check that uncertainties in removals are estimated or calculated correctly	Check that qualifications, assumptions and expert judgments are recorded. Check that calculated uncertainties are complete and calculated correctly, following the methodology requirements
Undertake review of internal documentation	Check that there is detailed internal documentation to support the estimates and to enable reproduction of the emission, removal estimates. Check that inventory data, supporting data, and inventory records are archived and stored to facilitate detailed review. Check integrity of any data archiving arrangements of outside organizations involved in inventory preparation
Check time series consistency	Check for temporal consistency in time series input data for biomass estimation. Check for consistency in the algorithm/method used for calculations throughout the time series
Undertake completeness checks	Confirm that estimates are reported for all years. Check that known data gaps that may result in incomplete emissions estimates are documented and treated in a conservative way
Compare estimates to previous estimates	Current inventory estimates should be compared to previous estimates, if available. If there are significant changes or departures from expected trends, re-check estimates and explain the difference

Uncertainty assessment

The project follows the methods from IPCC GPG for LULUCF, GPG 2003, and the modalities and procedures for A/R project activities to estimate baseline net GHG removal by sinks, leakage, actual net GHG removal by sinks, and net anthropogenic removal by sinks. In the context of this methodology, the major sources of uncertainties associated with changes in carbon stock in the living biomass pool include natural factors, such as fire and pest outbreaks, forest stand variables such as variation in the yield tables, allometric equation, biomass expansion factor (BEF), wood density, carbon fraction, and errors during measuring. Estimates of uncertainty will be developed for all land-use categories involved in the inventory part of the monitoring.

Verification of project emissions

The project will quantify and monitor the non-CO₂ GHG emissions resulting from the occurrence of forest fire within the project boundary, whose accumulated area affected by such fires in a year is $\geq 5\%$ of the Project Area. These events will be monitored, and the affected area will be recorded.

Emission of non-CO₂ GHG resulting from the loss of aboveground tree biomass due fire will be calculated in each verification period, by using the above ground biomass in trees of relevant strata

calculated in the previous verification and the default values for the combustion factor, the emission factors, and the global warming potential.

3.1.4 Dissemination of Monitoring Plan and Results (CL4.2)

Free, Prior and Informed Consent with social impact assessment is a fundamental axis of the project.

During this instance, surrounding communities were invited to the introduction of the project's main objectives, risks and benefits, with open instances to comment on it.

Documents are also available in Nideport's social network, shared to communities through social networks, publications in local newspapers, information meetings with stakeholders during monitoring instances. Moreover, the project's documentation (as well as local language summary) will be available on VCS and CCB webpage.

Due to the problems of periodic intermittency of electricity service and, as a result, intermittency in 4G data connectivity and Wi-Fi, added to the presence in many cases of only one cell phone per family, lack of computers, lack of a digital and registry culture that discourages the approach by electronic means and use of ICT'S, we have relied on a strategy of proximity through face-to-face briefings. 2022 progress reports, PD and MR summary in local language, as well as other documents have been handed personally to different stakeholders (local authorities, president of the Deliberative Council communities in Paraje Alegria and Cruce Caballero, Tekoa Alecrin authorities, with evidence available for VVB during verification) and information has been uploaded to the webpage as well as for other stakeholders.

3.2 Quantification of GHG Emission Reductions and Removals

According to VM0005, net baseline GHG emissions and removals can be estimated through one of the two following approaches:

1. Using Pre-relogging A-spatial Data; and,
2. Using Post-relogging Mid to High Resolution Spatial Data.

For this project option 1 "Using Pre-relogging A-spatial Data" was used.

The equation numbers in this monitoring report are related to the same used in VM0005.

This monitoring period refers to the period from the project start date until July 2022 (7 months), which is the date of the second forest inventory.

3.2.1 Baseline Emissions

Net CO2 equivalent emissions in the baseline will be determined as:

$$\Delta C_{BSL} = \sum_{t=1}^{t^*} \sum_{i=1}^{M_{BSL}} (\Delta C_{REL,i,t} + \Delta C_{tree-exist,i,t}) + GHG_{BSL-E,t} \quad (2)$$

In this project, net carbon stock change in existing tree vegetation ($\Delta C_{tree-exist}$) in the baseline scenario is assumed to be zero. The rationale for this is in PD section 3.2.1.

Therefore, since relogging occurs in all crediting period years, $GHG_{BSL-E,t}$, $\Delta C_{REL,i,t}$ and ΔC_{BSL} are determined only once for the entire crediting period. Rationale for these calculations is on PD section 3.2.1.

Table 1 Carbon stock changes and GHG emissions in the baseline scenario for the monitoring period.

Period	ΔC_{BSL}	ΔC_{REL}	$\Delta C_{tree-exist,i,t}$	$GHG_{BSL-E,t}$
Monitoring Period	243,810	211,932	4,615	36,493

3.2.2 Project Emissions

GHG emissions and removals in the with-project scenario are related to regrowth of the residual forest, silvicultural interventions such as climber cutting, liberation thinning, enrichment planting and/or harvesting, or a combination of these activities, and project implementation activities Net CO₂ equivalent emissions in the with-project scenario (WPS) are estimated as:

$$\Delta C_{WPS} = \sum_{t=1}^{t^*} \sum_{i=1}^{M_{WPS}} \Delta C_{P,i,t} + GHG_{WPS-E,t} \quad (33)$$

Where:

As explained in the PD, emissions related to project activities ($GHG_{WPS-E,t}$) are assumed to be zero.

The strata i included in this Monitoring Report are the forest types Closed Canopy Forest (CCF), Open Canopy Forest (OCF), Scattered Canopy Forest (DCF) and Scrubland (C), which were included as part of the forest stratification in the forest inventories.

Table 2 Net CO₂ equivalent emissions in the with-project scenario in the monitoring period, summarized over all forest types of rehabilitation stratum

Period	ΔC_{WPS}	$\sum \Delta C_{P,i,t}$	$GHG_{WPS-E,t}$
Monitoring Period	21,607	21,607	-

Estimation of $\Delta C_{P,i,t}$

Net carbon stock changes due to forest regrowth and silvicultural interventions in the with-project scenario are estimated as follows

$$\Delta C_{P,i,t} = \Delta C_{AGB,i,t} + \Delta C_{BGB,i,t} + \Delta C_{DW,i,t} + \Delta C_{WP,i,t} + E_{biomassloss,i,t} \quad (34)$$

The parameters $\Delta C_{DW,i,t}$, $\Delta C_{WP,i,t}$ and $\Delta C_{WP,i,t}$ are not quantified (see PD section 3.2.2).

Table 3 Net carbon stock changes in the with-project scenario in the monitoring period, summarized over all forest types of rehabilitation stratum

Period	$\Delta C_{P,i,t}$	$\Delta C_{AGB,i,t}$	$\Delta C_{BGB,i,t}$
Monitoring Period	-21,607	-18,005	-3,601

Estimation of $\Delta C_{AGB,i,t}$

The quantification of the net carbon stock changes in above-ground tree biomass is based on forest inventories performed in the project area. The first inventory was carried out in 2021 and the second one in July 2022. More detailed information is provided in the forest inventories report and spreadsheets. A brief summary is presented in Table 4 and a map of the sampling plots is shown in Figure 3.

Table 4 Sampling and strata detail of the forest inventories

Stratum	Sample plots	Total plot area	Stratum area (ha)
CCF	17	2.13	2,711.33
OFC	53	6.65	13,517.80
DCF	27	3.39	6,069.66
C	9	1.13	298.18
SA	7	0,88	281.48

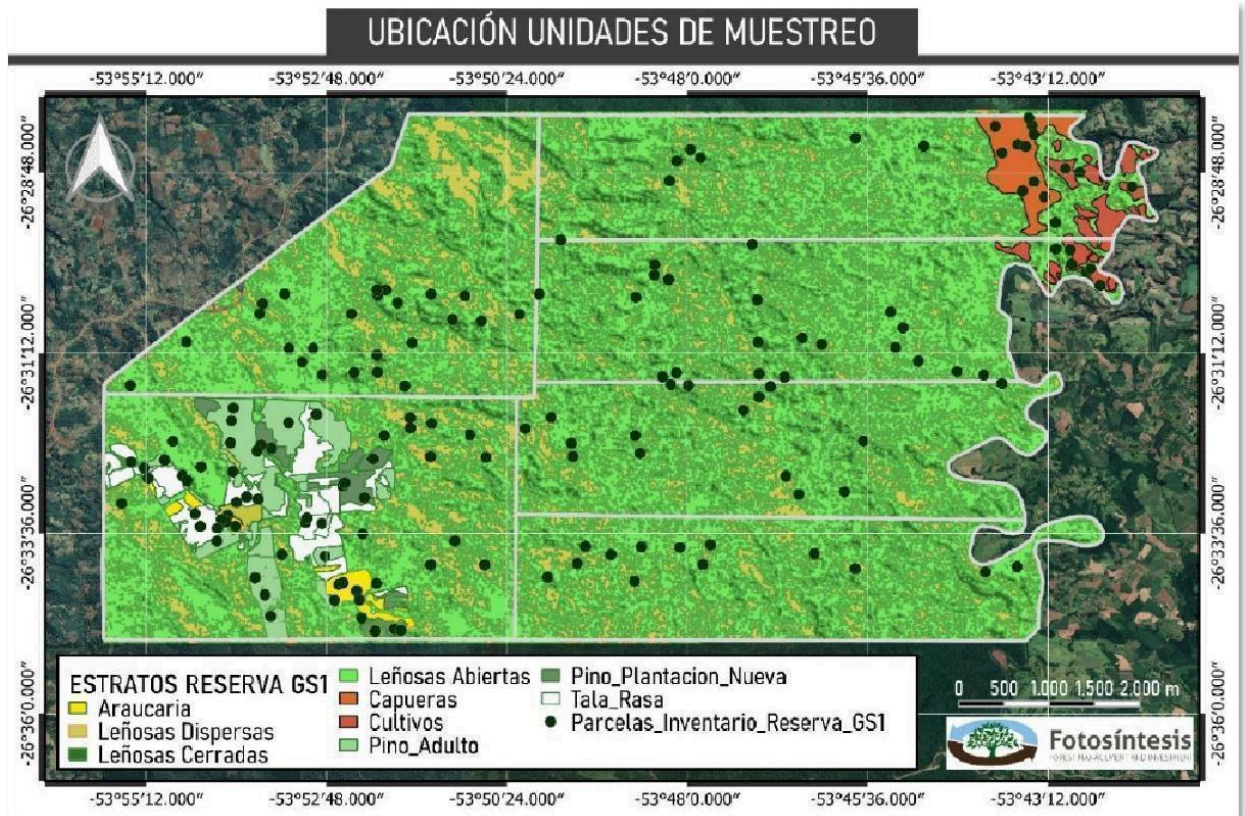


Figure 3 Location of monitoring plots in Nideport's project area.

The changes in the carbon stock in above-ground tree biomass within the project boundary are estimated using the following approach:

$$\Delta C_{AGB, i,t} = A_{i,t} \times (C_{AGB, i,t} - C_{AGB, i,t-T}) \times 44/12 / T \quad (35)$$

Where:

Changes in C Stock in Above-ground Tree Biomass

The mean carbon stock in above-ground tree biomass per unit area is estimated for each stratum based on field measurements in permanent sample plots. Two methods were used: the Biomass Expansion Factors (BEF – equation 36) method and the Allometric Equations (equation 39) method. The BEF method was used in the absence of species-specific allometric equations.

$$C_{AGB, i,j,i,sp,t} = V_{i,j,i,sp,t} \times D_j \times BEF_j \times CF_j \quad (36)$$

$$C_{AGB,j,i,sp,t} = \sum_{l=1}^{N_{j,sp}} f_j(X, Y, \dots) \times CF_j \quad (39)$$

Allometric method.

The following sources of allometric equations are used:

CITATION	MODEL
Maggio & Cellini (2016)	$V[m3] = a * DAP[cm]^b * H[m]^c$
Chave et al. (2014)	$AGBest = 0,0673 * (d * DAP^2 * HT)^{0,976}$
Conti et al. (2019)	$AGB = e^{(-2.281 + 1.525 \ln(BD) + 0.831 \ln(CD) + 0.523 \ln(H))}$
Costas, R.; Vera, N.; Lorán, D.; López Cristóbal, L.; Fosco, I.; González, J. 2006. Funciones de volumen para especies de bosque secundario de la Reserva Guaraní. Misiones (Argentina). Rev. FCA UNCuyo 38 (2): 49---57 pp.	$VT[dm3] = a + b * DAP[cm]^2 + c * DAP[cm]^2 * H[m] + d * DAP[cm] * H[m]^2$
Fassola, H.E.; Crechi, E.H.; Barth, S.R.; Keller, A.E.; Winck, R.A.; Martiarena, R.; Von Wallis, A.; Pinazo, M.; Knebel, O. 2010. Modelos regionales de biomasa aérea de Pinus taeda para Misiones y NE de Corrientes, Argentina. XIV Jornadas Técnicas Forestales y Ambientales. Facultad de Ciencias Forestales, UNaM.	$B[Kg] = EXP(a + b * \ln(DAP[cm]))$
Friedl, R.; Costas, R.; Maiocco, D.; Grance, L.; Palavecino, A. 1991. Construcción de tablas de volumen estándar para Araucaria angustifolia. VI Jornadas Técnicas. Inventarios, Modelos de Producción y Crecimientos Forestales. El Dorado, Misiones. pág.: 57---68.	$V[m3] = a + b * DAP[cm]^2 * H[m]$
Sevola, Y. 1975. Cubicación de árboles en el inventario forestal del noroeste argentino. Documento de trabajo N° 20. FAO:DP/ARG/70/536. Salta, Argentina.	$V[dm3] = EXP(a + b * \ln(DAP[cm]^2 * H[m]) + c * (H[m]/DAP[cm]))$ $V[dm3] = EXP(a + b * \ln(H[m]^2) + c * \ln(DAP[cm]^2 * H[m]))$

The equations published in the paper: *Recopilación de ecuaciones de volumen y biomasa de especies forestales de la República Argentina* (Maggio & Cellini 2016)⁴⁵. If there were any species that are not present in this bibliography (or are outside the range of applicability of the models), then.

The allometric equations of Chave et al. (2014)⁴⁶ will be used.

The methodology combines species-specific allometric models with globally recognized generic equations, ensuring a comprehensive approach to estimating forest biomass

Locally developed species-specific allometric models were prioritized. Where species-specific models were unavailable or exceeded their validity ranges, allometric equations from Chave et al. (2014) were utilized.

A comprehensive review of the <http://www.globallometree.org/> database was made and expanded this analysis by consulting additional scientific publications and datasets. This exhaustive effort confirmed the absence of more suitable models for the PA and validated the decision to apply the models used.

Additional scientific publications and web sites:

- Vachellia caven Biomass Models: Developed for forests in the Espinal region, part of the Atlantic Forest in Argentina.
Source: Facultad de Ciencias Exactas y Naturales
- Leguminous Species in the Arid Chaco: While focusing on a different biome, these models offer transferable insights for species common to the Atlantic Forest.
Source: Ecología Austral
- Prosopisnigra Biomass Equations: Tailored for forests in Entre Ríos, applicable to overlapping species distributions.
Source: Repositorio INTA

⁴⁵ Maggio, A.D. & Cellini, J.M. 2016. Recopilación de ecuaciones de volumen y biomasa de especies forestales de la República Argentina. Ministro de Ambiente y Desarrollo Sustentable de la Nación.
<https://libros.unlp.edu.ar/index.php/unlp/catalog/book/606#accordion-1>.

⁴⁶ Chave et al 2014. Improved allometric models to estimate the aboveground biomass of tropical trees. Global Change Biology. (20)10: 3177-3190.

- Volume and Biomass Compilation for Argentina: A comprehensive database of forest species equations, enhancing the robustness of the analysis.
Source: Ministerio de Ambiente (Maggio et al., 2016)
- FAO Forest Resources Assessment (FRA):
<http://www.fao.org/forest-resources-assessment/en/>
- Global Forest Watch (GFW)
<https://www.globalforestwatch.org/>
- Carbon Monitoring System (CMS)
<https://carbon.nasa.gov/>
- Tropical Forest Alliance (TFA)
<https://www.tropicalforestalliance.org/>
- World Resources Institute (WRI)
<https://www.wri.org/>

It is important to note that the allometric models of Chave et al. (2014) are widely recognized globally for their robustness and applicability in a wide variety of tropical ecosystems. These models, which have been successfully applied in studies throughout Latin America, Africa and Asia, are the reference standard in projects related to carbon quantification, forest restoration and REDD+ (Reducing Emissions from Deforestation and Forest Degradation). For example, research in the Amazon (Saatchi et al., 2011), Central Africa (Fayolle et al., 2013) and Southeast Asia (Goodman et al., 2014) has demonstrated the effectiveness of these models for accurate biomass estimation, even under conditions of limited data on forest structure.

The main strength of Chave's models lies in their general applicability, as they integrate key variables such as wood density, total height and DBH, providing robust estimates from a minimal data set. However, in certain contexts, such as the Atlantic Forest in Argentina, local models may offer greater accuracy, given that they are specifically calibrated to the species and ecological conditions of the region. In this regard, local equations validated are used when available and applicable (add number of species applied) and employed Chave models in those cases where no specific equations exist or the recorded individuals do not fit within the applicability ranges (add number of species applied).

This approach allowed Nideport to take advantage of the generality and reliability of the Chave et al. models for tropical forests, together with the precision of local models when available, thus ensuring the accuracy of our biomass estimates.

Evaluation of the Bioclimatic Stress Variable 'E'

The variable 'E,' introduced in Chave et al. (2014), accounts for environmental stress factors and is particularly useful in the absence of direct measurements. Nideport opted not to employ this variable citing the following justifications:

- Direct Measurements Available: Tree height was measured directly during field surveys, providing more precise data than indirect adjustments through 'E.'
- Regional Stability: The Atlantic Forest exhibits relatively stable climatic conditions, reducing the necessity for environmental stress adjustments.
- Methodological Integrity: The exclusion of 'E' minimizes the introduction of uncertainties associated with additional model parameters.

This decision adheres to the principle of prioritizing direct, high-quality data over indirect estimations when such data is accessible. The approach enhances the robustness and reliability of biomass calculations, particularly in areas with sufficient field data.

Regarding the bioclimatic stress variable 'E', proposed by Chave et al. (2014), its inclusion has proven to be highly beneficial in situations where complete data on tree height are not available. This factor allows allometric estimates to be adjusted to compensate for variations in environmental conditions such as rainfall seasonality, temperature variability and drought intensity, all variables that affect tree growth.

However, in the Nideport project, the height of each tree is recorded, which eliminates the need to use an indirect estimate through 'E'. In this way, Nideport maintains precision in the biomass estimation without the need to introduce additional factors that do not provide significant improvements in this specific context.

The analyses conducted, based on the evidence collected and comparable assessments, demonstrate that the forest within the project area has experienced a significant loss of forest biomass. As described in Section 3.2.1 of the Project Design Document (PD), the forest has lost approximately 50% of its biomass compared to a similar forest unaffected by exploitation.

Table 5 Above-ground carbon stock (tCO₂/ha) in trees in stratum i at year t shows the outcome of the calculation of parameter C_{AGB,i,t} (already multiplied by 44/12)

Stratum	Year 2021	Year 2022	Area (ha)
CCF	391,23	394,76	2,711.33
OFC	271,06	284,18	13,517.80
DCF	273,40	287,98	6,069.66
C	147,09	147,29	298.18
SA	125,83	131,92	281.48

Based on equation (35) from the methodology the net carbon stock change in above-ground tree biomass per stratum in 2010 is calculated (the calculation by 44/12 was performed in the previous step).

$$\Delta C_{AGB,i,t} = A_{i,t} \times (C_{AGB,i,t} - C_{AGB,i,t-T}) \times \frac{44}{12} / T \quad (35)$$

Table 6 Above-ground carbon stock changes $\Delta C_{AGB,i,t}$ (tCO₂) in trees in stratum i at year 2022

Year	CCF	OFC	DCF	C	SA	Total
2022	637	11,820	5,897	4	114	18,473

Estimation of $\Delta C_{BGB,i,t}$

$$\Delta C_{BGB,i,t} = \Delta C_{AGB,i,t} \times R_j \quad (40)$$

Table 7 Below-ground carbon stock changes $\Delta C_{BGB,i,t}$ (tCO₂) in trees in stratum i at year 2022

Year	CCF	OFC	DCF	C	SA	Total
2022	127	2,364	1,179	1	23	3,695

3.2.3 Leakage

Leakage is calculated only once, based on the baseline results. The leakage factor L_{FME} is 0.4. See PD section 3.2.3.

3.2.4 Net GHG Emission Reductions and Removals

The total net GHG benefits from the IFM project activity (ΔC_{IFM}) are calculated as the result of the total carbon loss in the baseline scenario (ΔC_{BSL}) and the net removals through the enhancement of forest growth due to natural regeneration, liberation thinning and enrichment planting (ΔC_{WPS}), minus any potential leakage (ΔC_{LK}) that might occur, for the period 15/12/2021 to 31/07/2022.

$$\Delta C_{IFM} = \Delta C_{BSL} - \Delta C_{WPS} - \Delta C_{LK} \quad (46)$$

ΔC_{BSL} is quantified in section 3.2.1 and ΔC_{WPS} is quantified in section 3.2.2. ΔC_{LK} is quantified in the PD section 3.2.3. Table 8 presents a summary of ΔC_{IFM} for the first monitoring period.

Table 8 Summary of total net GHG emission reductions for the first monitoring period

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
15/12/2021 to 31/07/2022	243,810	21,607	84,773	180,643
Total	243,810	21,607	84,773	180,643

ΔC_{IFM} must be corrected for uncertainty, as follows:

$$C_{IFM_ERROR} = \sqrt{Uncertainty_{BSL}^2 + Uncertainty_{WPS}^2} \quad (47)$$

Where Uncertainty represents the total uncertainty in the baseline scenario (carbon stocks in the first forest inventory) and Uncertainties represents the total uncertainty in the with-project scenario (carbon stocks in the second forest inventory).

Uncertainty_{BSL}: 9,19 % and Uncertainty_{WPS}: 7.32 %, Therefore, C_{IFM_ERROR}: 11,75 %

Since $C_{IFM_ERROR} > 10\%$ of ΔC_{IFM} , t then the modified value for ΔC_{IFM} , t to account for uncertainty must be:

$$= \frac{100 - C_{IFM_ERROR}}{100} \times C_{IFM,t} \quad (48)$$

Calculation of Verified Carbon Units

The number of Verified Carbon Units is calculated as follows:

$$VCU_{t2} = (\Delta C_{IFM,t2} - \Delta C_{IFM,t1}) \times \left(\frac{100 - C_{IFM_ERROR}}{100} \right) - Bufferwithholding_{t2} \quad (49)$$

$$VCU_{r2} = (-0) \times \left(\frac{100 - 11,75}{100} \right) - Bufferwithholding_{r2}$$

The buffer percentage, as determined by the AFOLU non permanence risk analysis tool, is 12%. Therefore, the amount of VCUs for this first monitoring period is 137,742

Table 9 Calculation of VCUs for the first monitoring period

Year	ΔC_{IFM}	C_{IFM_ERROR}	Buffer with holding	VCUs
2022	180,643	11,75	12%	137,742

3.3 Optional Criterion: Climate Change Adaptation Benefits

I. Activities and/or processes implemented for Adaptation (GL1.3)

The project activities will take into consideration the impacts observed and expected of Climate Change, based on community identification as well as science based. In this sense, table 10 identifies the different actions already in place for the communities' adaptation to expected changes due to Climate Change:

Table 10. Actions implemented during first monitoring period, towards Climate Change adaptation

Risk	Climatic factor	Temporal term	Level of risk	Adaptation potential	Actions implemented	Adaptation related project activity
Low water availability	Drought	Short term	High	Medium	A vegetable garden project activity was selected by the community (Ra yi project activity), budget presented and a community responsible selected	Ra yi;
Low crop yields. Loss of family income	Drought	Short term	High	Medium		Ra yi;
Material losses of low-income houses	Extreme precipitation events	Short term	High	High	Material bought, training started and the first two families selected.	Óga Project
Worst internal housing comfort	Increasing temperature	Short term	Medium	High		Óga project

Biodiversity is being lost at an exponential rate and climate change is one more pressure that acts in synergy with other important threats such as habitat loss and invasive exotic species. This makes the impacts on biodiversity even more harmful. The analysis conducted by Aves Argentina demonstrates the strategic location of the project area for connecting other reserves/green corridors. Reserves have shown to be an important aspect of climate change adaptation strategies with definite benefits ([Rawat and Rawat, 1994](#); [Tiwari, 2000](#)) primarily because of stresses that affect biodiversity ([Umina et al., 2005](#)).

The activities implemented by the project include halt in native forest logging and implementing improved forest management practices. This is known, based on scientific research, to be an important adaptation technique for climate change ([Mirza, 2002](#)). This includes the revegetation project activity in place, on cleared patches of land. These are important, not only for maximizing carbon storage potential, but also for conserving forest biodiversity ([Xu et al., 2008](#)), including genetic diversity needed to increase adaptation opportunity. In the same line, increasing green corridors connectivity provides species with greater adaptation opportunities when reducing stressors by providing better chances for roosting, feeding and breeding.

Moreover, watershed restoration will allow the regeneration of environments for the threatened and lesser-known species that use them (Black-fronted Piping-Guan and Long-tufted Screech-Owl) while protecting the ecosystem services that the streams generate along the entire area.

Last, communication, synergies and formal agreements with security authorities in the area (park rangers, fire fighters, police, military) have been achieved aiming to develop a local strategy to strengthen the sites network in the area, including direct actions to preserve natural heritage.

Risk	Climatic factor	Temporal term	Level of risk	Adaptation potential	Actions implemented	Adaptation related project activity
Habitat loss	Extreme events	Medium	Medium	Medium	Halt logging and start an improved forest management plan in critical regional green corridor increasing connectivity	Project area management
Habitat loss	Extreme events	Short term	Medium	Medium	Increased communication of knowledge to stakeholders and establishment of local collaborations with security authorities for unified actions	Project area management

4 COMMUNITY

4.1 Net Positive Community Impacts

4.1.1 Community Impacts (CM2.1)

Given this first monitoring period is less than 1 year since the start date, not all expected impacts have been reached. Moreover, only 4 of the total number of development project activities have started. This means there are still no beneficiaries in terms of improved health services, water access and education for this period. In terms of employment, no new job positions have been created during this first monitoring period so no employment or livelihoods impacted are reported. The other project activities in place have already led to different impacts detailed below.

Community Group	Women
-----------------	-------

Impact	1. Specific consideration to women needs and voice 2. Generation of equal job opportunities 3. Training and technical assistance for project development
Type of Benefit/Cost/Risk	Predicted and actual direct benefit. The project is expected to generate 25 job positions for women, not yet achieved. Moreover, training on different subjects has reached 36 women during this monitoring period included those part of the Cooperativa Nueva Esperanza, Tekoa Alecrin community and other rural women in the project zone⁴⁷.
Change in Well-being	1. The different consultation meetings that took place, especially all women instances, provided the women within the community with a safe place to raise their voice and present their needs, which can be met by the projects to be implemented. 2. Job opportunities are open to all gender and age. Training on CV writing took place in order to allow everyone to present their experience for the position requested. 3. With the equipment provided to Cooperativa Nueva Esperanza, the women that take part in the economic activity are able to increase their yield capacity and have the opportunity to provide economically for the family, or themselves in a formal job under good working conditions. Moreover, they can improve and gain new skills.

Community Group	Indigenous community
Impact	1. Improved housing conditions 2. Project development under free, prior and informed conditions 3. Technical, legal and economic guidance for community development 4. Training and equipment to improve food safety
Type of Benefit/Cost/Risk	Actual direct benefit to all the Tekoa Alecrin community (238 people in project lifetime)
Change in Well-being	The different type of development projects with the community are allowing for different changes in the community well-being including: 1. Improving health and family relations by reducing overcrowding in houses, and improving housing material conditions (first two families identified, design of modules agreed, and construction training started) 2. Projects designed according to local culture and needs, given the group a sense of unity, belonging and security in the projects 3. NIDEPOR has begun to intervene/mediate so that the Tekoa Alecrin can be guaranteed tenure of their land, and thus avoid intrusions, securing resources 4. Improving health and community economy by securing healthy food access by improving

⁴⁷ Indicators available for VVB

	vegetable garden conditions, resources and techniques in line with the expected impacts of climate change.
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Community Group	Vulnerable people (economic and social vulnerability, with their income and livelihoods, schooling and food sovereignty in a critical state)
Impact	1. Formal job opportunities in the area 2. Improvement of water reservoirs 3. Payment for environmental services 4. Training and capacitation
Type of Benefit/Cost/Risk	Predicted and actual direct and indirect benefits to all the rural communities surrounding the project area (values expected for project lifetime is of 1500 people from rural surrounding areas, of which 700 are women: during this period as not all project activities are still implemented, training and capacitation equal 64 who have received training on CV writing, construction and others is included (see section 2.3.13), plus, the Tekoa Alecrin community as a whole who has participated in the FPIC process, totaling 302 who have improved well-being).
Change in Well-being	1. Better working conditions and income than without project opportunities 2. Water access and adaptation to climate change projected impacts. 3. Increase in the number of economic activities, leading to better financial state of families. 4. Capacity building in different subjects (food, technical skills, gender equality, biodiversity, others).

4.1.2 Negative Community Impact Mitigation (CM2.2)

Through the project that promotes the protection of the native forest comes the risk of limiting communities' access to natural resources currently obtained from the native forests. Identifying the community's relation with the project area and main needs described by the community allows the design of the corresponding development projects needed. In this sense, through the different participatory processes described above and the company's interactions with the community, it is sought to jointly establish initiatives for the development of communities that mitigate possible negative well-being impacts, as well as the protection and enhancement of the identified HCVs. Moreover, the participatory process to identify main threats to HCVs allowed the design and monitoring plan to mitigate them.

In this sense, the first steps have taken place, with participatory assemblies and census with communities of the project zone, in order to better understand the communities' economic activities, dependence on natural resources, as well as social organization and main needs, fears and identified threats. Some threats identified are external to the project's activities, with some of them expected to be reduced due to the project. One example is the observed and expected droughts because of deforestation and mudslides because of extreme events due to climate change. The project's main activity (forest enrichment and conservation) is expected to revert these threats.

Last, regarding access to forest resources, the project seeks to limit illegal activities that put biodiversity in danger, like illegal hunting. Still, it must be noted that reliance of the local communities on the forest of the project area for their livelihoods is not significant, not

depending exclusively on living biomass, deadwood, or litter for heating and cooking but within forest of the project zone and nearer to their homes. In this line, fuel wood withdrawal is expected to become organized and formalized. Other impacts and mitigation actions related to each one of the projected development projects are detailed as follows:

Project Name	Participatory Carbon Budgeting
Issues and/or expected negative impacts	Intra-neighborhood conflicts due to the absence of a participatory tradition.
Measures to be taken to mitigate/solve the problems/expected negative impacts.	Development of community mediation strategies. 2 Alternative conflict resolution.

Project Name	Forest Safety Net
Issues and/or expected negative impacts	1. Reluctance of the population to enroll in a registry; and a socio-environmental report under the project activity. 2. A continuity of the extractive practice that may threaten the site's natural capital.
Measures to be taken to mitigate/solve the problems/expected negative impacts.	Approach with social workers

Project Name	Óga
Issues and/or expected negative impacts	1. Resistance of the older members of the community for the improvement of the houses. 2. Difficulty for the community members designated by the cacique to understand and learn the new construction techniques. 3. Need to reach a consensus between the ancestral housing models and construction techniques of the Mbya Guaraní and the modern models and techniques.
Measures to be taken to mitigate/solve the problems/expected negative impacts.	1. Meetings with the oldest members of the community and the cacique to reach a consensus on the model and construction of the housing units. 2 Training workshops to facilitate the learning of new construction techniques. 3. Meetings with the Cacique and the Council of Authorities so that the new houses and their construction techniques respect and are in accordance with the Mbya Guaraní traditions and culture.

Project Name	Ra 'yi, strengthening family and community farming in Tekoa Alecrin
Issues and/or expected negative impacts	1. Lack of interest of the community in the project 2. Complications in stimulating the community's capacity for self-production of seeds 3. Poor maintenance of the transferred tools.
Measures to be taken to mitigate/solve the problems/expected negative impacts.	1. Reorientation of the community approach strategy 2. Generation of training. 3. Design of a strategy to improve the maintenance of the tools.

Project Name	Cooperativa Nueva Esperanza
Issues and/or expected negative impacts	1. Closure of a market. 2. Impossibility of locating the increase in processed products. 3. Lack of training in the use of the new machinery used. 4. That the support project activity generates an overload of daily work for the women workers. 5. Malfunctioning of the equipment due to lack of maintenance or technical failure.
Measures to be taken to mitigate/solve the problems/expected negative impacts.	1. Market evaluation. 2. Strategy for consolidation of markets in which it operates. 3. Strategy for opening new markets. 4. Training in the use and maintenance of the machinery and equipment acquired. 5. Training for an efficient use of the machinery avoiding labor overload.

Project Name	Don Antonio: Native medicinal species nursery with an ecotourism and educational approach.
Issues and/or expected negative impacts	1. Climatic, ecological or infrastructure problems affecting plant production and maintenance.
Measures to be taken to mitigate/solve the problems/expected negative impacts.	1. Design an emergency protocol for climatic, ecological or infrastructure problems

Project Name	Payment for environmental services project
Issues and/or expected negative impacts	Fights between neighbors over the use of water from the reservoirs.
Measures to be taken to mitigate/solve the problems /expected negative impacts.	1. Signing of a commitment document with neighbors for obligations and use of the reservoirs with watershed protection. The document states that this is a scalable project, with pilot tests at the beginning. The pilot farms will have to share the use of water with the farms that have a water deficit. This until the reservoir system is completed.

4.1.3 Net Positive Community Well-Being (CM2.3, GL1.4)

The community and community groups are expected to see their well-being changed positively by the project, compared to the without-project scenario. Given the limited economic activities opportunities in the area, disarticulated public entities support and external threats including climate change impacts expected, the without project scenario includes migration, lower incomes, limited access to water, biodiversity loss and forest resources loss, among others.

The project benefits detailed lead to better well-being conditions of different types:

1. Participatory carbon project activity: a portion of the carbon credit emission will be used to support community projects (including education, health, HCV, community infrastructure); The funds worked with the community, are weighted, voted and implemented in a decentralized manner (e.g., community associations). During this monitoring period, prior to the emission of credits, funding from the project has been provided by other means, but this mechanism will be the one leading once the project is validated and verified. There

will also be payments for environmental services for neighbors who conserve biomass on their property.

2. Productive projects are expected to generate local formal job opportunities, with better working conditions, equal access to job positions (with 50% of job positions occupied by women). Moreover, first training project activities are in place, which will lead to capacity building within the communities as well as the recovery of cultural activities and knowledge (medicinal plant nursery, handcrafts, CV and thesis writing, among others).
3. Forest safety net: people are still allowed to gather resources within the property, as it is not seen as a threat to the project biodiversity and climate objectives yet (it is limited to the people entering). But the activity will be organized in such a way that it does not go against the maintenance and restoration expected by the project.
4. HCV have been identified and selected, while project and plans for their conservation, enhancement, and monitor are still to be planned in a merged action between project proponent and communities with projects designed exclusively for the purpose.
5. Mitigation and adaptation to Climate Change; forest enrichment and regeneration in the long-term will mitigate climate change projections, while other projects in place, like Óga, will allow vulnerable families to adapt to the expected impacts (such as increase in temperatures, increase in extreme precipitation events) with housing improvement.

A summary of the net positive community benefits regarding each one of the development projects are as follow:

Project Name	Net positive benefits
Participatory Carbon Budgeting	1. Improvement of the quality of life of the population in the area of influence of the project based on participatory management projects in health, education, maintenance of HCVs and community infrastructure. 2. Establishment of a culture of good participatory practices with sustainability and equity as the core themes. 3. Substantive participation of women.
Payment for environmental services project	1. Training in HCVs (water and forestation) maintenance on local rural smallholder farms 2. Improving incomes of local small rural producers.
Forest Safety Net	1. To provide a forest safety net to regulate harvesting practices and maintain a buffer against shortages of timber and other wild products; providing a local environmental service to the poorest and most resource- dependent households in the absence of community forests in the project's area of influence.
Óga	1. Solve the housing problems of housing quantity and precariousness of the Tekoa Alecrín, building 35 houses. 2. Strengthen the Tekoa Alecrín's housing self-construction capacities, 20 persons at least.
Ra 'yi, strengthening family and community farming in Tekoa Alecrín	1. Increase in the number and variety of cultivated species, from 6 to ten 10 species. 2. Increase in the number of people working in community gardens, from 6 persons to 12 persons. 3. Capacitation in food security in the village.

Cooperativa Nueva Esperanza	1. Increase production line speed per raw material processed 2. Increase in the number of products produced per raw material processed 3. Adequate supply of the markets in which it operates. 4. Opening of new markets 5. Increase in the cooperative's profits 6. Strengthening of the gender perspective in agricultural production.
Don Antonio: Native medicinal species nursery with an ecotourism and educational approach.	1. Contribute to the conservation of traditional knowledge and native medicinal species. 2. Value the traditional knowledge of Antonio Barreto. 3. Dissemination of the identification, use and conservation of native medicinal plants. 4. Contribute to the reforestation of native plants within the property.

4.1.4 Protection of High Conservation Values (CM2.4)

The project activities' main objective is the enrichment and regeneration of the forest within the project area as well as the implementation of different development projects which will lead to an increase in the well-being of the community within the project zone. In this sense, no HCV could possibly be negatively affected. To ensure this, there are actions identified to be implemented.

As previously stated, the project is driven by community engagement. Identifying the community's relation with the project area and main needs described by the community, allows the design of the corresponding development projects needed. In this sense, through different participatory processes described and interactions of Nideport with the community, it is sought to jointly establish initiatives for the development of communities that mitigate possible negative well-being impacts, as well as the protection and enhancement of the identified HCVs. Moreover, the participatory process to identify main threats to HCVs allows the design and monitoring plan to mitigate them.

In this sense, no HCVs related to community well-being have been negatively affected by the project. For example, in the case of fuel wood, through this project that promotes the protection of native forest on the project site and surrounding areas, this high conservation value is expected to remain stable and is highly likely to improve its availability in the medium term and be accessed coordinately by any community group that needs it.

The different actions needed and monitoring of the HCVs areas to ensure their protection are detailed below:

HCVs	Focus Area	Actions needed and taken for maintenance	Monitoring plan	Actions implemented during the monitoring period
Laguna Encantada (Enchanted lagoon)	Project area	Increased control of the entry of people within the boundaries of the project. - Public information sessions will be held on the importance of caring for the forest and the environment in general. - Establishment of agreements with the security forces to coordinate actions in the event of problems.	A team will visit the site once every six months to verify the status of the HCV and the measures taken. - The same team will carry out a photographic and technical survey to evaluate environmental and technical issues. - The people in charge of monitoring will make biannual	

		- The project includes reforestation plans of native plants that will improve the situation of this HCV. - Any type of extractive activity at the site (e.g., firewood, fishing, illegal hunting , etc.) is prohibited. - Signs will be posted to provide information on the importance of the specific site. - GPS positioning coordinates were identified in order to know the exact location. - Photographic samples of the site were taken in order to begin photographic monitoring. - The project includes the installation of forest security systems, prevention and early warning of fires and other threats.	reports on the evolution and impact of the measures taken and the state of the HCV.	
Yabotí mini stream; Invernada stream; Toro stream; Guaraní aquifer Streams without nomenclature; Numerous springs and water sinks	Project area	- Increased control of the entry of people within the boundaries of the project. - Public information sessions will be held on the importance of caring for the forest and the environment in general. - Establishment of agreements with the security forces to coordinate actions in the event of problems. - The project includes reforestation plans of native plants that will improve the situation of this HCV. - Any type of extractive activity at the site (e.g., firewood, fishing, illegal hunting , etc.) is prohibited. - Signs will be posted to provide information on the importance and proper maintenance of the different watercourses. - GPS tracks were obtained for the different watercourses in order to know their	A team in charge will visit different watercourses once every six months to verify the status of the HCV and the measures adopted. - The same team will carry out a photographic and technical survey to evaluate environmental and technical issues. - Those responsible for monitoring will prepare biannual reports on the evolution and impact of the measures taken and the status of the HCV.	

		location. - Photographic samples of the site were taken in order to begin photographic monitoring. - The project includes the installation of forest security systems, prevention and early warning of fires and other threats.		
Forestal Belga's graveyards	Project area	Visual inspection of each grave once a year, whether there have been visits or not. -Authorization of visits (the record of visits will be kept for 5 years). -Elimination of existing weeds in the vicinity of the graves. -Placement of signage -Prohibition to visitors to remove or change part of them (plaques, etc.). -No machinery is allowed near the graves. Planting near the graves is prohibited. -Any existing natural regeneration (exotics) will be eliminated.	Visit Authorization (visits log will be kept for 5 years). -Once every 12 months the Field Supervisors will verify the proper condition of the gravesites following the following guidelines:-Visual observation of weeds present in the graves. -Observation of the existence of machine tracks in the vicinity of the graves. -Observation of exotic regeneration near the tombs (it is forbidden to make plantations near the tombs) 4. - Observation of the state of conservation of the tombs, visual observation of plaques, etc. (it is forbidden to make any change). -Observation of the existence of bonfires, damage to trees, etc.	Manual mowing of grass, maintenance of landscaping for safe entry of the population
Cultural or Community Values Sites: Churches, Soccer Fields, Community Hall, CAPS, Schools	Project boundaries	Participatory meetings were held with different stakeholders in the local community to identify the HCVs. - GPS marking was carried out to determine the exact location of the various HCVs. - The project includes the development of a participatory carbon plan through which local communities can decide where to use a percentage of the income derived from the project's carbon credits to improve these HCVs. - The project includes generating instances of	A team in charge will visit the various community HCVs once every six months to verify the status of the HCVs and the measures taken. - The same team will carry out a photographic and technical survey to evaluate and record the condition of the various HCVs. - Those responsible for monitoring will prepare biannual reports on the evolution and impact of the measures	Pilot implementation of participatory carbon with focus on education for equipment and didactic material for schools

		dialogue and collaboration with the different cultural and community institutions present in the project area.	taken and the state of the HCV.	
Firewood and collection areas in the native forest for household fuel wood (cooking and home heating).	Project boundaries	Public information campaigns held on the importance of caring for the forest. - Generate understanding with the security forces. - Reforestation of native plants. - The project includes the creation of a "Forest Security Network" that consists of ensuring that the community has access to firewood and other forest products in an equitable and orderly manner. - The project includes the installation of forest security systems, prevention and early warning of fires and other threats within the project area, but limiting threats outside the project area limits.	A local monitoring team will be responsible for conducting biannual photographic and general technical surveys to evaluate environmental and technical issues. - Those responsible for monitoring will make biannual reports on the evolution and impact of the measures taken and the status of the HCV.	
Native forests for its ecosystem services	Project boundaries	Increased control of the entry of people within the boundaries of the project. - Public information sessions will be held on the importance of caring for the forest and the environment in general. - Establishment of agreements with the security forces to coordinate actions in the event of problems. - The project includes reforestation plans of native plants that will improve the situation of this HCV. - Organization of firewood donation days for the community in order to further regulate the influx of people looking for firewood. - The project includes the installation of forest security systems, prevention and early	A local monitoring team will be responsible for carrying out biannual photographic and general technical surveys to evaluate environmental and technical issues. - Those responsible for monitoring will carry out biannual reports on the evolution and impact of the measures taken and the status of the HCV.	

		warning of fires and other threats.		
Wood/firewood collection areas in Tekoa Alecrin (Mbya Guarani Community)	Project boundaries	Participatory meetings were held with various local community stakeholders to identify HCVs. - The project includes the development of a participatory carbon plan through which local communities can decide where to use a percentage of the revenues derived from the project's carbon credits to improve these HCVs. - The project includes generating instances of dialogue and collaboration with the different cultural and community institutions present in the project area.	In a governance scheme between the Alecrin community and project representatives, the best ways to carry out the HCV monitoring process will be evaluated. It will seek not to generate invasive practices that alter the intimacy and daily life of the community.	
Harvesting areas for wild products, medicinal plants, fruits and game in the Tekoa Alecrin (Mbya Guarani Community)	Project boundaries	Participatory meetings were held with community representatives to identify HCVs. - The project includes the development of a participatory carbon plan through which local communities can decide where to use a percentage of the revenues derived from the project's carbon credits to improve these HCVs. - The project includes generating instances of dialogue and collaboration with the different cultural and community institutions present in the project area. - Development of a joint care and preservation scheme under a governance structure based on Mbya Guarani cultural and historical patterns.	In a governance scheme between the Alecrin community and project representatives, the best ways to carry out the HCV monitoring process will be evaluated. The aim will be to avoid invasive practices that alter the privacy and daily life of the community.	

Fishing zones in the Tekoa Alecrín (Mbya Guarani Community)	Project boundaries	Participatory meetings were held with community representatives to identify HCVs. - The project includes the development of a participatory carbon plan through which local communities can decide where to use a percentage of the revenues derived from the project's carbon credits to improve these HCVs. - The project includes generating instances of dialogue and collaboration with the different cultural and community institutions present in the project area. - Development of a joint care and preservation scheme under a governance structure based on Mbya Guarani cultural and historical patterns.	In a governance scheme between the Alecrín community and project representatives, the best ways to carry out the HCV monitoring process will be evaluated. The aim will be to avoid invasive practices that alter the privacy and daily life of the community.	
Conservation Value Bodies and streams in the Tekoa Alecrín (Mbya guaraní Community): Alegría stream, Piray Guazú stream, Suturno stream, Streams not named, Other sources and streams	Project boundaries	Participatory meetings were held with community representatives to identify HCVs. - The project includes the development of a participatory carbon plan through which local communities can decide where to use a percentage of the revenues derived from the project's carbon credits to improve these HCVs. - The project includes generating instances of dialogue and collaboration with the different cultural and community institutions present in the project area. - Development of a joint care and preservation scheme under a governance structure based on Mbya Guarani cultural and historical patterns.	In a governance scheme between the Alecrín community and project representatives, the best ways to carry out the HCV monitoring process will be evaluated. The aim will be to avoid invasive practices that alter the privacy and daily life of the community.	Protection of a spring, installation of a filter, pump, water tank and hose for water distribution for home consumption and irrigation.

Boundary of Tekoa Alecrín Community Terrain, "Rumbo" (Mbya guaraní Community)	Project boundaries	Participatory meetings were held with community representatives to identify HCVs. - The project includes the development of a participatory carbon plan through which local communities can decide where to use a percentage of the revenues derived from the project's carbon credits to improve these HCVs. - The project includes generating instances of dialogue and collaboration with the different cultural and community institutions present in the project area. - Development of a joint care and preservation scheme under a governance structure based on Mbya Guarani cultural and historical patterns.	In a governance scheme between the Alecrín community and project representatives, the best ways to carry out the HCV monitoring process will be evaluated. The aim will be to avoid invasive practices that alter the privacy and daily life of the community.	
Places of worship of the Tekoa Alecrín, "Opys" (Mbya guaraní Community)	Project boundaries	Participatory meetings were held with community representatives to identify HCVs. - The project includes the development of a participatory carbon plan through which local communities can decide where to use a percentage of the revenues derived from the project's carbon credits to improve these HCVs. - The project includes generating instances of dialogue and collaboration with the different cultural and community institutions present in the project area. - Development of a joint care and preservation scheme under a governance structure based on Mbya Guarani cultural and historical patterns.	In a governance scheme between the Alecrín community and project representatives, the best ways to carry out the HCV monitoring process will be evaluated. The aim will be to avoid invasive practices that alter the privacy and daily life of the community.	

Tekoa Alecrin Graveyard (Mbya guaraní community)	Project boundaries	Participatory meetings were held with community representatives to identify HCVs. - The project includes the development of a participatory carbon plan through which local communities can decide where to use a percentage of the revenues derived from the project's carbon credits to improve these HCVs. - The project includes generating instances of dialogue and collaboration with the different cultural and community institutions present in the project area. - Development of a joint care and preservation scheme under a governance structure based on Mbya Guarani cultural and historical patterns.	In a governance scheme between the Alecrin community and project representatives, the best ways to carry out the HCV monitoring process will be evaluated. The aim will be to avoid invasive practices that alter the privacy and daily life of the community.	
Tekoa Alecrin School, CAPS, Craft stalls (Mbya guaraní Community)	Project boundaries	Participatory meetings were held with community representatives to identify HCVs. - The project includes the development of a participatory carbon plan through which local communities can decide where to use a percentage of the revenues derived from the project's carbon credits to improve these HCVs. - The project includes generating instances of dialogue and collaboration with the different cultural and community institutions present in the project area. - Development of a joint care and preservation scheme under a governance structure based on Mbya Guarani cultural and historical patterns.	In a governance scheme between the Alecrin community and project representatives, the best ways to carry out the HCV monitoring process will be evaluated. The aim will be to avoid invasive practices that alter the privacy and daily life of the community.	Pilot implementation of participatory carbon with focus on education for bilingual school equipment and didactic material.

4.2 Other Stakeholder Impacts

4.2.1 Mitigation of Negative Impacts on Other Stakeholders (CM3.2)

The negative impacts to other stakeholders identified are companies in the production chain of wood products and informal labor employers. In the first case, given the project is of medium scale and the plantation forestry activity is extended in the region, it is not considered a mitigation measure is needed. Anyway, regarding local communities, job opportunities will be available in order to implement the project's forestry plan, as well as new productive projects.

In the case of informal labor employers, no mitigation is considered needed because although the payment for environmental services is expected to impact the whole community within the project zone, not all "changueos" are expected to halt.

Regarding trespassing and illegal activities conducted by poachers, the limitation and control of these activities are required to preserve the biodiversity and fulfill the main objectives of the project, although it may lead to a negative impact on their economic activity. Bearing in mind these activities are not of subsistence, but illegal threatening activities with political boundary trespassing with criminal attitude, this limitation is considered necessary and conducted by the corresponding national military authorities.

4.2.2 Net Impacts on Other Stakeholders (CM3.3)

Other stakeholders are not expected to be negatively affected by the project as, in the case of other plantation forestry companies, the scale is medium and within a forestry region with other projects to work with,.

Evidence that no negative impacts on well-being of other stakeholders have taken place are the lack of grievances received for the project and the good acceptance of the project in the area.

4.3 Community Impact Monitoring

4.3.1 Community Monitoring Plan (CM4.1, CM4.2, GL1.4, GL2.2, GL2.3, GL2.5)

During this first monitoring period, with less than one year since the project start date, the monitoring results are limited. Moreover, given the project design is based on the Participatory Carbon Program and no credits have yet been emitted, all actions and activities implemented have been executed based on initial budget, but will migrate to these mentioned mechanisms once project is validated and throughout its lifetime. Furthermore, the monitoring plan in place states projects follow up to take place annually, for these reasons some had not yet been conducted prior to this document elaboration. Updated results will be presented in the monitoring period starting August 2022.

In this sense, the current monitoring results in place include limited outcomes of the project to date in terms of community groups covering only four projects of the total proposed in the project description Ra'Yí and Oga Project at Alcecrín indigenous community). These are detailed in Table 4.

Regarding the HCVs identified, the monitoring plan established for this period is limited only to the process of identifying the sites that will be safeguarded in the project due to the time period of this Monitoring Report, but the planning of the tasks to be carried out according to the identification of the different HCVs systematized in the survey with the local communities is described below (Table 3)

Table 3. HCVs monitoring plan

HCV Monitoring plan	- A local monitoring team will be responsible for carrying out biannual photographic and general technical surveys to evaluate environmental and technical issues. - Those responsible for monitoring will carry out biannual reports on the evolution and impact of the measures taken and the status of the HCV.
Laguna Encantada, water courses, and community cultural premises Monitoring plan	- A team will visit the site once every six months to verify the status of the HCV and the measures taken. - The same team will carry out a photographic and technical survey to evaluate environmental and technical issues. - The people in charge of monitoring will make biannual reports on the evolution and impact of the measures taken and the state of the HCV.
Forestal Belga's Graveyards Monitoring plan	-Visit Authorization (visits log will be kept for 5 years). -Once every 12 months the Field Supervisors will verify the proper condition of the gravesites following the following guidelines: -Visual observation of weeds present in the graves. -Observation of the existence of machine tracks in the vicinity of the graves. -Observation of exotic regeneration near the tombs (it is forbidden to make plantations near the tombs) -Observation of the state of conservation of the tombs, visual observation of plaques, etc. (it is forbidden to make any change). -Observation of the existence of bonfires, damage to trees, etc.
Tekoa Alecrin HCVs Monitoring plan	- In a governance scheme between the Alecrin community and project representatives, the best ways to carry out the HCV monitoring process will be evaluated. It will seek not to generate invasive practices that alter the intimacy and daily life of the community.

Table 4: Community monitoring plan for the first monitoring period

Community Group: women growers
Change in Well-being: women participation in the project

The first goal achieved was the substantive increase of participation of women in decision making and the generation of spaces for deliberation and decision making with a gender perspective.

Community Group: women growers			
Change in Well-being: Actions			
Training	Training	Gender perspective	Donations

One training workshop for the improvement of the cooperative's productive capacity and organizational processes. Satisfaction level of the training workshop were: very satisfactory.	One training workshop for the use of new equipment. Satisfaction level of the training workshop were: very satisfactory.	One workshop with a gender perspective to improve the functioning of entrepreneurship. Satisfaction level of the training workshop were: very satisfactory.	Donations of new equipment for the productive improvement of the cooperative
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Community Group: Indigenous community Tekoa Alecrin – Oga Project & Ra 'yi: community horticultural project.

Change in Well-being: indigenous participation in the project

The first objective achieved was to establish contact with the Guaraní Alecrín indigenous community, establishing bonds of trust with their traditional authorities and presenting the project, as well as reaching a consensus on the future process of a Free, Prior and Informed Consultation with the community as a whole in order to reach a consensus on the progress of the GS1 project and plan future projects with positive impacts on the community.

On the other hand, a gender workshop was held with eight women from the community, using the focus group technique to identify the main problems and their potential solutions in relation to gender issues. Feedback from the beneficiaries indicated a very high level of satisfaction.

Community Group: Indigenous community Tekoa Alecrin – Oga Project		
Change in Well-being		
Training in housing construction	Meetings for design houses	Meeting to establish priorities and beneficiaries
One member of the community was trained to be responsible for the construction and training of the members of Tekoa Alecrin who will participate in the wooden housing construction program. Satisfaction level of the training were: very satisfactory	Three meetings and workshops were held to plan and define the designs of the houses to be built with the consensus of the community.	A meeting was held to establish housing priorities and draw up a list of community members beneficiaries with the agreement of the community and their leaders.

Community Group: Indigenous community Tekoa Alecrín – Ra'yi: community horticultural project		
Change in Well-being		
Food security training workshops	Horticulture training	Donations
One training workshop to improve food security by strengthening self-sufficiency agriculture and several notions of agroecology. Satisfaction level of the training workshop were: very satisfactory	Two training courses to improve food security through an agroecology horticultural practical workshop: management of native seeds, use of agro-ecological fertilizers and phytosanitary products, sowing and planting techniques, sustainable use of water, etc. Satisfaction level of the training workshop were: very satisfactory	Donation of equipment, tools and seeds for horticultural production.

4.3.2 Monitoring Plan Dissemination (CM4.3)

Access to information throughout the life of the project has been defined to be through a strategy that includes news web portal and project social networks, local radios and newspapers, face-to-face briefings with stakeholders during verification instances. Moreover, the installation of a local Community Relations Office (RRCC, for its acronyms in Spanish) in Cruce Caballero, is projected in the short term. It will work with open hours to allow communities to reach out

Due to the problems of periodic intermittency of electricity service and, as a result, intermittency in 4G data connectivity and Wi-Fi, added to the presence in many cases of only one cell phone per family, lack of computers, lack of a digital and registry culture that discourages the approach by electronic means and use of ICT'S, we have relied on a strategy of proximity through face-to-face briefings. 2022 progress reports, PD and MR summary in local language, as well as other documents –including the community monitoring plan- have been handed personally to different stakeholders (local authorities, president of the Deliberative Council communities in Paraje Alegria and Cruce Caballero, Tekoa Alecrin authorities, with evidence available for VVB during verification) and information has been uploaded to the webpage as well, for other stakeholders.

Moreover, project documentation will be available at CCB and VCS webpage once validated and in NIDEPOR webpage with project details.

4.4 Optional Criterion: Exceptional Community Benefits

4.4.1 Short-term and Long-term Community Benefits (GL2.2)

As previously stated, the project is and will generate net positive well-being benefits in the shape of formal job opportunities, better working conditions, environmental service payments to communities, HCV as well as native forest conservation and enhancement, and the implementation of development project activities within the community.

In the short term, job opportunities, housing improvement, and active community participation are some of the benefits the project is already engaging in, leading to an increased well-being of the communities in the project zone. Moreover, the conservation and enhancement of the communities' HCV areas potentially will improve the opportunities for social cohesion. In the case of food gardens technical assistance and training, it will directly benefit food security for

the communities involved in the project. These are some of the short-term benefits that can be identified for the project and associated project activities.

In the long term, the community benefits include an increase in well-being due to the conservation of forest and biodiversity ecosystem services which include avoidance of soil erosion and reduction in drought frequency, among others like local temperature control. Moreover, the different project activities will have strengthened the gender perspective in agricultural production and training and job experiences will increase technical skills within the communities and installed capacities.

4.4.2 Marginalized and/or Vulnerable Community Groups (GL2.4)

Community Group 1	Women
Net positive impacts	Different instances in place (focus group discussions) seek to generate safe spaces for women to raise their voice and present those needs which can be met by the projects to be designed and implemented, leading to further opportunities for well-being. The project will generate equal job opportunities for men and women, providing women with the opportunity to provide economically for the family, or its own, in a formal job under good working conditions. Training will take place improving and gaining new skills, which include technical assistance to improve existing project's productivity and outcomes. In the case of Cooperativa Nueva Esperanza, the original project was designed by women, and Nideport attempted to strengthen it.
Benefit access	Special consideration is paid to listen to women's needs, risks and desires, generating all-women moderated consultations and meetings⁴⁸.
Negative impacts	Constant follow up on project development is monitored using the indicators defined for the specific projects including women impacted. Moreover, there is public access to the project proponent through different channels to raise any concerns, comments. As well as a code of conduct which specifically mentions avoiding any kind of discrimination towards women. Any negative impact or risk to women will be studied and the project will be redefined to mitigate them in gender safeguards.
Community Group 2	Tekoa Alecrin community
Net positive impacts	The different type of development project activities in place with the community will allow for different positive changes in the community well-being in the short-term including: 1. Improve health and family relations by reducing overcrowding in houses, and improving housing material conditions 2. Projects are designed by Tekoa Alecrín, with Nideport's support and expertise in project management. 3. NIDEPORT begins to intervene/mediate so that the Tekoa Alecrín can be guaranteed tenure of their land, and thus avoid intrusions, securing resources 4. Improve health and community economy by securing healthy food access.

⁴⁸ Meeting minutes and outcomes available for VVB during validation

Benefit access	The culture of the Alecrin community was studied before the first encounter, in order to better understand hierarchy and respect its way of interacting with the outside. In this line, all meetings are coordinated through the community's leaders and summaries are extended to the community group. The projects are defined and designed through a Free, Prior and Informed Consent during which the community's needs are identified.
Negative impacts	Constant follow up on project development is monitored and project development informed and discussed with the community group. Any negative impact or risk will be studied and the project will be redefined to mitigate them. Moreover, there is public access to the project proponent through different channels to raise any concerns, comments.

Community Group 3	Vulnerable people (economic and social vulnerability with their income and livelihoods, schooling and food sovereignty in a critical state)
Net positive impacts	The project's aim is to generate job opportunities with better working conditions and income and increase economic activities than without the project leading. Moreover, different development projects defined with the community include participation, capacitation and incomes from HCV's improvement.
Benefit access	Projects are defined and designed based on main needs identified during public consultations with and by the communities. Monitoring plans will allow us to follow the project objectives, making sure the benefits are accessed by those in need.
Negative impacts	Constant follow up on project development is monitored and project development informed and discussed with the community group. Any negative impact or risk will be studied, and the project redefined, if needed, to mitigate it. Moreover, there is public access to the project proponent through different channels to raise any concerns, comments.

4.4.3 Net Impacts on Women (GL2.5)

The without project scenario shows a continued historical trend that has reinforced the differentiated allocation of productive and reproductive work, where a marked division of labor according to gender is identified. In general, the tasks of production and provision are associated with the figure of the man, while the tasks of care and maintenance of domestic life are associated with the figure of the woman strongly influenced by the evangelical religion in the area. This translates into a scenario in which men tend to have salaried jobs mostly linked to forestry (extraction and processing of wood), production based on perennial crops (such as yerba mate, tea, etc.) whereas women tend to engage in unpaid domestic work ranging from sowing and harvesting food for both household consumption and sale, to preparing daily food, cleaning and tidying up the home, to the care of the elderly/children and persons with disabilities.

The project's main participatory mechanism leaves the development project activities to be defined and designed by the community (with technical support from Nideport's team). These instances are moderated with a gender approach to ensure women's participation. Moreover, there have been all-women instances to discuss and identify main needs.

It is relevant to distinguish a case in the project area where particular dynamics occur in terms of gender relations in forest governance. This is the case of the Nueva Esperanza Cooperative, a project born in 2006 and promoted by a group of 12 women between 30 and

50 years of Paraje Gentile, for the agroecological and sustainable production of preserves based on native wild fruits. The weekly work of these entrepreneurs consists in the gathering of fruits from the forest, for the subsequent elaboration and commercialization of vinegars, liqueurs and condiments. In addition to this, they are currently working on the creation of a nursery to conserve native species and generate greater environmental awareness, since they have noticed a growing shortage of certain species due to the felling of trees.

The project includes a specific project activity with these community groups, seeking to provide equipment and related training (machinery as well as economic and marketing courses and gender equality) for the cooperative to increase production. During this monitoring period, in May 2022, machinery and equipment to optimize production was delivered including a semi-automatic packaging machine, a 50-liter stainless steel sterilizing pot were purchased and 3 fermentation tanks with their corresponding stopcocks.

On the other hand, with respect to substantive participation of the women of the Tekoa Alecrin community, both our key informants and the women in the community with whom we have been able to interact briefly, have informed us that they have broad decision-making power within the community. Moreover, main FPIC documentation has been translated to Mbya Guaraní for all to access it. Moreover, the first projects designed with the community will lead to positive impacts for women as it includes improving housing conditions as well as new houses to reduce family overcrowding. Moreover, the vegetable garden training and improvements will allow us to secure food and adapt to climate change impacts projections. All projects designed and implemented will only be considered if no apparent negative impacts to women in the community arise from them.

4.4.4 Benefit Sharing Mechanisms (GL2.6)

Given the current monitoring period is the first for the project and no credits have been emitted yet, the project activities budget in place has been defined based on the initial available budget for the project. As from this first credit emission, the project will work based on a Participatory Carbon Budgeting mechanism as summarized in table 6. It shows the different communities targeted, well-being conditions to be improved, among others. This will be achieved using a Participatory Carbon Budgeting mechanism described in table 5.

Table 5: Participatory Carbon Budgeting mechanism description

Project activity or Intervention	Participatory carbon budget in which the population of the project's area of influence can determine how the budget will be used. The annual amount allocated to the PCP comes from a percentage of the profits obtained by the company from the issuance of carbon credits. The amount allocated depends on the profits obtained. The following table shows the amounts allocated to the PCP according to the profits obtained from the issuance of carbon credits:	
	Profits obtained from the issuance of carbon credits	Percentage of direct transfer for projects
	Up to USD 500,000.	5%
	From USD 500,001 to USD 1,000,000.	5%
	From USD 1,000,001 to USD 1,500,000.	3%
	More than USD 1,500,001	2%
	The amount earmarked for the PCP will be divided as follows:	
	Operating expenses	Estimated fixed amount of USD 1500
	Materials expenses	Estimated fixed amount of USD 800

	Pre-feasibility /consulting costs	Estimated fixed amount of USD 3,300
	Direct transfer to civilian institution for project execution	It will depend on the profits obtained by issuing carbon credits (see table above, the amount allocated must be subtracted from the fixed costs, which gives us the amount for the implementation of the project).
	Accountability	estimated fixed amount of USD 350
	Execution monitoring expenses	estimated fixed amount of USD 1700

Target Audience	To the entire population of the project's area of influence (1500 inhabitants).
Net Profit	1. Improvement of the quality of life of the population in the area of influence of the project based on participatory management projects in health, education, maintenance of HCVs and community infrastructure. 2. Establishment of a culture of good participatory practices with sustainability and equity as the core themes. 3. Substantive participation of women.
Issues and/or expected negative impacts	Intra-neighborhood conflicts due to the absence of a participatory tradition.
Measures to be taken to mitigate/solve the problems and/or expected negative impacts.	1. Development of community mediation strategies. 2. Alternative conflict resolution.
Possible Affected Stakeholders	No potential stakeholders are expected to be affected

Table 6: Benefit sharing mechanism summary description

Degree of influence of the property category ⁴⁹ .	Community	Vulnerability Situation	Definition of specific problems	Distributive Criteria	Name of project activity/distributive mechanism for problems	What does the project/distributive mechanism consist of	Participation mechanism	Type of Benefit
1 and 2	Cruce Caballero	Population of the project's area of influence is below the provincial and national poverty lines ⁵⁰ .	Lack of water, lack of forestation and the need to strengthen the farm economy.	Universality / Equality	Payment for Environmental Services	Payment for environmental services for reforestation and construction of reservoirs with watershed protection in farms.	1. Payment for environmental services 2. Construction of reservoirs with protection of watersheds. 3. Afforestation of native species.	NET
	Tobuna		Lack of participatory designs and participatory budgets in which the population can determine the priorities for investments in health, education, protection of social HCVs and community infrastructure.	Universality / Equality	Participatory Carbon Budgeting	Participatory carbon budget in which the population in the project's area of influence can determine how the budget will be used.	Participation in the participatory forums of the Participatory Carbon Budget.	
	Paraje Piñeiro		"The population in the area of influence of the project has a dependence on the "forest safety net" in: A.	Universality / Equality	Forest safety net	. The project aims to regularize the firewood extraction and collection in GS1, respecting limited present activity.	Through Citizen Consultation, socio-environmental visits to homes, informative meetings/debate	

⁴⁹ See description in section 2.1.8

⁵⁰ See detail in section 4.5.1

			Firewood. B. Medicinal Plants (the lower the purchasing power the greater the use of medicinal plants obtained through collection).					
	Paraje Alegria		Antonio is living with part of his family in the vicinity of the GS1 property in a situation of socio-economic fragility. From this, he thought of a nursery project that contributes to the conservation and dissemination of this ethno-botanical knowledge of high value, in the context of the disappearance of traditional knowledge, and that, at the same time, guarantees him an economic income for his subsistence and material well being.	Equity	Don Antonio: Native medicinal species nursery with an ecotourism and educational approach	Construction of a nursery for native medicinal plants with an ecotourism and educational focus.	IN DESIGN STAGE	
	Paraje Gentile		"In a framework of systemic socio-economic fragility of women, there is a need to speed up the processing times of products	Gender / equity	Cooperativa Nueva Esperanza	Technology transfers to increase the speed of production and the quantity produced.	The cooperative has its own autonomous benefit sharing system. It is also planned to hold bi-monthly meetings and documented mechanisms for follow-up to demonstrate	

			in order to increase production and, from this, the income of a women's cooperative and its workers.				equitable participation of the members in the benefits generated by the project.	
3.	Tekoa Alecrin	Population of Tekoa Alecrin below the national indigence line with more than one IBN ⁻⁵¹	Through the FPIC with the Alecrin village, it was determined that Tekoa has habitat problems: insufficient housing for the entire population, which leads to overcrowding, and high precariousness of the existing housing. These problems are directly linked to the community's lack of materials and tools for self-construction of housing.	Equality / equity	Oga	Improvement of the community's housing self-construction capacities and construction of housing for the community, respecting and maintaining the cultural heritage of the Mbya Guaraní.	Building of housing modules, starting with the households with the worst conditions. It will include training for the self-construction of houses, which will be in charge of the Arco Iris Cooperative. By decision of the Council of Authorities, in both cases, housing and people who receive training will be defined by Tekoa Alecrin itself).	EXTRAORDINARY (GOLD)
			It was found in different interviews and through the surveys conducted that there are food	Equality / equity	Ra 'yi (community vegetable garden)	Support for community and family agriculture in Tekoa Alecrin.	The benefits will be received by the whole Tekoa Alecrin, since the project is oriented towards the vegetable	

⁵¹ See more detail in section 4.5.1

			problems in the village. Likewise, a series of problems related to agriculture was identified: shortage of seeds in general and lack of adequate tools to improve crops.				garden, to which the entire community has access.	
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4.4.5 Governance and Implementation Structures (GL2.8)

We understand governance at the local level as

...a decentralized and cooperative process with a network logic - formal or informal - in which the local State, key actors - with presence, impact and proximity in the territory - from the private sector, interest groups and other levels of government participate. In this process, the local government does not govern by subordination by making unilateral decisions, but tends to do so by coordinating the interactions and joint actions of the various actors, with the intention of sustaining them over time; to lead society, defining objectives and collective goals in a participatory and deliberative manner; jointly planning, executing and evaluating public works, social development project activities, investment and economic development projects, and the provision of public services. This relational form of government based on networks formed by local governments and different private actors, interest groups and other state levels varies from municipality to municipality and has different impacts in each territory. (Colella, 2022. pp. 59-60)⁵²

However, in the project's area of influence, the local government does not promote coordination and cooperation between the civil sector, the private sector and the state sector to design, implement and monitor public policies. For this reason, civil and private institutions are atomized, often working on the same issues, but in an overlapping and uncoordinated manner, which leads to inefficiency and ineffectiveness of resources and projects undertaken.

Faced with this situation of disarticulation of civil institutions, private sector and other stakeholders, it was decided to implement "key actor", "snowball" and "focus group" techniques to identify the different stakeholders in the area of influence of the project, as well as their interests in order to articulate with them in the different projects carried out by the community relations area. Also, due to the lack of initiative from the local government, it was decided that Nideport would take the initiative to generate coordination and cooperation among the different stakeholders.

All the development project activities presented in this document have been designed, implemented and are/will be monitored in a participatory and cooperative manner, under a governance logic, by Nideport's Community Relations area (Pablo Gallardo, Guillermo Colella, Martin Couchot and Sofía Rodríguez) together with the communities located in the project's area of influence. Regarding the actions taken within the project area, this is defined based on experts and third parties' technical analysis, which also includes, to a lesser extent, the knowledge of community members who have worked in the property for many decades now. It should be noted that in the case of the Oga and Ra 'yi (strengthening family and community farming), these are original ideas of the members of Tekoa Alecrin, but due to lack of resources and technical capabilities they could not be developed. It is thanks to the coordination and cooperation between Tekoa Alecrin and Nideport that these projects could be developed. Likewise, the design, implementation and follow-up were carried out respecting the culture and tradition of the Mbya Guarani.

Project Name	Census
Methodology for project design and implementation	Research with a mixed - or triangulated - multistage design. With interviews of maximum variation; under the logics of "key actor", "snowball" and "Focus Group". And with censuses in villages, towns and native communities located in the area of influence of the project; with a random sample selection by conglomerates for villages and villages, and with a directed sample selection and by conglomerates for the native community.

On the other hand, the following tables show the methodological strategies for designing the projects with the stakeholders.

⁵² Colella, Guillermo G. 2022. Gobernanza en Gobiernos Locales. Editorial Autores de Argentina. Argentina.

Project Name	Participatory Carbon Budgeting
Methodology for project design and implementation	Citizen consultation. Participatory design through assemblies and forums.
Project Name	Forest Safety Net
Methodology for project design and implementation	Citizen consultation. Participatory design and census in villages and sites in the project's area of influence, with a random cluster sample selection.
Project Name	Payment for environmental services project
Methodology for project design and implementation	Citizen consultation. Participatory design in assemblies and forums
Project Name	Óga
Methodology for project design and implementation	Free, Prior and Informed Consent (FPIC). SWOT Matrix. Participatory Design. Maximum variation interviews. Participatory Rural Appraisal (PRA)
Project Name	Ra 'yi, strengthening family and community farming in Tekoa Alecrín
Methodology for project design and implementation	Free, Prior and Informed Consent (FPIC). SWOT Matrix. Participatory Design. Maximum variation interviews. Participatory Rural Appraisal (PRA).
Project Name	Cooperativa Nueva Esperanza
Methodology for project design and implementation	Census, interviews, "Focus Group", participatory design.
Project Name	Don Antonio: Native medicinal species nursery with an ecotourism and educational approach.
Methodology for project design and implementation	Census, interviews, "Focus Group". Participatory design.

4.4.6 Smallholders/Community Members Capacity Development (GL2.9)

As previously stated, all development project activities are defined based on main needs and threats identified by communities in the public consultation. These project activities are further

discussed and designed by the community together with Nideport in meetings with the community including focal groups. The implementation of the project activities is done by the community, generating job opportunities or based on environmental service payment, according to the project. The monitoring of the project activity is publicly available to the community and management, although led by Nideport is worked together with the community group defined for the task.

In the case of the project area, the main plan and design is defined by Nideport and a group of external experts. Its implementation is also discussed with workers which have worked for many decades for Forestal Belga and are still part of the project. Specifically, a nursery project was conceived to contribute to the conservation and dissemination of a person from the community, highly valuable ethno-botanical knowledge - in the context of the disappearance of traditional knowledge- and which, at the same time, guarantees him an economic income for his subsistence and material well-being by including eco-tourism and education activities.

Project Name	Óga
Capacity development and training	Staggered inclusive job training. In this, members selected by Tekoa Alecrin are trained so that they can then train the rest of the community. The purpose of the training is to "develop training actions, more precisely, a Temporary Inclusive Job Training activity to generate opportunities for social inclusion and enhance people's capabilities". The Instrumentation would be as follows: granting of economic and/or financial support through the allocation of subsidies, scholarships, grants, fixed capital transfers, as well as technical assistance, counseling, guidance, and job training, either for the purpose of support in the technical, operational, administrative management of WBG projects or for other job opportunities. In no case will a grant or support finance activities that may be included in an employment contract, in a contract for the provision of technical services, in the performance of consulting tasks, internships, etc. Amounts and insurance: The maximum amounts of the project benefits for each beneficiary will be assigned according to the nature and duration of the training project and the social situation of the beneficiary and in accordance with the amount set by the competent authority at the national level to determine a Minimum, Vital and Mobile Wage, pursuant to the provisions of Article 140 and concordant provisions of Law No. 24,013, as amended, or the one that replaces it, as well as its regulations. Prior to the payment of the stipend, Nideport will contract an insurance for each recipient with the same characteristics of the risk insurance for field activities carried out by its team in San Pedro, Misiones. The economic and/or financial support, and the technical assistance or training, granted or provided by this company by any of the modalities foreseen in the preceding article, either on its own account, or through third parties or by other means, is not intended to establish a contract or functional or legal dependence of any nature that links it with those or with the direct beneficiaries of the project activity. Consequently, the condition of beneficiary of the training project activity in any of its benefits, does not generate any employment relationship with Nideport or with the institutions responsible for their training. The following modules will be worked on during the training: Module 1: Wood selection. Module 2: Timber estimation. Module 3: Wood analysis. Module 4: Cutting practices. Module 5: Module construction.

	Module 6: Wood maintenance plan.
Targeted community members	Members selected by Tekoa Alecrín, so that they can then train all members of the community.

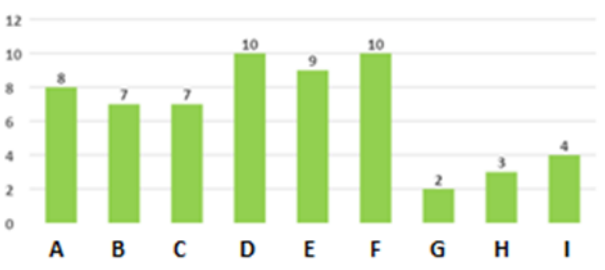
Moreover, human force needed for the different projects' implementation, both economic activities as well as native forest regeneration and enrichment, will be based on local communities, prior training and capacitation.

In the case of the Alecrín community, the project activities' definition is accompanied (technically and providing access to materials and capacitation) by NIDEPORT but the design, implementation and management is defined by the community based on their culture.

More precisely, the training topics per project for community groups are as follows:

Project Name	Ra 'yi, strengthening family and community farming in Tekoa Alecrín
Capacity development and training	Training of selected members of the Tekoa Alecrín in agroecological cultivation techniques and seed preservation, so that they can then train all members of the community including water management.
Targeted community members	Members selected by Tekoa Alecrín, so that they can then train all members of the community.

Project Name	Nueva Esperanza Cooperative
Capacity development and training	On Tuesday, May 17, 2022, a survey was conducted so that the members of the cooperative could determine the topics of interest for training. The survey was designed to address two dimensions: one specifically related to the work carried out by the cooperative, and the other related to other skills and knowledge that would improve their social capital. In relation to this, a list was made of possible topics on which the respondents had to answer "yes" or "no". Once the responses had been collected, a statistical analysis was carried out to determine which topics had been the most important. As a result, it was found that, in the first place, the training on "Strengthening the gender approach", "Training in environment and sustainable development" and "Institutional relations" were weighted; these were followed by "Improvements in the production and reproduction of plants and seeds", "Improvements in technology transfer" and "Improvements in marketing and publicity...". In last place we find "Increasing social participation", "Improvements in labor organization..." and "Improvements in techniques for identification, recognition and harvesting of native fruits..."

	Survey on training interest at Nueva Esperanza Cooperative  Result of the survey conducted on May 17, 2022, to the members of the cooperative in which they determined the topics of interest for the trainings: Bar names from left to right: improvement in plant production and reproduction, improvement in technology transfer, improvement in marketing, strengthening the gender approach, institutional relations, training in environmental issues..., improvement in identification and recognition techniques, improvement in labor organization and social participation
Targeted community members	To the women members of the cooperative and to women who join the cooperative in the future.
Project Name	Participatory Carbon Budgeting
Capacity development and training	Training in institutional strengthening oriented to good democratic practices in the management of civil institutions. Training in participation in participatory forums for dialogue, design, implementation and monitoring of community projects.
Targeted community members	To the entire population of the project's area of influence.
Project Name	Forest Safety Net
Capacity development and training	Not applicable
Project Name	Don Antonio: Native medicinal species nursery with an ecotourism and educational approach.
Capacity development and training	The training is oriented to the development of writing skills for the project manager, in order to be able to record knowledge according to scientific writing standards. This is linked to the development of Gustavo Pedroza's thesis. A thesis workshop has been developed and will later be used to record ethnobotanical knowledge. The training modules are as follows: 1) Training in pre-project thesis writing. Topics: Design and writing. Basic notions on the use of Word. Selection of appropriate bibliography. Writing and spelling. Cutting and writing of research objects and topics. Description of general and specific objectives. Selection of methodologies to be implemented. 2) Training in elaboration and writing of university

	thesis. Topics: Design and writing. Generation of organization chart. Selection of appropriate bibliography. Writing and spelling. Cutting and writing of research objects and topics. Description of general and specific objectives. Selection of methodologies to be implemented. 3) Training in maintenance and conditioning of nursery spaces.
Targeted community members	Antonio Barreto is a long-time resident of the project area. In addition, he worked for approximately 40 years for different companies located on the current Forestal Belga-Nideport property. From various interviews and informal conversations with him and his family, it was possible to identify his great knowledge of medicinal plants in the area. Based on this, a nursery project was conceived to contribute to the conservation and dissemination of this knowledge and ethno-botanical heritage of high value, in the context of the disappearance of traditional and community knowledge.

Project Name	Payment for environmental services project
Capacity development and training	Training in forest law, watercourse maintenance, water reservoir construction, planting and enrichment of native trees species.
Targeted community members	To the entire population of the project's area of influence.

Project Name	Job opportunities at GS1 property
Capacity development and training	Training in identification, enrichment and planting of native trees, measurement of forest biomass, climate change adaptation, gender and labor rights.
Targeted community members	To the entire population of the project's area of influence.

5 BIODIVERSITY

5.1 Net Positive Biodiversity Impacts

5.1.1 Biodiversity Changes (B2.1)

Given this first monitoring period takes place less than 1 year since the start date, limited impacts are expected to be visible in fauna and flora. Although logging stopped the day before the starting date, the project's development (regeneration and revegetation activities, inventories, site visits, surveillance, etc.) include vehicle and people movement in the project area, which may limit the number of present and new species in the project area.

Biodiversity Element	Fauna biodiversity
Estimated Change	Enhancement of biodiversity in the areas to be regenerated and conserved (22,298.8ha) as well as surrounding protected areas working as green corridors

Justification of Change	Degraded areas are starting to be restored, after all harvesting activity has stopped. The area is being enriched and restored with native species from seedlings. Other areas' natural regeneration will take place after bamboo species are controlled. These actions are allowing fauna to return to the property, by reducing threats and recovering feeding, reproduction and rest areas for animals, as well as extending the green corridor connecting different natural reserves.
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Biodiversity Element	Invasive species
Estimated Change	Reduction
Justification of Change	Monitoring of reforestation and enrichment activities (short and medium term) will allow the project to identify invasive species growth (especially pines from plantations near the project's area) and eventual implementation of an invasive species plan will reduce invasive species numbers.

Biodiversity Element	Native forest
Estimated Change	Degradation reduction and reforestation in the areas to be regenerated and conserved (in the total 22,29.8ha with reforestation taking place in shrublands and shifting agriculture areas adding in 579.7ha)
Justification of Change	Monitoring and mitigation of illegal activities such as harvesting and forest fires are expected to reduce degradation, added to enrichment of native species activities. Indicators on threats reduced and areas enriched, as well as individuals installed will allow the monitoring of the estimated change.

Biodiversity Element	Flora species
Estimated Change	Improvement from a low to high productive forest due to species distribution and number changes in the whole 22,298.8 ha of the project.
Justification of Change	With the logging stopped in the project area those species more affected by log selection will be able to recover in the long-term. Moreover, the implementation of the next steps of the Forest Regeneration Plan which includes not only re-vegetation but also enrichment activities, will lead to changes in the species frequency and growth.

Biodiversity Element	IUCN species
Estimated Change	Numbers increased in the project area (4 EN IUCN species identified during baseline; 2 species under EN category of IUCN confirmed during first monitoring period)
Justification of Change	Based on Aves Argentinas studies ⁵³ species in the project zone have a potential to regenerate. The restoration of habitats, as well as the monitoring and control of illegal poaching and illegal hunting will reduce threats to endangered species, as well as their habitat, leading to an increase in their population.

⁵³ General bird inventory, management and recommendations, and future actions. Argentine Birds for the company. 2021 General bird inventory, management and recommendations, and future actions. Argentine Birds for the company. 2021

5.1.2 Mitigation Actions (B2.3)

To enhance existing HCV areas, the project works as an extension of the Green Corridors between Peñalito Reserve and Yatubai, its conservation (and regeneration) means the opportunity for habitat restoration and a bigger area for endangered species population to enhance. The project has generated different opportunities of synergy with other security authorities (park rangers, police, firefighters and national military forces), which enable the mitigation of biodiversity threats both, in the project area and project zone.

Regarding the enrichment activities, the project has implemented the first steps of the Forest Restoration Plan in SPVN GS1. In this line, a failure of 30% in the establishment of seedlings is estimated. This failure can be caused by various biotic and abiotic factors. However, to reduce their impact, two instances are annually planned in which the plantations of the last two campaigns will be monitored to assess the status of each seedling.

The activities will include:

- Adversities management,
- Lift in case of falls due to wind, branches, animal trampling, etc.
- Replacement or replant if necessary.

The status of the stratum will also be monitored. For example, the state of the forest structure and soil conditions, like soil moisture, soil cover, water erosion risks, etc.

5.1.3 Net Positive Biodiversity Impacts (B2.2, GL1.4)

As detailed throughout the biodiversity section, all the project activities are focused on preserving and recovering the exploited and degraded area, restoring its natural capital, recovering its biodiversity, protecting native species of flora and fauna in danger of extinction, favoring the strengthening of ecosystem services, preserving cultural values, contributing proactively with the local communities and generating positive effects to combat climate change.

By avoiding deforestation since the start date of the project and the implementation of the first steps of the Forest Regeneration Plan with the aim of recovering native forests, the project will provide not only larger areas (connecting existing KBA areas) for species to be able to find food, shelter as well as reproductive sites, but to allow the forest to provide ecosystem services related to climate change adaptation, including flooding control, reduce temperatures, limit soil erosion, among others.

Moreover, the work done in terms of security in the area with joint efforts with park rangers and other security authorities will allow biodiversity communities to recover. This is being monitored, in this case with a first limited survey, but is part of a broader plan to generate valuable information to define further actions needed to fully adapt to the present species needs.

5.1.4 High Conservation Values Protected (B2.4)

As seen in figure 5 and already detailed, the project will enhance the biodiversity from other protected natural areas within the project zone, working as a corridor (or at least reducing distances) between two state natural areas: Piñalito and Yabotí. Moreover, other HCV identified, as water bodies and water banks are being conserved, given the reduction of anthropogenic activities in the area with negative impact in the HCV (including plantation forestry and associated activities), as well as native forest conservation together with the environmental service they provide.

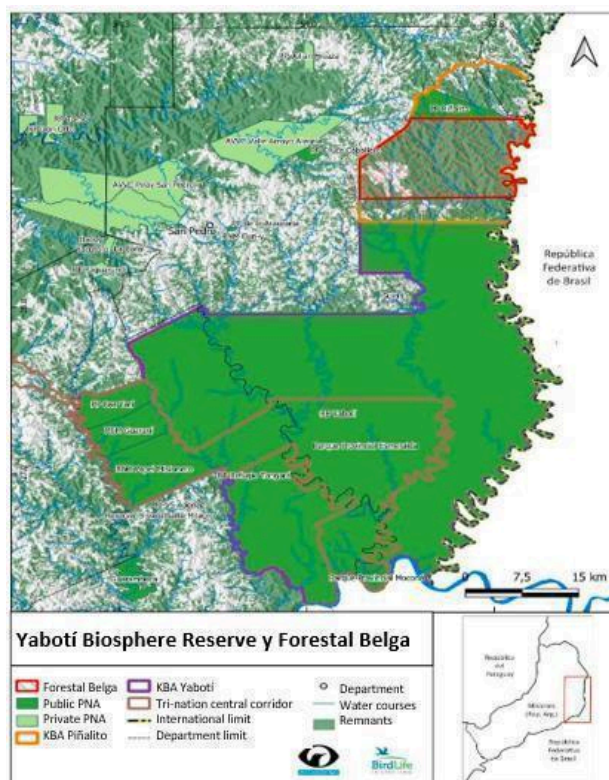


Figure 5: public, private conservation areas as well as identified KBA in the project zone.

One of the main aspects of the project is the synergy with other security authorities and future technology in place to monitor both biodiversity evolution and threats.

Moreover, the enrichment and regeneration of native forest, based on a thorough study on best species to use according to stratum needs, is expected to enhance HCV protection including water courses, endangered species, as well as other ecosystem services.

5.1.5 Invasive Species (B2.5)

The project plans only to reintroduce baseline native species, so no known invasive species will be introduced. During this first monitoring period the first native species have been planted in degraded areas.

Neighboring areas to the project area include exotic species monoculture plantations, where other regeneration activities will take place outside the project boundary, but not affecting the project area. Moreover, the project includes frequent forest inventories and biodiversity monitoring, and the presence of invasive species will be controlled as needed, based on the monitoring plan results.

5.1.6 Impacts of Non-native Species (B2.6)

Species	<i>Pinus ellioti</i> plantations
Justification of Use	<i>Pinus ellioti</i> may be present in the project area given the species was already planted at the start of the project in the project zone and may have invaded parts of the project area, but the project does not include the use of any non-native species.

Adverse Effect	The introduction may have led to seedling invasion in the area, which will have to be controlled as part of the project's enrichment and regeneration activities.
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5.1.7 GMO Exclusion (B2.7)

No GMOs are used to generate GHG emissions reductions or removals as the project aims to enrich and regenerate the area with native non-GMO species only.

5.1.8 Inputs Justification (B2.8)

The enrichment and regeneration of native forest activities includes the use of native species seedlings. Regarding fertilizers, due to soil condition and nutritional characteristics, the establishment of individuals is not conditioned to the use of mineral additives in the field.

Finally, weed control will be carried out manually, through the implementation of project activities with the communities. Campaigns will be carried out with workers who will go around planted areas that are up to two years old. Weeds will be cleared within a radius of 1mt around the plant and the evolution and health of the seedling will be monitored.

Name	Native species seedlings
Justification of Use	For forest enrichment and regeneration
Potential Adverse Effect	There is a low chance seedlings may have invasive seeds in the soil used, this will be controlled by carefully studying seedling pots, to avoid any other specimen establishment in the area.

5.2 Offsite Biodiversity Impacts

5.2.1 Negative Offsite Biodiversity Impacts (B3.1) and Mitigation Actions (B3.2)

Negative Offsite Impact	Mitigation Measure(s)
The increase in security in the premises of the project area could lead to higher poaching and illegal hunting pressure on other lands.	The project includes training, and job positions for the communities living in the project zone and the project expects to expand during the project lifetime, the area of influence of its projects.
The public sector could rest in private conservation projects, reducing investment to other HCV areas.	The project includes training and equipment to rangers, firefighters, helping local governments to mitigate risks in the area. During this monitoring period, first synergies have been worked with rangers and other security authorities.

5.2.2 Net Offsite Biodiversity Benefits (B3.3)

The negative impact identified outside the project zone includes the potential increase in poaching and illegal hunting pressure on other areas which, compared to the positive effects of the project on biodiversity this seem compensated, being:

- Connection to the other two areas that make up a major green corridor in the province.
- Enrichment and regeneration, avoiding plantations and indiscriminate logging in an

area with critically endangered species.

Moreover, the project identifies mitigation actions including:

- The creation of jobs and training opportunities to reduce illegal activities in project zones.
- Increase capacity building with training and equipment for first responders and rangers.
- Increase the project's influence zone, including more communities throughout the project's lifetime.

Moreover, during this first monitoring period, no offsite negative impacts are expected to have occurred as illegal activities have not been fully limited in the project area, regardless of the control activities conducted, as traces of trespassing (traces of horses and dogs for example) are still visible.

5.3 Biodiversity Impact Monitoring

5.3.1 Biodiversity Monitoring Plan (B4.1, B4.2, GL1.4, GL3.4)

As detailed in the monitoring plan, the first biodiversity inventory was limited to bird species and to the forest inventory (for wood species). This was decided as it was conducted less than a year from the start date, and, in the case for fauna, impacts are not expected till later in time as extraction forestry activities have been taking place till the day before the start date. This survey is then, aiming to generate more information regarding species, specially trying to identify winter migration species (in the case of the bird survey) that may have not been included in previous fauna surveys.

In this sense, a 4-day, 3-night survey was carried out in July 2022, during which a large part of the property was covered (Fig. 6). The Survey was carried out by Aves Argentina a well renowned biodiversity conservation NGO in Argentina.

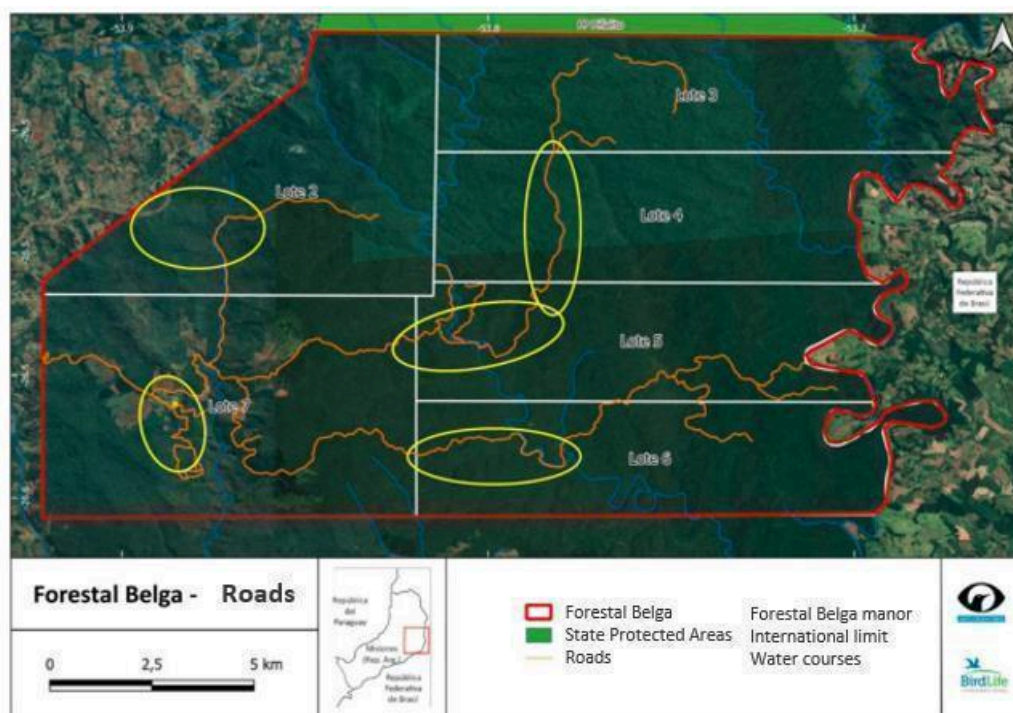


Figure 6: Property lots where fauna survey took place during the first monitoring period and roads of listening points.

The survey consisted of walks with listening points along 30 km of the property's accessible roads in lots 2, 4, 6 and 7. The total search effort was approximately 44 hours, of which 40

hours were spent searching for diurnal birds and 4 hours were spent searching for diurnal birds and 4 hours for nocturnal birds. Weather permitting, the searches were conducted from one hour before sunrise to 2 hours after sunset. Birds were observed with binoculars and recorded from the experience of field technicians familiar with the voices of the Atlantic rainforest birds.

In addition, 30 minutes of recordings were obtained with a Zoom HN4 Pro recorder and Sennheiser ME66 directional microphone. Sennheiser ME66 directional microphone. Playback was used to confirm and find those cryptic and endangered species (e.g. Batará and threatened species (e.g. Black-breasted Batará).

For each species, relative abundance was specified as follows:

A-Abundant, more than 10 records per day every day.

C-Common, 5 to 10 records every day.

F- Frequent, 5 records per day almost every day.

E-Scarce, 1 or 2 records per day almost every day; R-Rare, low numbers and not recorded every day.

As a result of the bird monitoring, a total of 155 bird species were recorded⁵⁴ (Three new species were identified (totaling 298 species for the property), which had not been recorded in previous years campaigns (Black Eagle *Buteogallus urubitinga*; Chimango, *Milvago chimango*; and Naranjero, *Rauneia bonariensis*).

As for wintering birds in the interior Atlantic rainforest of Misiones province, it was only possible to detect the presence and in large numbers of the Sky-headed Tanager (*Euphonia cyanocephala*).

Although the survey was initially intended for bird species, during the process, mammals could be observed by direct observation and footprints. During the walking tours along the roads of the trails of the property it was possible to directly observe some species of mammals and when puddles or muddy areas were checked, also others could be identified by the mammal's tracks left. In this way, the mammal species detected were Puma (*Puma concolor*), Ocelot (*Leopardus pardalis*), Southern tigrina (*Leopardus guttulus*), Bush fox (*Cerdocyon thous*), Aguará Popé (*Procyon cancrivorus*), Agutí (*Dasyprocta azarae*), Brazilian cottontail (*Sylvilagus brasiliensis*), Corzuela Colorada (*Mazama americana*) and Coatí (*Nasua nasua*).

Table 7. List of species identified during first monitoring period, with higher than "Near threatened"

IUCN category:

Species	IUCN category	Relative abundance*
Vinaceous-breasted Parrot (<i>Amazona vinacea</i>):	Endangered	7 individuals
Brazilian cottontail (<i>Sylvilagus brasiliensis</i>)	Endangered	Footprint found
Southern tiger cat (<i>Leopardus guttulus</i>)	Vulnerable	Footprint found
Rusty-margined Guan (<i>Penelope superciliaris</i>):	Near threatened	Scarce
Ornate hawk-eagle (<i>Spizaetus ornatus</i>)	Near threatened	Rare

⁵⁴ Complete list available in Aves Argentina survey report with list of species and relative abundance.

Rusty-barred owl (<i>Strix hylophila</i>)	Near threatened	Rare
Yellow-browed woodpecker (<i>Piculus aurulentus</i>)	Near threatened	Rare
Araucaria tit-spinetail (<i>Leptasthenura setaria</i>)	Near threatened	Common
Southern Bristle-Tyrant (<i>Phylloscartes eximius</i>)	Near threatened	Scarce
Bay-ringed tyrannulet (<i>Phylloscartes sylviolus</i>):	Near threatened	Scarce
Azure jay (<i>Cyanocorax caeruleus</i>)	Near threatened	Scarce
Creamy-bellied Gnatcatcher (<i>Poliophtila lactea</i>)	Near threatened	Scarce

From those vulnerable and endangered species identified as trigger species and initially identified and/ or expected, only one could be recorded in this survey:

- Yacutinga (*Pipile jacutinga*) EN
- Vinaceous-breasted Parrot (*Amazona vinacea*) EN – CONFIRMED (7 individuals observed flying, but no active nidification found)
- Helmeted woodpecker (*Celeus galeatus*) VU
- White-bearded Antshrike (*Biatas nigropictus*) VU
- Brown Howler Monkey (*Alouatta guariba*) VU (During the walks along the paths of the property, it was possible to identify in puddles or muddy areas these mammal tracks)

Although, at present, the GS1 Reserve has an avifauna in line with the inland Atlantic rainforest, populations of different bird species found in the Atlantic rainforest are diminished and in low numbers due to the long history of logging and illegal hunting on the property. Bird surveys maintained over time will increase the list of species on the property, assess how the populations of the different bird species are recovering and increase knowledge about the restoration of fauna in exploited areas.

Regarding flora monitoring, a forest inventory took place where flora species incidence is then estimated for the main strata (see table 9 in section 7 and detail on monitoring methodology in section 3.1.3). This can be later compared throughout the project's lifetime with the baseline analysis in line with the Management and Conservation Plan in place⁵⁵ (Figure 7). During this first monitoring period, biomass is seen to have increased in Scattered and Open Woody Areas. In time, modification in canopy structure (to be analyzed during the extended monitoring) will allow further analysis of the regeneration of the forest in the project area.

⁵⁵ Available to VVB in shared drive folder

	% de Participación Individuos Especie / Individuos Totales	% de Participación Carbono Especie / Carbono Total		% de Participación Individuos Especie / Individuos Totales	% de Participación Carbono Especie / Carbono Total
Especies	100,0%	100,0%	Especies	100,0%	100,0%
Laurel negro	5,45%	8,69%	Hovenia	0,55%	0,26%
Rabo Itá	3,87%	4,79%	Caroba	0,16%	0,25%
María Preta	2,78%	4,67%	Quina	0,30%	0,23%
Alecrín	0,85%	5,40%	Cerella	0,14%	0,22%
Guatambú	2,30%	3,21%	Limonero de Monte	1,29%	0,22%
Catigua	5,27%	3,08%	Cacheta	0,21%	0,21%
Liana	6,21%	3,04%	Pitinga	0,02%	0,20%
Isapuy	2,23%	3,03%	Inga	0,87%	0,20%
Guabirá	2,23%	2,91%	Fumo bravo	0,64%	0,19%
Loro Blanco	1,52%	2,65%	Cocon	0,09%	0,18%
Cedro	1,52%	2,61%	Samohú	0,28%	0,17%
Azota Caballo	1,61%	2,59%	Niño azoté	1,01%	0,16%
Persigero	2,62%	2,58%	Mora Blanca	0,32%	0,16%
Incienso	1,10%	2,21%	Palo de Agua	0,14%	0,15%
Camboata Colorado	2,26%	2,12%	Catiguá xx	0,28%	0,14%
Guayubira	0,76%	2,09%	Palo Amargo	0,18%	0,13%
Laurel Ayuí	1,06%	2,05%	Timbó	0,18%	0,12%
Ombú	0,44%	2,04%	Siete Capote	0,23%	0,12%
Laurel Amarillo	1,54%	1,98%	Esenbeckia	0,02%	0,12%
Ivirá oví	0,83%	1,63%	Ubajai	0,12%	0,11%
Blanquillo	2,81%	1,61%	Yacaratia	0,05%	0,10%
Pindó	2,03%	1,57%	Yerba Mate	0,23%	0,10%
Grapia	0,60%	1,45%	Zapallo Caspi	0,14%	0,10%
Vasuriña	1,22%	1,41%	Inga Guazú	0,09%	0,10%
Canela layana	0,53%	1,36%	Pitanga	0,12%	0,10%
Larangeira	10,20%	1,33%	Cutieira	0,62%	0,09%
Higuera	0,28%	1,28%	Rodilla de Viejo	0,78%	0,07%
Rabo Molle	0,92%	1,28%	Yuquerí	0,37%	0,07%
Aguay	2,19%	1,14%	Chirca	0,18%	0,07%
Anchico Colorado	0,76%	1,11%	Nandipá	0,28%	0,06%
Koku	2,00%	0,99%	Guazatumba	0,07%	0,06%
Isapuy Pará	0,81%	0,95%	Burro caá guazú	0,02%	0,05%
Camboata Blanco	0,97%	0,74%	Verduza	0,30%	0,05%
Caona	0,28%	0,72%	Cañafistola	0,02%	0,05%
Cancharana	0,81%	0,66%	Lapacho amarillo	0,02%	0,05%
Tarumá	0,23%	0,66%	Caa Guazu	0,07%	0,04%
Anchico Blanco	0,85%	0,65%	Sabugero	0,14%	0,04%
Guaicá	0,37%	0,65%	Pelotero	0,30%	0,04%
Marmelero	0,39%	0,61%	Yaboticaba	0,02%	0,03%
Timbo Blanco	0,28%	0,60%	Pata de buey	0,07%	0,03%
Guabiyu	0,48%	0,60%	Sapium	0,05%	0,02%
Lechero	1,96%	0,57%	Mandioca Brava	0,25%	0,02%
Tembetary	0,58%	0,57%	Araucaria	0,05%	0,02%
Carne de Vaca	0,44%	0,52%	MAMÓN DEL MONTE	0,02%	0,02%
Tala	1,15%	0,49%	Palo de capuera	0,30%	0,02%
Cangorosa	1,43%	0,46%	Burro caá	0,02%	0,01%
Loro Negro	0,39%	0,45%	Myrsine	0,16%	0,01%
Ortiga brava	1,98%	0,44%	Palo Pólvora	0,25%	0,01%
Espina Corona	0,23%	0,43%	Palo capuera 1	0,00%	0,01%
Quiebra Machado	0,71%	0,38%	Catiguá	0,09%	0,01%
Pororoca	0,60%	0,37%	Chachí Bravo	0,02%	0,01%
Araticú	0,87%	0,34%	Rapanea	0,05%	0,00%
Ivaporotí	0,62%	0,34%	Citronela	0,07%	0,00%
Guatambú Amarillo	0,32%	0,32%	Cedrillo	0,05%	0,00%
Espolón de gallo	0,69%	0,31%	Niño irupá	0,02%	0,00%
Seibo	0,25%	0,28%			

Figure 7: Distribution (%) by species over the total individuals measured in the forest inventory and participation in carbon totals by species

In terms of other stakeholders' impact monitoring, based on communications with PP Piñalito authorities, no increase in illegal activities has been identified for these monitoring periods since the start of the project activities. This has been explained due to an increase in surveillance in the areas.

5.3.2 Biodiversity Monitoring Plan Dissemination (B4.3)

Project information is available for the public through different means. During the monitoring process basic documents have been made, reporting results in a simple and inclusive language and with measures of evaluation of processes and results, they are available on the website, and have been reported in meetings with stakeholders during monitoring instances.

Free, Prior and Informed Consent with social impact assessment is a fundamental axis of the project. During this instance, surrounding communities were invited to the introduction of the project's main objectives, risks and benefits, with open instances to comment on it.

Documents are also available in Nideport's social network and shared during information meetings with stakeholders during monitoring instances. Moreover, the project's documentation (as well as local language summary) is available on VCS and CCB webpage.

Due to the problems of periodic intermittency of electricity service and, as a result, intermittency in 4G data connectivity and Wi-Fi, added to the presence in many cases of only one cell phone per family, lack of computers, lack of a digital and registry culture that discourages the approach by electronic means and use of ICT'S, we have relied on a strategy of proximity through face-to-face briefings. 2022 progress reports, PD and MR summary in local language, as well as other documents have been handed personally to different stakeholders (local authorities, president of the Deliberative Council communities in Paraje Alegria and Cruce Caballero, Tekoa Alecrin authorities, with evidence available for VVB during verification) and information has been uploaded to the webpage as well for other stakeholders.

5.4 Optional Criterion: Exceptional Biodiversity Benefits

5.4.1 Trigger Species Population Trends (GL3.3)

Trigger Species	Yacutinga (<i>Pipile jacutinga</i>) – Endangered at global level
With-project Scenario	For the conservation and recovery of the population on the property, first, logging has completely stopped since the start date of the project. Moreover, work is being done to reduce illegal hunting and poaching threats by merging efforts with rangers. The conservation of this and other endangered species that suffer from this problem depends on this action. At the same time, revegetation of banks of streams is part of the Forestry Regeneration Plan in place.
Trigger Species	Helmeted woodpecker (<i>Celeus galeatus</i>) – Vulnerable at global scale
With-project Scenario	For the conservation and recovery of the population on the property, first, logging has completely stopped since the start date of the project. The regeneration and reforestation with laurels and guatambú are part of the regeneration plan which is expected to lead to an increase in the populations of the species on the property.
Trigger Species	Vinaceous-breasted Parrot (<i>Amazona vinacea</i>) Endangered at global level
With-project Scenario	It is of vital importance that Araucaria angustifolia specimens are not removed, both for the conservation of this species and the Blue magpie. Due to the proximity to established populations of the species in the vicinity of Cruce Caballero, the property owned by Forestal Belga would appear to be a potential colonization area for the species, which would lead to an increase in the number of individuals at a global level. In this line, the Forest Regeneration Plan takes into consideration

	this recommendation and specimens will only be thinning.
Trigger Species	White-bearded Antshrike (<i>Biatas nigropectus</i>) Vulnerable at global level
With-project Scenario	For the conservation and recovery of the population on the property, logging has completely stopped since the start date of the project. On the other hand, the reproductive cycle of the reed was manifested during 2020 and 2021, and the status of the species is unknown. The recommendation of Aves Argentinas has been of applying no management of any kind in the areas covered by Yatevo reed in the coming years, in the hope that, with a favorable environment for the species, they will return.
Trigger Species	Southern tiger cat (<i>Leopardus guttulus</i>) - Vulnerable at global level
With-project Scenario	For the conservation and recovery of the population on the property, logging has completely stopped since the start date of the project. Moreover, work is being done to reduce illegal hunting and poaching threats by merging efforts with rangers. Last, the connectivity with other protected areas that is being achieved are expected to generate a prosperous environment for their reproduction.

6 ADDITIONAL PROJECT IMPLEMENTATION INFORMATION

Example of the key milestones follow up for monitoring the progress and execution of projects, by project. In this case for the FPIC with the Tekoa Alecrin community, focusing on the Óga project activity.

Table 8. FPIC with Tekoa Alecrin community Key milestones example

Free, Prior and Informed Consent at Tekoa Alecrín	
Date	Key milestones
Between December 2020 and February 2021	Previous research was carried out in meetings with the Council of Authorities of Tekoa Alecrín, as well as with any member of the community who wanted and could be part of them.
December, 2020	Two meetings were held. In the first meeting, introductions were made between members of the Nideport company and the Council of Authorities. In the second meeting the Nideport team was allowed to tour the village and meet the community members.

	
January 26, 2021	With the Council of Authorities and various members of the Alecrín community (2 adult women, 3 adult men, 5 young men, a girl and 3 or 4 boys) it is agreed to carry out a FPIC process in order to carry out a project/s that focus on issues that the Tekoa Alecrín considers to be of primary importance. 
February 22, 2021	The Council of Authorities is informed about the methodology of the FPIC and how to carry out the projects. Cacique Primero states that due to internal organization and tradition, the FPIC will not be carried out with all the members of the community, but that the Council of Authorities is empowered to speak on behalf of the whole Tekoa. We agreed with what was established by Cacique Primero. The diffusion of the FPIC as well as the methodology to carry out the projects, by decision of the Council of Authorities, is in the hands of the Council of Authorities, which will transmit the information through the sergeants and policemen. 
February 23, 2021	The Council of Authorities communicates what was established the previous day to the members of the community.

May 19, 2021	A housing improvement and construction project was agreed with the Council of Authorities, as this is considered the most urgent and necessary problem for the community. However, we proposed that the improvement and construction will not be carried out by Nideport, but that Nideport will provide the materials for the construction and will train the members of the community to carry out the improvements and the construction of the houses under a "guided self-construction" framework. On the other hand, it was agreed that a pilot test will be carried out with the improvement and construction of between 10 and 15 houses, under a scalable logic until 50 houses are completed. The Council of Authorities agreed with this point. Cacique Primero and the Council of Authorities expressed their agreement with everything but made explicit that the training they receive and the shape of the houses to be built must respect the culture and traditions of the Tekoa Alecrin. Point on which we agreed. On the other hand, the problem of feeding the community arises, since the community garden that they currently have does not always produce enough food for the whole community. Likewise, they have not been able to generate their own seed bank, which is aggravated by the fact that they do not always have the money to buy seeds for planting. 
June 3, 2021	In an assembly, the signing of the Act of Agreement took place between the Tekoa Alecrin and Nideport, where the community expressed its agreement with the FPIC procedure.
July 2021	Having analyzed the housing problem formulated by the Alecrin Community in the FPIC, Nideport decided not only to provide solutions to the housing problem with the construction of houses, but also to transmit to the community the knowledge to be able to build this type of housing on their own.
September 19, 2021	The members of Nideport presented a tentative housing model to the Authorities Council and the members of Tekoa Alecrin for them to review and ask if they agree with it or if it requires modifications. The Council of Authorities stipulated that the housing model is accepted by them, but that it is likely that the elders will ask for some modifications. These will be seen at the time of housing construction. Likewise, the Nideport team agreed with this proposal, and it was mentioned again that it is not only a question of providing the Tekoa Alecrin with housing, but also of transmitting to the community the knowledge to be able to build this type of housing on their own. The Council of Authorities agreed with this proposal. The cacique and the council of authorities undertook to transmit the housing model presented by Nideport so that the rest of the community could give their approval and propose modifications if they considered them necessary.

October 5, 2021	The cacique confirmed that the community agrees with the housing model presented, and as he had anticipated, there will be cases in which families will want bathrooms in their homes and others that do not. Nideport states that the Tekoa must begin to organize itself to determine the roles that the different members of the community will play in the project. The Nideport team conducted a census to determine the number of houses, the structural conditions and which families should be given priority for the construction of the first housing modules. The census was carried out in 24 houses out of 40 under the "random cluster method". It was possible to determine the precarious conditions of the houses, the risk of fire, problems of overcrowding, lack of adequate ventilation, water seepage, etc.
November 24, 2021	• Tekoa members were shown flip charts with the agreed projects, clarifying that it is expected to be able to start with them in March-April 2022. • A workshop was held to determine Tekoa's HCVs. • A gender workshop was held with 8 participants of different ages: using a "focus group" methodology. This focused on the needs of women based on a series of trigger questions that considered: 1. Their opinion on the proposed projects. 2. Their interest in being trained in housing construction. 3. Their interest in training to improve their knowledge of crop cultivation. 4. Needs that they indicated as being specific to women. 
November 24, 2021	Nideport presented the "Oga" and "Huerta Comunitaria" projects on paper to the community, to check that everything agreed between Tekoa and Nideport is included and to explain how both projects will be developed, with the start scheduled for March-April 2022. We also informed them that the initial budget for the Oga project will be \$10,000,000 pesos (first 10 housing modules) and that of the Huerta Comunitaria project will be \$1,500,000 pesos.
December 13, 2021	Intrusion into the Tekoa Alecrin territory in which trees were cut down (affecting the HCV firewood).
December 14, 2021	Nideport begins to intervene / mediate so that the Tekoa Alecrin can have guaranteed tenure of their land, and thus avoid intrusions.
February 22, 2022 February 23, 2022	A meeting was held in which the book provided was returned and a community representative was appointed for the Oga project.
February 23, 2022	The Nideport team met with Marcelo Gutiérrez of the Arcoíris LTDA Cooperative, who gave a report with a series of questions for the construction of the first

	houses. 
April 26, 2022	The Nideport team met with El Cacique 1ro, El Cacique 2do, Bernabé Benitez (responsible for the community in front of the Oga project) and a member of Tekoa Alecrín; and with Marcelo Gutiérrez of the Arco Iris LTDA Cooperative. First, the members of Tekoa Alecrín raised 2 questions about the housing, discussed in an assembly of Tekoa Alecrín, namely: A. They reiterated that each family should be given the possibility to choose whether they want a chimney or not in their homes. Nideport members and Marcelo Gutiérrez agreed but suggested that the best option is the one that contemplates the chimney. B. They reiterated that each family should be given the possibility of choosing whether they want a dry toilet. On the other hand, the 1st Cacique provided the NIDEPORT team with a copy of the minutes of the "Assembly of all the members of the Alecrín Aboriginal Community on the ratification of the continuity of the Cacique and Renewal of Legal Representatives of March 5, 2021" and the minutes of "Registration in the Registry of Communities of the Alecrín Community, recognized by provision No. 05/2003 of the registry of the Directorate of Guaraní Affairs, under registration No. C.I. 064 of the respective book". Finally, the NIDEPORT team presented to the members of Tekoa Alecrín a proposal for an Inclusive Job Training for Bernabé Benitez, which aims to "develop training actions, more precisely, a Temporary Inclusive Job Training activity to generate opportunities for social inclusion and enhance the capabilities of people". The training will work on the following modules: A. Wood selection. B. Wood Estivation. C. Wood analysis. D. Cutting Practices. E. Wood maintenance plan. The modality of the training will be 3 times per week (Monday, Wednesday and Friday), 4 hours per day (in the morning). The 1st Cacique tells us that he will inform the members of the Tekoa at their next assembly that their suggestions have been heard and answered, that the choice will depend on each family; and about the proposal of the inclusive job training for Bernabé.
August 25, 2022	The Nideport team met in Tekoa with the Council of Authorities, members of the Community and Marcelo Gutierrez from Coop. Arco Iris LTDA. To discuss the

progress of the Oga project. The families that will receive the first 2 housing modules are selected, according to equity criteria, delivering them to the most vulnerable families. Also, the method of construction by panels of the housing modules is explained.

7 ADDITIONAL PROJECT IMPACT INFORMATION

Distribución Porcentual de Especies del Total de Individuos Medidos en el Inventario							
PARCELA B	PORCENTAJE	PARCELA B	PORCENTAJE	PARCELA B	PORCENTAJE	PARCELA B	PORCENTAJE
ESPECIE		ESPECIE		ESPECIE		ESPECIE	
Larangeira	11,62%	Espolón de gallo	1,29%	Guabiyu	0,43%	Tarumá	0,18%
Catigua	10,64%	Quiebra Machado	1,29%	Ivaporoití	0,43%	Timbo Blanco	0,18%
Liana	7,32%	Araticú	1,05%	Mandioca Brava	0,43%	Yerba Mate	0,18%
Laurel negro	5,72%	Fumo bravo	0,98%	Caona	0,37%	Alecrín	0,12%
Ortiga brava	4,74%	Verduza	0,98%	Loro Blanco	0,37%	Araucaria	0,12%
Cangorosa	3,63%	Cedro	0,92%	Pororoca	0,37%	Carne de Vaca	0,12%
Persigüero	3,57%	Hovenia	0,92%	Cutieira	0,31%	Cerella	0,12%
Lechero	3,26%	Laurel Amarillo	0,92%	Laurel Ayuí	0,31%	Grapia	0,12%
Blanquillo	2,58%	Incienso	0,86%	Marmelero	0,31%	Guatambú Amarillo	0,12%
Rabo Itá	2,58%	Aguay	0,80%	Quina	0,31%	Mora Blanca	0,12%
Guatambú	2,21%	Isapuy	0,80%	Anchico Blanco	0,25%	Palo de Agua	0,12%
Vasuriña	2,09%	Cancharana	0,74%	Guaicá	0,25%	Sabugüero	0,12%
Camboata Colorado	1,91%	Guayubira	0,74%	Higuera	0,25%	Yuquerí	0,12%
Niño azoté	1,91%	Inga	0,74%	Loro Negro	0,25%	Camboata Blanco	0,06%
Tala	1,91%	Cacheta	0,68%	Ombú	0,25%	Cedrillo	0,06%
Guabirá	1,78%	Tembetary	0,68%	Palo Amargo	0,25%	Chirca	0,06%
Cocon	1,41%	Anchico Colorado	0,62%	Palo Pólvora	0,25%	Colita	0,06%
Koku	1,41%	Limonero de Monte	0,62%	Siete Capote	0,25%	Espina Corona	0,06%
María Preta	1,41%	Isapuy Pará	0,55%	Pata de buey	0,18%	Palo de capuera	0,06%
Pindó	1,41%	Ivirá ovi	0,49%	Rabo Molle	0,18%	Yacaratia	0,06%
Inga Guazú	1,35%	Azota Caballo	0,43%	Seibo	0,18%	Yuquerí guazú	0,06%

Figure 8. Distribution (%) by species over the total individuals measured in the forest inventory (baseline).

Nombre Inglés	Nombre científico	2022			
Brown Tinamou	<i>Crypturellus obsoletus</i>	S	Yellow-headed Caracara	<i>Milvago chimachima</i>	S
Small-billed Tinamou	<i>Crypturellus parvirostris</i>	R	Chimango Caracara	<i>Milvago chimango</i>	R
Tataupa Tinamou	<i>Crypturellus tataupa</i>	S	American Kestrel	<i>Falco sparverius</i>	S
Brazilian Teal	<i>Amazonetta brasiliensis</i>	R	Monk Parakeet	<i>Myiopsitta monachus</i>	S
Rusty-margined Guan	<i>Penelope supercilialis</i>	S	Pileated Parrot	<i>Pionopsitta pileata</i>	F
Spot-winged Wood-Quail	<i>Odontophorus capueira</i>	S	Scaly-headed Parrot	<i>Pionus maximiliani</i>	C
Picazuro Pigeon	<i>Patagioenas picazura</i>	C	Vinaceous-breasted Parrot	<i>Amazona vinacea</i>	7 ind
Ruddy Quail-Dove	<i>Geotrygon montana</i>	R	Maroon-bellied Parakeet	<i>Pyrrhura frontalis</i>	C
White-tipped Dove	<i>Leptotila verreauxi</i>	C	White-eyed Parakeet	<i>Psittacara leucophthalmus</i>	14 ind
Gray-fronted Dove	<i>Leptotila rufaxilla</i>	S	Spot-backed Antshrike	<i>Hypodaedalus guttatus</i>	S
Eared Dove	<i>Zenaida auriculata</i>	F	Giant Antshrike	<i>Batara cinerea</i>	R
Guira Cuckoo	<i>Guira guira</i>	S	Large-tailed Antshrike	<i>Mackenziaena leachii</i>	R
Smooth-billed Ani	<i>Crotophaga ani</i>	S	Tufted Antshrike	<i>Mackenziaena severa</i>	S
Squirrel Cuckoo	<i>Piaya cayana</i>	S	Variable Antshrike	<i>Thamnophilus caerulescens</i>	F
Common Pauraque	<i>Nyctidromus albigollis</i>	S	Plain Antvireo	<i>Dysithamnus mentalis</i>	F
Gray-rumped Swift	<i>Chaetura cinereiventris</i>	F	Rufous-margined Antwren	<i>Herpsilochmus rufimarginatus</i>	S
Scale-throated Hermit	<i>Phaethornis eurynome</i>	S	Bertoni's Antbird	<i>Drymophila rubricollis</i>	F
Glittering-bellied Emerald	<i>Chlorostilbon lucidus</i>	R	Dusky-tailed Antbird	<i>Drymophila malura</i>	F
Purple-crowned Plovercrest	<i>Stephanoxis loddigesii</i>	S	White-shouldered Fire-eye	<i>Pyriglena leucoptera</i>	S
White-throated Hummingbird	<i>Leucochloris albigollis</i>	F	Rufous Gnateater	<i>Conopophaga lineata</i>	C
Slaty-breasted Wood-Rail	<i>Aramides saracura</i>	S	Variegated Antpitta	<i>Grallaria varia</i>	S
Southern Lapwing	<i>Vanellus chilensis</i>	C	Speckle-breasted Antpitta	<i>Cryptopezus nattereri</i>	S
Whistling Heron	<i>Syrigma sibilatrix</i>	R	Planalto Tapaculo	<i>Scytalopus pachecoi</i>	R
King Vulture	<i>Sarcoramphus papa</i>	R	Short-tailed Antthrush	<i>Chamaeza campanisona</i>	R
King Vulture	<i>Coragyps atratus</i>	A	Rufous-breasted Leaftosser	<i>Sclerurus scansor</i>	R
Turkey Vulture	<i>Cathartes aura</i>	F	Olivaceous Woodcreeper	<i>Sittasomus griseicapillus</i>	A
Ornate Hawk-Eagle	<i>Spizaetus ornatus</i>	R			

Sepia-capped Flycatcher	<i>Leptopogon amaurocephalus</i>	S
Yellow-olive Flycatcher	<i>Tolmomyias sulphureus</i>	F
Eared Pygmy-Tyrant	<i>Myiornis auricularis</i>	F
Drab-breasted Pygmy-Tyrant	<i>Hemitriccus diops</i>	S
Ochre-faced Tody-Flycatcher	<i>Poecilatriccus plumbeiceps</i>	F
Southern Beardless-Tyrannulet	<i>Camptostoma obsoletum</i>	F
Gray Elaenia	<i>Myiopagis caniceps</i>	S
Yellow Tyrannulet	<i>Capsiempis flaveola</i>	C
Rough-legged Tyrannulet	<i>Phyllomyias burmeisteri</i>	R
Greenish Tyrannulet	<i>Phyllomyias virescens</i>	C
White-crested Tyrannulet	<i>Serpophaga subcristata</i>	R
Great Kiskadee	<i>Pitangus sulphuratus</i>	F
Cattle Tyrant	<i>Machetornis rixosa</i>	F
Social Flycatcher	<i>Myiozetetes similis</i>	R
Sibilant Sirystes	<i>Sirystes sibilator</i>	F
Long-tailed Tyrant	<i>Colonia colonus</i>	R
Rufous-browed Peppershrike	<i>Cyclarhis gujanensis</i>	C
Rufous-browed Peppershrike	<i>Cyclarhis gujanensis</i>	C
Rufous-crowned Greenlet	<i>Hylophilus poicilotis</i>	S
Azure Jay	<i>Cyanocorax caeruleus</i>	
Plush-crested Jay	<i>Cyanocorax chrysops</i>	C
Masked Gnatcatcher	<i>Troglodytes aedon</i>	C
Creamy-bellied Gnatcatcher	<i>Poliophtila lactea</i>	S
Pale-breasted Thrush	<i>Turdus leucomelas</i>	F
White-necked Thrush	<i>Turdus albicollis</i>	S
Rufous-bellied Thrush	<i>Turdus rufiventris</i>	C

Figure 9. Relative abundance of all bird species identified during monitoring campaign of July 2022

Wood density of timber species extracted in the baseline scenario.

Weighted Average: 0,70

Common Name	Scientific Name	Account	Density
Aguay	<i>Chrysophyllum gonocarpum</i>	95	0,80
Anchico Colorado	<i>Parapiptadenia rigida</i>	70	0,95
Azota Caballo	<i>Luehea divaricata</i>	123	0,62
Cacheta	<i>Schefflera morototoni</i>	23	0,68
Camboata Colorado	<i>Cupania vernalis</i>	182	0,85
Cancharana	<i>Cabralea canjerana</i>	62	0,67
Cañafistola	<i>Peltophorum dubium</i>	1	0,90
Carne de Vaca	<i>Styrax leprosus</i>	40	0,39
Caroba	<i>Jacarandá micrantha</i>	11	0,55
Cedro	<i>Cedrela fissilis</i>	150	0,53
Cocon	<i>Cocon</i>	27	0,68
Espina Corona	<i>Gleditsia amorphoides</i>	17	0,87
Grapia	<i>Apuleia leiocarpa</i>	42	0,83
Guatambú	<i>Balfourodendron riedelianum</i>	179	0,84
Guaycá	<i>Ocotea puberula</i>	38	0,47
Guayubira	<i>Patagonula americana</i>	80	0,78
Incienso	<i>Myrocarpus frondosus</i>	82	0,84
Ivirá oví / Canela de Venado*	<i>Helietta apiculata</i>	75	0,87
Lapacho amarillo	<i>Tabebuia alba</i>	1	0,98
Laurel Amarillo	<i>Nectranda lanceolata</i>	111	0,53
Laurel Ayuí	<i>Ocotea diospyrifolia</i>	84	0,63
Laurel negro	<i>Nectranda megapotamica</i>	573	0,56
Loro Blanco	<i>Bastardiopsis densiflora</i>	119	0,70
Loro Negro	<i>Cordia trichotoma</i>	29	0,60
Marmelero	<i>Ruprechtia laxiflora</i>	35	0,75
Mora Blanca	<i>Alchornea iricurana</i>	20	0,40
Persiguero	<i>Prunus subcoriacea</i>	234	0,76
Quina / Kina**	<i>Rawolfia sellowii</i>	28	0,68

Rabo Itá	<i>Lonchocarpus leucanthus</i>	287	0,89
Rabo Molle	<i>Lonchocarpus muehlbergianus</i>	45	0,72
Sabuguero	<i>Pentapanax warmingiana</i>	8	0,47
Tembetary / Mamica *	<i>Fagara naranjillo</i>	54	0,78
Timbó	<i>Enterolobium contortisiliquum</i>	13	0,42
TOTAL		2.938	
Weighted Average Density			0,70

Wood density of all species monitored in the monitoring period.

Weighted Average: 0,71

Common Name	Scientific Name	Account	Density
Aguary	<i>Chrysophyllum gonocarpum</i>	95	0,80
Alecrín	<i>Holocalyx balansae</i>	74	1,05
Anchico Blanco	<i>Albizia edwallii</i>	47	0,62
Anchico Colorado	<i>Parapiptadenia rigida</i>	70	0,95
Araticú	<i>Rollinia rugulosa</i>	55	0,59
Araucaria	<i>Araucaria angustifolia</i>	5	0,50
Azota Caballo	<i>Luehea divaricata</i>	123	0,62
Blanquillo	<i>Sebastiania commersoniana</i>	233	0,55
Burro caá	<i>Casearia sylvestris</i>	1	0,68
Burro caá guazú	<i>Roupala cataractarum</i>	4	0,68
Caa Guazu	<i>Roupala brasiliensis</i>	5	0,68
Cacheta	<i>Schefflera morototoni</i>	23	0,68
Camboata Blanco	<i>Matayba eleagnoides</i>	41	0,74
Camboata Colorado	<i>Cupania vernalis</i>	182	0,85
Cancharana	<i>Cabralea canjerana</i>	62	0,67
Canela layana	<i>Ocotea pulchella</i>	70	0,63
Cangorosa	<i>Maytenus ilicifolia</i>	89	0,68
Cañafistola	<i>Peltophorum dubium</i>	1	0,90
Caona	<i>Ilex brevicuspis</i>	21	0,69

Carne de Vaca	<i>Styrax leprosus</i>	40	0,39
Caroba	<i>Jacarandá micrantha</i>	11	0,55
Catigua	<i>Trichilia catiguá</i>	406	0,88
Catiguá xx	<i>Trichilla claussoni</i>	11	0,88
Cedrillo	<i>Guarea pohlii</i>	4	0,57
Cedro	<i>Cedrela fissilis</i>	150	0,53
Cerella	<i>Eugenia involucrata</i>	9	0,94
Chachí Bravo	<i>Alsophila setosa</i>	1	0,71
Chichita	<i>Shinus terebentifolius</i>	90	0,71
Chirca	<i>Cupania vernalis</i>	15	0,70
Citronela	<i>Citronela paniculata</i>	1	0,71
Cocon	<i>Cocon</i>	27	0,68
Colita	<i>Cordia ecalyculata</i>	1	0,68
Cutieira	<i>Pilocarpus pennatifolius</i>	16	1,03
Esenbeckia	<i>Esenbeckia febrifuga</i>	2	0,68
Espina Corona	<i>Gleditsia amorphoides</i>	17	0,87
Espolón de gallo	<i>Strychnos brasiliensis</i>	57	0,82
Fumo bravo	<i>Solanum granuloso leprosum</i>	75	0,39
Grapia	<i>Apuleia leiocarpa</i>	42	0,83
Guabirá	<i>Campomanesia xanthocarpa</i>	161	0,86
Guabiyu	<i>Myrciantes pungens</i>	52	0,68
Guatambú	<i>Balfourodendron riedelianum</i>	179	0,84
Guatambú Amarillo	<i>Aspidosperma australe</i>	25	0,73
Guaycá	<i>Ocotea puberula</i>	38	0,47
Guayubira	<i>Patagonula americana</i>	80	0,78
Guazatumba	<i>Casearia decandra</i>	3	0,69
Higuera	<i>Ficus luschnathiana</i>	18	0,68
Hovenia	<i>Hovenia dulcis</i>	48	0,68
Incienso	<i>Myrocarpus frondosus</i>	82	0,84
Inga	<i>Ingá marginata</i>	35	0,73

Inga Guazú	<i>Ingá uruguensis</i>	28	0,73
Isapuy	<i>Machaerium stipitatum</i>	156	0,84
Isapuy Pará	<i>Machaerium paraguariensis</i>	56	0,69
Ivaporoití	<i>Plinia rivularis</i>	40	0,68
Ivirá oví	<i>Helietta apiculata</i>	75	0,87
Koku	<i>Allophyllus edulis</i>	124	0,60
Lapacho amarillo	<i>Tabebuia alba</i>	1	0,98
Lapacho negro	<i>Tabebuia heptaphylla</i>	1	0,98
Larangeira	<i>Actinostemon concolor</i>	410	0,68
Laurel Amarillo	<i>Nectranda lanceolata</i>	111	0,53
Laurel Ayuí	<i>Ocotea diospyrifolia</i>	84	0,63
Laurel negro	<i>Nectranda megapotamica</i>	573	0,56
Lechero	<i>Sebastiania brasiliensis</i>	151	0,55
Liana	<i>Liana spp</i>	262	0,68
Limonero de Monte	<i>Segueira aculeata</i>	39	0,68
Loro Blanco	<i>Bastardiopsis densiflora</i>	119	0,70
Loro Negro	<i>Cordia trichotoma</i>	29	0,60
Mamon del monte	<i>Mamon del monte</i>	1	0,68
Mandioca Brava	<i>Manihot grahamii</i>	15	0,68
María Preta	<i>Diatenopteryx sorbifolia</i>	254	0,96
Marmelero	<i>Ruprechtia laxiflora</i>	35	0,75
Miconia	<i>Miconia pusilliflora</i>	1	0,68
Mora Blanca	<i>Alchornea iricurana</i>	20	0,40
Niño azoté	<i>Calliandra foliolosa</i>	55	0,68
Ñandipá	<i>Sorocea bonplandii</i>	5	0,88
Ombú	<i>Phytolacca dioica</i>	42	0,68
Ortiga brava	<i>Urera baccifera</i>	152	0,68
Palo Amargo	<i>Picrasma crenata</i>	18	0,68
Palo de Agua	<i>Dracaena fragrans</i>	25	0,68

Palo de capuera	<i>Cestrum laevigatum</i>	7	0,68
Palo Pólvara	<i>Trema micrhanta</i>	23	0,41
Pata de buey	<i>Bauhinia forticata</i>	4	0,64
Persiguero	<i>Prunus subcoriacea</i>	234	0,76
Pindó	<i>Arecastrum romanzoffianum</i>	165	0,68
Pitanga	<i>Eugenia uniflora</i>	4	0,71
Pitinga	<i>Chusquea tenella</i>	1	0,71
Pororoca	<i>Rapanea gardneriana</i>	23	0,68
Quiebra Machado	<i>Achatocarpus praecox</i>	62	0,68
Quina	<i>Rawolfia sellowii</i>	28	0,68
Rabo Itá	<i>Lonchocarpus leucanthus</i>	287	0,89
Rabo Molle	<i>Lonchocarpus muehlbergianus</i>	45	0,72
Rodilla de Viejo	<i>Piper brasiliensis</i>	6	0,71
Sabugero	<i>Pentapanax warmingiana</i>	8	0,47
Samohú	<i>Chorisia speciosa</i>	20	0,26
Sapium	<i>Sapium glandulatum</i>	2	0,39
Seibo	<i>Erythrina falcata</i>	21	0,24
Siete Capote	<i>Campomanesia guazumifolia</i>	12	0,88
Tala	<i>Celtis iguanaea</i>	93	0,67
Tarumá	<i>Vitex megapotamica</i>	29	0,71
Tembetary	<i>Fagara naranjillo</i>	54	0,78
Timbó	<i>Enterolobium contortisiliquum</i>	13	0,42
Timbo Blanco	<i>Ateleia glazioviana</i>	41	0,42
Ubajai	<i>Eugenia pyriformis</i>	4	0,75
Vasuriña	<i>Chrysophyllum marginatum</i>	130	0,79
Verduza	<i>Seguiera aculeata</i>	28	0,68
Yaboticaba	<i>Plinia cauliflora</i>	2	0,68
Yacaratia	<i>Jacaratia spinosa</i>	4	0,68

Yerba Mate	<i>Ilex paraguariensis</i>	16	0,68
Yuquerí	<i>Yuquerí</i>	8	0,68
Yuquerí guazú	<i>Acacia tucumanensis</i>	1	0,80
Zapallo Caspi	<i>Celtis iguanaea</i>	6	0,67
TOTAL		7160	
Weighted average density			0,71

8 APPENDICES

Appendix 1: Project Risks Table

Identify Risk	Potential impact of risk on climate, community and/or biodiversity benefits	Actions needed to mitigate the risk
Extreme storms and precipitations	Tree individuals' loss, access to area could be difficult, projects with communities could be delayed	Early warnings and replacement of individuals in large, affected areas; keep fluent communication with communities and update on project's deadlines
Natural and intentional fires	Loss of biodiversity and infrastructure	24/7 monitoring to provide quick response and avoid large areas affected. Training and equipment delivered for firefighters and rangers to prevent and mitigate effects.
Extreme wind events	Trees fell in large areas; damage to monitoring infrastructure.	Early warnings and replacement of individuals in large, affected areas as well as equipment damaged.
Low establishment levels	Reduction in carbon sequestration	Regeneration plan and monitoring actions in place to replace individuals not established.
Illegal encroachment and illegal hunting	Biodiversity loss due to direct illegal hunting or habitat loss.	24/7 monitoring to provide quick response and mitigate fauna and flora affected; community social and productive projects; job generation and training for neighboring communities.
No agreement reached among stakeholders on community projects	Change in benefits achieved and stakeholders engaged	Periodic meetings, understand cultural characteristics of communities and needs.

Appendix 2: Methodological notes and tables for measuring the project's social impact

Methodological notes and tables for measuring the project's social impact

To measure the social and environmental impact of our native forest restoration project, we use a thorough methodology aligned with internationally established standards such as the Verified Carbon Standard (VCS) and the Climate, Community and Biodiversity (CCB) Standards.

This approach ensures that our impact assessments are rigorous and credible. We employ a combination of quantitative and qualitative data collection methods.

With respect to social impact, quantitative data is collected through satisfaction surveys of project beneficiaries and through official statistics at local, provincial and national levels. Additional surveys of the local population are also conducted when official data are lacking.

Qualitative data is obtained from interviews and focus groups with local communities and other stakeholders. We also conduct in-depth interviews with different key players in the local population (educational leaders, religious leaders, indigenous community leaders, local mayor, etc.). This approach allows us to gain an in-depth understanding of how our projects affect the community, identify their needs and concerns, and ensure that our efforts are in line with their expectations and contribute positively to their well-being and the development of the local communities.

In this section we briefly present the methodological tools for measuring the social impact of the company's activities on the populations adjacent to the native forest regeneration and carbon credit certification project.

These tools allow us to draw the baselines of the project, measure the progress of the different activities and, according to what we want to measure (nominal measurement, ordinal measurement or quantitative measurement), use one or the other.

On the other hand, these tools allow the construction of measurement strategies with multiple variables that enable the systematization and quantitative simplification of a complex network of factors and different dimensions of each of the projects and activities promoted by the company in the local communities.

Finally, through these tools, new variables can also be incorporated to account for the growth and complexity of the activities to be measured, without losing the comparative capacity with the data constructed in the initial baseline.

Nominal Dichotomous Measurement

(disjunctive syllogism)

The disjunctive syllogism is a form of logical reasoning of a proposition that presents two or more alternatives of which at least one is true. So, "If or If" in disjunctive reasoning is "A or B" ($P \vee Q$). Therefore, it cannot be A or B at the same time, otherwise it would incur a logical fallacy. Thus if $\sim P$ (Not P) then it is either If or If Q.

General formula:

$P \vee Q$

$\sim P \quad Q$

In the nominal measurement indicators for project monitoring, we present only two options: "yes" or "no", which refer to "there is" or "there is not" a certain infrastructure; "a certain planned activity was done" or "was not done". As more projects are implemented more mutually exclusive variables can be incorporated, e.g. "was done"; "in process" or "not done".

Example:

"Was done" (P) 'or' (V) 'Was not done' (Q).

Not done (~ P)

Then "Not done" (Q)

Quantity measurement

This is a basic scale for placing a unit within a category or segment.

General formula:

X and $\leq X$ (X pts. = Very High).

$X \leq X \leq X \leq X$ (X pts. = High)

$X \leq X \leq X$ (X pts. = Medium)

$X \leq X \leq X \leq X$ (1 pts. = Low)

0 (0 pts. = Very Low)

A simple example could be the measurement of the impact on the productive capacity and quality of vinegar production from the equipment acquired for the production of the Nueva Esperanza Cooperative through the "Women Growers" Project promoted by Nideport: according to the rating given by each member of the cooperative this impact will be placed in the following ranking.

Between 9 and 10 = very important

Between 7 and 8 = important

Between 4 and 6 = regular

Between 1 and 3 = not very important

0 = very unimportant

The X within the parentheses allows not only to place a unit in a given category or segment, but also to weight it within each category or segment.

Following the previous example:

Between 9 and 10 = very important (5 pts).

Between 7 and 8 = important (4 pts)

Between 4 and 6 = regular (3 pts)

Between 1 and 3 = not very important (2 pts)

0 = very unimportant (1 pt)

Scoring the unit for being in a category allows us to later put together an index to measure a complex process, with multiple variables; therefore, it is very useful for locating and cataloguing production quantities of different goods or services.

For example, in the Mujeres Cultivadoras project, it allows adding up the production of different types of vinegars and/or liquors produced in the cooperative.

Ordinal Measurement

(Lasker Scale)

The Lasker scale is used to place a unit within a “ruler”, where the units obtain a different degree of weighting and in which a value can be attributed to each category for subsequent measurement. This tool is very useful for measuring the satisfaction levels of the direct beneficiaries of the projects or activities promoted by the company.

General formula:

$(X) \vee (\leq X) \vee (\leq X) \vee (\leq X)$.

The simplest example is:

- Not at all satisfied
- Not satisfied
- Satisfied
- Quite satisfied
- Very satisfied

Table: Community monitoring plan for the first monitoring period

Community Group: women				
Change in Well-being 1				
I: Change in Well-being	II: Impacts on Well-Being	III: Impact indicators in Well-being	IV: Type of measurement of Well-being impact indicator	V: Impact measurement logic in Well-being
1. Substantive participation of women in decision making.	1. Generation of spaces for deliberation and decision making with a gender perspective.	1. Existence of spaces for deliberation and decision making with a gender perspective.	1. Nominal measurement (yes-no)	Nominal dichotomous measurement disjunctive syllogism $\begin{matrix} P \vee Q \\ \sim P \\ Q \end{matrix}$
VI: Projects that make Well-being improvements a reality	VII: Long-term benefit variables by project affecting community group Well-being improvement variables.	VIII: Short/medium term variables per project, acting on long term variables per project, affecting community group Well-being improvement variables	IX: Indicators of short/medium term variables by project	X: Impact monitoring indicators (climate change adaptation benefits)
Participative carbon	- Women participating in participatory carbon - Women's decision making in participatory carbon - Projects with a gender perspective	- Women participating in participatory carbon forums - Effective participatory carbon meetings with the participation of women in which they have made decisions. - Prioritized projects with a gender focus	- Number of women participating in the participatory carbon forums - Number of effective participatory carbon meetings with the participation of women in which decisions have been made. - Number of prioritized projects with a gender approach.	—

XI: Impact monitoring indicators (exceptional community benefits)	XII: Type of measurement of the project variables indicator	XIII: Formal logic of measurement of project variables	XIV: Data collection instrument for project indicators and Well-being impact indicators in Comuniratio group	XV: Sampling for projects and for community group Well-being impacts
1. Number of women participating in the participatory carbon forums 2. Number of effective participatory carbon meetings with the participation of women in which decisions have been made. 3. Number of prioritized projects with a gender approach.	1. Quantity measurement. 2. Quantity measurement 3. Quantity measurement.	Quantity measurement X and $\leq X$ (X pts. = Very High) $X \leq X \leq X \leq X$ (X pts. = High) $X \leq X \leq X$ (X pts. = Medium) $X \leq X \leq X \leq X$ (1 pts. = Low) 0 (0 pts. = Very Low)	Interview surveys, filling out a survey form	All women participating in the participatory carbon forums
XVI: Monitoring strategy for projects and for community group well-being impacts	VII: Monitoring methodology for projects and for community group well-being impacts	XVIII: Monitoring frequency for project variables for projects and for community group well-being impacts		
Participatory management evaluation among the community, EPET N° 31 de Cruce Caballero, EP N° 482 of Cruce Caballero & and its cooperative, and Recreative, Sports and Cultural Committee of Cruce Caballero. Satisfaction survey. Management evaluation with control group.	Management evaluation reports	Annual monitoring		

Monitoring table with values				
Community Group: women				
Change in Well-being 1				
I: Change in Well-being	II: Impacts on Well-Being	III: Impact indicators in Well-being	IV: Type of measurement of Well-being impact indicator	V: Impact measurement logic in Well-being
1. Yes	1. Yes	1. Yes	1 Nominal measurement (yes-no)	Nominal dichotomous measurement disjunctive syllogism $P \vee Q$ $\sim P$ Q
VI: Projects that make Well-being improvements a reality	VII: Long-term benefit variables by project affecting community group Well-being improvement variables.	VIII: Short/medium term variables per project, acting on long term variables per project, affecting	IX: Indicators of short/medium term variables by project	X: Impact monitoring indicators (climate change)

		community group Well-being improvement variables		adaptation benefits)
Participative carbon	1. Women participating in participatory carbon 2. Women's decision making in participatory carbon 3. Projects with a gender perspective	1. Women participating in participatory carbon forums 2. Effective participatory carbon meetings with the participation of women in which they have made decisions. 3. Prioritized projects with a gender focus	1. Number of women participating in the participatory carbon forums 2. Number of effective participatory carbon meetings with the participation of women in which decisions have been made. 3. Number of prioritized projects with a gender approach.	—
XI: Impact monitoring indicators (exceptional community benefits)	XII: Type of measurement of the project variables indicator	XIII: Formal logic of measurement of project variables	XIV: Data collection instrument for project indicators and Well-being impact indicators in comuniratio group	XV: Sampling for projects and for community group Well-being impacts
1. Number of women participating in the participatory carbon forums 2. Number of effective participatory carbon meetings with the participation of women in which decisions have been made. 3. Number of prioritized projects with a gender approach.	1. Quantity measurement. 2. Quantity measurement 3. Quantity measurement.	Quantity measurement X and ≤ X (X pts. = Very High) X ≤ X ≤ X ≤ X (X pts. = High) X ≤ X ≤ X (X pts. = Medium) X ≤ X ≤ X ≤ X (1 pts. = Low) 0 (0 pts. = Very Low)	Interview surveys, filling out a survey form	All women participating in the participatory carbon forums
XVI: Monitoring strategy for projects and for community group well-being impacts	VII: Monitoring methodology for projects and for community group well-being impacts	XVIII: Monitoring frequency for project variables for projects and for community group well-being impacts		
Participatory management evaluation among the community, EPET N° 31 de Cruce Caballero, EP N° 482 of Cruce Caballero & and its cooperative, and Recreative, Sports and Cultural Committee of Cruce Caballero. Satisfaction survey. Management evaluation with control group.	Management evaluation reports	Annual monitoring		

Community Group: women
Change in Well-being 2

I: Change in Well-being	II: Impacts on Well-Being	III: Impact indicators in Well-being	IV: Type of measurement of Well-being impact indicator	V: Impact measurement logic in Well-being
2. Provide women with the opportunity to provide economically for the family, or for their own family in a formal job with good working conditions, avoiding overload of domestic and care tasks.	2. Generation of equal employment opportunities	1 Existence of equal employment opportunities	1 Nominal measurement (yes-no)	nominal dichotomous measurement disjunctive syllogism $P \vee Q$ $\sim P$ Q
VI: Projects that make Well-being improvements a reality	VII: Long-term benefit variables by project affecting community group Well-being improvement variables.	VIII: Short/medium term variables per project, acting on long term variables per project, affecting community group Well-being improvement variables	IX: Indicators of short/medium term variables by project	X: Impact monitoring indicators (climate change adaptation benefits)
Employment and training at SPVN GS1	1. Creation of new jobs that improve family income 2. Equal employment opportunities 3. Substantive participation in the management and direction of the project. 4. Training dimension	1. Provide employment to women from the project boundary to work in SPVN GS1 . 2. Women hired out of the total number of people hired 3. Decision-making positions occupied by women out of the total number of decision making positions. 4. Training dimension: A Trainings on gender perspective to hired women B Training on soft and hard skills.	1. Number of jobs provided to women from project boundary to work in SPVN GS1 2. Percentage of number of women hired over the total number of people hired 3. Number of decision-making positions occupied by women over the total number of decision-making positions 4. Training dimension A: number of training in gender perspective to women hired B: number of training in soft and hard skills.	—
XI: Impact monitoring indicators (exceptional community benefits)	XII: Type of measurement of the project variables indicator	XIII: Formal logic of measurement of project variables	XIV: Data collection instrument for project indicators and Well-being impact indicators in comuniratio group	XV: Sampling for projects and for community group Well-being impacts
1. Number of jobs provided to women from project boundary to work in SPVN GS1 2. Percentage of number of women hired over the total number of people hired 3. Number of	1. Quantity measurement 2. Percentage quantity measurement 3. Quantity measurement 4. Capacitation dimensioning: A: quantity	Quantity measurement X and $\leq X$ (X pts. = Very High) $X \leq X \leq X \leq X$ (X pts. = High) $X \leq X \leq X$ (X pts. = Medium) $X \leq X \leq X \leq X$ (1 pts.	Interview surveys, filling out a survey form	All women who have been hired to work at SPVN GS1 and their family groups

decision-making positions occupied by women over the total number of decision-making positions 4. Training dimension A: number of trainings in gender perspective to women hired	measurement B: quantity measurement	= Low) 0 (0 pts. = Very Low)		
XVI: Monitoring strategy for projects and for community group well-being impacts	XVII: Monitoring methodology for projects and for community group well-being impacts	XVIII: Monitoring frequency for project variables for projects and for community group well-being impacts		
Internal management evaluation	Management evaluation reports	Annual monitoring		

Community Group: women				
Change in Well-being 3				
I: Change in Well-being	II: Impacts on Well-Being	III: Impact indicators in Well-being	IV: Type of measurement of Well-being impact indicator	V: Impact measurement logic in Well-being
3. To provide equipment and generate new capacities through training, to improve productivity and results in existing projects.	3. Provision of equipment, training and technical assistance for the development of projects.	1. Effective delivery of equipment. 2. Existence of training. 3. Existence of technical assistance for the development of projects	1. Nominal measurement. (yes-no) 2. Nominal measurements. (yes-no) 3. Nominal measurement (yes-no)	Nominal dichotomous measurement disjunctive syllogism $P \vee Q$ $\sim P$ Q
VI: Projects that make Well-being improvements a reality	VII: Long-term benefit variables by project affecting community group Well-being improvement variables.	VIII: Short/medium term variables per project, acting on long term variables per project, affecting community group Well-being improvement variables	IX: Indicators of short/medium term variables by project	X: Impact monitoring indicators (climate change adaptation benefits)
Mujeres Cultivadoras	1. Dimension speed of the production line of the processed products. 2. Dimension Liters produced dimension of the products produced 3. Dimension of sales quantity of produced products 4. Dimension of old and new customers 5. Dimension of training in gender perspective in agricultural	1. Dimension speed of the production line of the processed products: A: production time of vinegars. B. production time of dressings. 2. Dimension Liters produced of the processed products. A: liters of vinegar produced. B. liters produced of dressings.	1. Dimension speed of the production line of the processed products: A. decrease of production time of vinegars. B. decrease of time of production of dressings. 2. Dimension liters produced of the processed products. A. increase in the quantity of liters of	_____

	6. production. Degree of satisfaction with the project.	3. Dimension Sales quantity of the products produced. A: bottles of vinegars sold. B: bottles of dressings produced. 4. Dimension of old and new customers: A: continuing customers. B new customers. 5. Dimension training on gender perspective in agricultural production: A training on gender perspective. 6. Dimension level of satisfaction with the project.	vinegar produced. B. increase in the quantity of produced liters of dressings. 3. Dimension quantity of sales of the products produced. A: increase in the number of bottles of vinegars sold. B: increase in the number of bottles of dressings produced. 4. Dimension old and new customers: A maintenance of the number of customers retained. B number of new customers. 5. Dimension training on gender perspective in agricultural production: Several training sessions on gender perspective. 6. Dimension Level of satisfaction with the project	
XI: Impact monitoring indicators (exceptional community benefits)	XII: Type of measurement of the project variables indicator	XIII: Formal logic of measurement of project variables	XIV: Data collection instrument for project indicators and Well-being impact indicators in comuniratio group	XV: Sampling for projects and for community group Well-being impacts
5 Dimension training on gender perspective in agricultural production: Several training sessions on gender perspective.	1. Dimension Speed of the production line of finished products: A. time quantity measurement. B. time quantity measurement. 2. Dimension Liters produced of processed products. A. quantity measurement. B. quantity measurement. 3. Dimension Sales quantity of the produced products. A: quantity measurement. B: quantity measurement. 4. Dimension Size of old and new customers: A: quantity measurement. B: quantity measurement. 5. Dimension training	Quantity measurement. X and $\leq X$ (X pts. = Very High) $X \leq X \leq X \leq X$ (X pts. = High) $X \leq X \leq X$ (X pts. = Medium) $X \leq X \leq X \leq X$ (1 pts. = Low) 0 (0 pts. = Very Low) Ordinal measurement. Lasker scale. $\vee X \vee X \vee X$	Interview surveys, filling out a survey form	All women in the new hope cooperative and family groups of women in the cooperative

	on gender perspective in agricultural production: A quantity measurement. 6. Dimension Degree of satisfaction with the project ordinal measurement (very satisfied, satisfied, not very satisfied, not satisfied at all)			
XVI: Monitoring strategy for projects and for community group well-being impacts	XVII: Monitoring methodology for projects and for community group well-being impacts	XVIII: Monitoring frequency for project variables for projects and for community group well-being impacts		
Participatory management evaluation	Crossing management reports from Nideport and the cooperative on production, sales, needs, and problems raised during period	Annual monitoring		

Monitoring table with values				
Community Group: women				
Change in Well-being 3				
I: Change in Well-being	II: Impacts on Well-Being	III: Impact indicators in Well-being	IV: Type of measurement of Well-being impact indicator	V: Impact measurement logic in Well-being
3. Yes	3. Yes	1. Yes 2. Yes 3. Yes	1. Nominal measurement (yes-no) 2. nominal measurements (yes-no) 3. nominal measurements (yes-no)	Nominal dichotomous measurement disjunctive syllogism $P \vee Q \sim P \vee Q$
VI: Projects that make Well-being improvements a reality	VII: Long-term benefit variables by project affecting community group Well-being improvement variables.	VIII: Short/medium term variables per project, acting on long term variables per project, affecting community group Well-being improvement variables	IX: Indicators of short/medium term variables by project	X: Impact monitoring indicators (climate change adaptation benefits)
Mujeres Cultivadoras	1. Dimension speed of the production line of the processed products. 2. Dimension Liters produced Dimension of the products produced 3. Dimension of sales	1. Dimension speed of the production line of the processed products: A: production time of vinegars. B. production time of dressings.	1. Dimension speed of the production line of the processed products: A. decrease of production time of vinegars. B. decrease of time of	—

	quantity of produced product 4. Dimension of old and new customers 5. Yes 6. Yes	2. Dimension Liters produced of the processed products. A: liters of vinegar produced. B. liters produced of dressings. 3. Dimension Sales quantity of the products produced. A: bottles of vinegars sold. B: bottles of dressings produced. 4. Dimension of old and new customers: A: continuing customers. B new customers. 5. Dimension training on gender perspective in agricultural production: A yes 6. Yes	production of dressings. 2. Dimension liters produced of the processed products. A. increase in the quantity of liters of vinegar produced. B. increase in the quantity of produced liters of dressings. 3. Dimension quantity of sales of the products produced. A: increase in the number of bottles of vinegars sold. B: increase in the number of bottles of dressings produced. 4. Dimension old and new customers: A maintenance of the number of customers retained. B number of new customers. 5. Dimension training on gender perspective in agricultural production: A 1(one) very satisfactory	
XI: Impact monitoring indicators (exceptional community benefits)	XII: Type of measurement of the project variables indicator	XIII: Formal logic of measurement of project variables	XIV: Data collection instrument for project indicators and Well-being impact indicators in comuniratio group	XV: Sampling for projects and for community group Well-being impacts
5 Dimension training on gender perspective in agricultural production: A 1 (one)	1. Dimension Speed of the production line of finished products: A. time quantity measurement. B. time quantity measurement. 2. Dimension Liters produced of processed products. A. quantity measurement. B. quantity measurement. 3. Dimension Sales quantity of the produced products. A: quantity measurement. B: quantity measurement. 4. Dimension Size of old and new customers: A: quantity	Quantity measurement $X \text{ and } \leq X$ (X pts. = Very High) $X \leq X \leq X \leq X$ (X pts. = High) $X \leq X \leq X$ (X pts. = Medium) $X \leq X \leq X \leq X$ (1 pts. = Low) 0 (0 pts. = Very Low) Ordinal measurement Lasker Scale $X \vee X \vee X \vee X$	Interview surveys, filling out a survey form	All women in the new hope cooperative and family groups of women in the cooperative

	measurement B: quantity measurement. 5. Dimension training on gender perspective in agricultural production: A 1 (one) 6. Dimension Degree of satisfaction with the project very satisfactory			
XVI: Monitoring strategy for projects and for community group well-being impacts	XVII: Monitoring methodology for projects and for community group well-being impacts	XVIII: Monitoring frequency for project variables for projects and for community group well-being impacts		
Participatory management evaluation	Crossing management reports from Nideport and the cooperative on production, sales, needs, and problems raised during period	Annual monitoring		

Community Group: Indigenous community				
Change in Well-being 1				
I: Change in Well-being	II: Impacts on Well-Being	III: Impact indicators in Well-being	IV: Type of measurement of Well-being impact indicator	V: Impact measurement logic in Well-being
1. Improve housing conditions by reducing overcrowding in houses, improving housing materials and training in housing construction.	1. Improvement of housing conditions and training in housing construction.	A. effective improvement of housing conditions. B. existence of training in housing construction.	A. nominal measurement (yes-no) B. nominal measurement (yes-no)	Nominal dichotomous measurement disjunctive syllogism P V Q ~ P Q
VI: Projects that make Well-being improvements a reality	VII: Long-term benefit variables by project affecting community group Well-being improvement variables.	VIII: Short/medium term variables per project, acting on long term variables per project, affecting community group Well-being improvement variables	IX: Indicators of short/medium term variables by project	X: Impact monitoring indicators (climate change adaptation benefits)
OGA	1. Dimension Construction of housing with a modular methodology. 2. Dimension overcrowding. 3. Dimension quality of housing. 4. Dimension training	1. Dimension construction of housing with modular methodology. 2. Dimension existence of overcrowding. 3. Dimension quality of housing.	1. Dimension construction of housing with modular methodology: number of houses built 2. Dimension existence of overcrowding:	3 Dimension Quality of housing: A: quality of housing materials. B: existence of flooding

	in housing construction using a modular methodology.	4. Dimension training.	A: number of people living together in the house per square meter of housing. 3. Dimension Quality of housing: A: quality of housing materials. B: existence of flooding or leaks in the dwelling. C: existence of adequate ventilation. D: existence of adequate heating. E: existence of fire risk. F. degree of satisfaction with the constructed dwelling. 4. Dimension Training: A. number of people trained in modular construction. B. degree of satisfaction of those trained with the training.	or leaks in the dwelling. C: existence of adequate ventilation. D: existence of adequate heating. E: existence of fire risk.
XI: Impact monitoring indicators (exceptional community benefits)	XII: Type of measurement of the project variables indicator	XIII: Formal logic of measurement of project variables	XIV: Data collection instrument for project indicators and Well-being impact indicators in comuniratio group	XV: Sampling for projects and for community group Well-being impacts
1. Dimension construction of housing with modular methodology: A: Number of houses built. 2. Dimension existence of overcrowding: A: number of people living together in the house per square meter of housing. 3. Dimension Quality of housing: A: Quality of housing materials. B: Existence of flooding or leaks in the dwelling. C: Existence of adequate ventilation. D: Existence of adequate heating. E: Existence of fire risk. 4. Dimension Training: A. Number of people trained in modular construction.	1. Dimension of housing construction with modular methodology: A. measurement of quantity. 2. Dimension of overcrowding: A measurement of quantity, crossing of housing inhabitants by square meters of housing. 3. Dimension Quality of housing: A: ordinal measurement (very good, good, fair, poor, bad, very poor) B: nominal measurement (yes-no) C: nominal measure (yes-no) D: nominal measurement (yes-no) E: nominal measurement (yes-no) F: ordinal measurement (very satisfied, satisfied, not very satisfied, not at all)	Quantity measurement X and $\leq X$ (X pts. = Very High) $X \leq X \leq X \leq X$ (X pts. = High) $X \leq X \leq X$ (X pts. = Medium) $X \leq X \leq X \leq X$ (1 pts. = Low) 0 (0 pts. = Very Low) dichotomous nominal measurement disjunctive syllogism P V Q $\sim P$ Q ordinal measurement Lasker scale $(X) \vee (\leq X) \vee (\leq X) \vee (\leq X)$	Interview surveys, filling out a survey form	1. Stimulus group: members of the Alecrin community who have benefited from housing. 2. Control group: all members of the Tekoa Alecrin who have not yet received a house, by cluster selection. 3. Members of the Tekoa Alecrin trained

	satisfied). 4. Dimension Training: A. Quantity measurement. B ordinal measurement (very satisfied, satisfied, not very satisfied, not at all satisfied).			in modular house construction.
XVI: Monitoring strategy for projects and for community group well-being impacts	XVII: Monitoring methodology for projects and for community group well-being impacts	XVIII: Monitoring frequency for project variables for projects and for community group well-being impacts		
After the construction of housing modules, the monitoring includes maintenance of housing; community housing conditions; construction capacity gained, and other indicators worked. Satisfaction survey. Management evaluation with control group.	Management evaluation together with Tekoa Alecrin community	Annual monitoring		

Monitoring table with values				
Community Group: Indigenous community				
Change in Well-being 1				
I: Change in Well-being	II: Impacts on Well-Being	III: Impact indicators in Well-being	IV: Type of measurement of Well-being impact indicator	V: Impact measurement logic in Well-being
1. Improve housing conditions by reducing overcrowding in houses, improving housing materials and training in housing construction.	1. Improvement of housing conditions and training in housing construction.	A. Effective improvement of housing conditions. B. Yes	A. Nominal measurement (yes-no) B. Nominal measurement (yes-no)	Nominal dichotomous measurement disjunctive syllogism $P \vee Q$ $\sim P$ Q
VI: Projects that make Well-being improvements a reality	VII: Long-term benefit variables by project affecting community group Well-being improvement variables.	VIII: Short/medium term variables per project, acting on long term variables per project, affecting community group Well-being improvement variables	IX: Indicators of short/medium term variables by project	X: Impact monitoring indicators (climate change adaptation benefits)
OGA	1. Dimension Construction of housing with a modular methodology. 2. Dimension overcrowding. 3. Dimension	1. Dimension construction of housing with modular methodology 2. Dimension existence of overcrowding.	1. Dimension construction of housing with modular methodology: A: number of houses built 2. Dimension	3 Dimension Quality of housing: A: quality of housing materials. B: existence of flooding or

	4. quality of housing Yes	3. Dimension quality of housing 4. Yes	existence of overcrowding: A: number of people living together in the house per square meter of housing. 3. Dimension Quality of housing: A: quality of housing materials. B: existence of flooding or leaks in the dwelling. C: existence of adequate ventilation. D: existence of adequate heating. E: existence of fire risk. F. degree of satisfaction with the constructed dwelling 4. Dimension Training: A. 2 (two) B. very satisfactory	leaks in the dwelling. C: existence of adequate ventilation. D: existence of adequate heating. E: existence of fire risk.
XI: Impact monitoring indicators (exceptional community benefits)	XII: Type of measurement of the project variables indicator	XIII: Formal logic of measurement of project variables	XIV: Data collection instrument for project indicators and Well-being impact indicators in community group	XV: Sampling for projects and for community group Well-being impacts
1. Dimension construction of housing with modular methodology: A: number of houses built 2. Dimension existence of overcrowding: A: number of people living together in the house per square meter of housing. 3. Dimension Quality of housing: A: quality of housing materials. B: existence of flooding or leaks in the dwelling. C: existence of adequate ventilation. D: existence of adequate heating. E: existence of fire risk. 4. Dimension Training: A. 2 (two)	1. Dimension of housing construction with modular methodology: A. measurement of quantity 2. Dimension of overcrowding: A measurement of quantity, crossing of housing inhabitants by square meters of housing. 3. Dimension Quality of housing: A: ordinal measurement (very good, good, fair, poor, bad, very poor). B: nominal measurement (yes-no). C: nominal measure (yes-no). D: nominal measurement (yes-no). E: nominal	Quantity measurement X and $\leq X$ (X pts. = Very High) $X \leq X \leq X \leq X$ (X pts. = High) $X \leq X \leq X$ (X pts. = Medium) $X \leq X \leq X \leq X$ (1 pts. = Low) 0 (0 pts. = Very Low) dichotomous nominal measurement disjunctive syllogism $P \vee Q$ $\sim P$ Q ordinal measurement Lasker scale $(X) \vee (\leq X) \vee (\leq X)$ $\vee (\leq X)$	Interview surveys, filling out a survey form	1. Stimulus group: members of the Alecrin community who have benefited from housing. 2. Control group: all members of the Tekoa Alecrin who have not yet received a house, by cluster selection 3. 2 (two)

	measurement (yes-no). F: ordinal measurement (very satisfied, satisfied, not very satisfied, not at all satisfied). 4. Dimension Training: A. quantity measurement. B very satisfied			
XVI: Monitoring strategy for projects and for community group well-being impacts	XVII: Monitoring methodology for projects and for community group well-being impacts	XVIII: Monitoring frequency for project variables for projects and for community group well-being impacts		
After the construction of housing modules, the monitoring includes maintenance of housing; community housing conditions; construction capacity gained, and other indicators worked. Satisfaction survey. Management evaluation with control group.	Management evaluation together with Tekoa Alecrin community	Annual monitoring		

Community Group: Indigenous community				
Change in Well-being 2				
I: Change in Well-being	II: Impacts on Well-Being	III: Impact indicators in Well-being	IV: Type of measurement of Well-being impact indicator	V: Impact measurement logic in Well-being
2. Improve food security by strengthening self-sufficiency agriculture.	2. Training and equipment to improve food security.	A. Existence of training to improve food security B. Delivery of equipment to improve food security	A. Nominal measurement (yes-no) B. Nominal measurement (yes-no)	Nominal dichotomous measurement disjunctive syllogism $P \vee Q$ $\sim P$ Q
VI: Projects that make Well-being improvements a reality	VII: Long-term benefit variables by project affecting community group Well-being improvement variables.	VIII: Short/medium term variables per project, acting on long term variables per project, affecting community group Well-being improvement	IX: Indicators of short/medium term variables by project	X: Impact monitoring indicators (climate change adaptation benefits)

		variables		
Ra 'yi project	- General improvement and expansion of community gardens. - Increase in the varieties cultivated to generate a greater diversification of the family horticultural diet. - Increased participation of the people in the community gardens. - Promoting adaptation to climate change in agricultural production. - Improved food security in the village. - Facilitate access, storage and distribution of HCVs water. - Satisfaction with the project.	- Increase in the size of community gardens. - Increase in the number and variety of species cultivated. - Increase in the number of people working in the community gardens. - Creation of a community seed bank to improve the conservation and availability of seeds in the village. - Improved food security in the village by increasing the number of times that families eat per day. - Improvement of spring water infrastructure for access, storage and distribution of water - Satisfaction with the project.	- Size of community gardens. - Number of species cultivated and number of varieties of species cultivated. - Number of people working in the community gardens. - Existence of a community seed bank. - Number of times families eat per day. - Construction of a water source formwork, with the installation of a tank, pump, filters. - Degree of satisfaction with the project.	- Size of community gardens. - Number of species cultivated and number of varieties of species cultivated. - Number of people working in the community gardens. - Existence of a community seed bank. - Number of times families eat per day. - Construction of a water source formwork, with the installation of a tank, pump, filters.
XI: Impact monitoring indicators (exceptional community benefits)	XII: Type of measurement of the project variables indicator	XIII: Formal logic of measurement of project variables	XIV: Data collection instrument for project indicators and Well-being impact indicators in comuniratio group	XV: Sampling for projects and for community group Well-being impacts
1. Size of community gardens.	1. Measurement of magnitude of square meters.	Quantity measurement X and $\leq X$ (X pts. =	Interview surveys, filling out a survey form	Community garden managers and

2. Number of species cultivated and number of varieties of species cultivated. 3. Number of people working in the community gardens. 4. Existence of a community seed bank. 5. Number of times families eat per day. 6. Construction of a water source formwork, with the installation of a tank, pump, filters.	2. Quantity measurement. 3. Quantity measurement. 4. Nominal measurement (yes-no). 5. Quantity measurement. 6. Nominal (yes-no) 7. Ordinal measurement (very satisfied, satisfied, not satisfied, not satisfied at all).	Very High) $X \leq X \leq X \leq X$ (X pts. = High) $X \leq X \leq X$ (X pts. = Medium) $X \leq X \leq X \leq X$ (1 pts. = Low) 0 (0 pts. = Very Low) dichotomous nominal measurement disjunctive syllogism $P \vee Q$ $\sim P$ Q ordinal measurement Lasker scale $(X) \vee (\leq X) \vee (\leq X)$ $\vee (\leq X)$		families who participate and depend on the community garden.
XVI: Monitoring strategy for projects and for community group well-being impacts	XVII: Monitoring methodology for projects and for community group well-being impacts	XVIII: Monitoring frequency for project variables for projects and for community group well-being impacts		
1. Monitoring sheets 2. Field tours and visual records of progress. 3. Interviews with the leaders of the community 4. Observation of the tools and supplies transferred. 5. Brief survey 6. Satisfaction survey. Management evaluation with control group.	Management evaluation together with Tekoa Alecrin community	Annual monitoring		

Community Group: Vulnerable people (economic and social vulnerability, with their income and means of subsistence, schooling and food sovereignty in a critical state).

Change in Well-being 1

I: Change in Well-being	II: Impacts on Well-Being	III: Impact indicators in Well-being	IV: Type of measurement of Well-being impact indicator	V: Impact measurement logic in Well-being
1. Improvement of the quality of life of the project boundary population by promoting practices of distributive democracy.	1 Increased social cohesion for project management based on the promotion of good participation practices with a focus on sustainability and equity.	A. Increased social cohesion for project management. B, installation of good participatory practices focused on sustainability and equity	A. nominal measurement (yes-no) B. nominal measurement (yes-no)	Nominal dichotomous measurement disjunctive syllogism P V Q ~ P Q
VI: Projects that make Well-being improvements a reality	VII: Long-term benefit variables by project affecting community group Well-being improvement variables.	VIII: Short/medium term variables per project, acting on long term variables per project, affecting community group Well-being improvement variables	IX: Indicators of short/medium term variables by project	X: Impact monitoring indicators (climate change adaptation benefits)
Participatory Carbon project	- Improvement of the quality of life of the population in the project's area of influence. - Establishment of a culture of good participatory practices with sustainability and equity as central axes. - Generate mechanisms of Distributive Democracy in which the neighbors of the project boundary participate. - Degree of satisfaction with the participatory carbon.	- Improve the quality of life of the project boundary population through participatory management projects in health, education, maintenance of HCVs and community infrastructure. - Increase social cohesion for project management through the implementation of participatory carbon forums in which agreements are reached on projects to be carried out. - Participation of women and men in the PC forums. - Degree of	- Number of projects carried out from participatory carbon. - Number of forums held in which the neighbors reached agreements on projects to be carried out. - Number of people who participated in the participatory carbon forums. - Degree of satisfaction with participatory carbon.	—

		satisfaction with participatory carbon.		
XI: Impact monitoring indicators (exceptional community benefits)	XII: Type of measurement of the project variables indicator	XIII: Formal logic of measurement of project variables	XIV: Data collection instrument for project indicators and Well-being impact indicators in community group	XV: Sampling for projects and for community group Well-being impacts
1. Number of projects carried out from participatory carbon 2. Number of forums held in which the neighbors reached agreements on projects to be carried out. 3. Number of people who participated in the participatory carbon forums.	1. Quantity measurement 2. Quantity measurement 3. Quantity measurement 4. Ordinal measurement (very satisfied, satisfied, not very satisfied, not satisfied at all)	Quantity measurement X and $\leq X$ (X pts. = Very High) X $\leq$ X $\leq$ X $\leq$ X (X pts. = High) X $\leq$ X $\leq$ X (X pts. = Medium) X $\leq$ X $\leq$ X (1 pts. = Low) 0 (0 pts. = Very Low) ordinal measurement Lasker scale (X) v ($\leq$ X) v ($\leq$ X) v ($\leq$ X)	Interview surveys, filling out a survey form	All project boundary neighbors participating in and/or benefiting from participatory carbon.
XVI: Monitoring strategy for projects and for community group well-being impacts	XVII: Monitoring methodology for projects and for community group well-being impacts	XVIII: Monitoring frequency for project variables for projects and for community group well-being impacts		
Participatory management evaluation among the community, EPET N° 31 de Cruce Caballero, EP N° 482 of Cruce Caballero & and its cooperative, and Recreative, Sports and Cultural Committee of Cruce Caballero. Satisfaction survey. Management evaluation with control group.	Management evaluation reports	Annual monitoring		

Community Group: Vulnerable people (economic and social vulnerability, with their income and means of subsistence, schooling and food sovereignty in a critical state).

Change in Well-being 2

I: Change in Well-being	II: Impacts on Well-Being	III: Impact indicators in Well-being	IV: Type of measurement of	V: Impact measurement
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			Well-being impact indicator	logic in Well-being
2. Improved working conditions and incomes without project opportunities.	2. Formal employment opportunities in the area.	A. Existence of formal employment opportunities in the area created by Nideport.	A. Nominal measurement (yes-no)	Nominal dichotomous measurement disjunctive syllogism $P \vee Q$ $\sim P$ Q
VI: Projects that make Well-being improvements a reality	VII: Long-term benefit variables by project affecting community group Well-being improvement variables.	VIII: Short/medium term variables per project, acting on long term variables per project, affecting community group Well-being improvement variables	IX: Indicators of short/medium term variables by project	X: Impact monitoring indicators (climate change adaptation benefits)
Employment and trainings in SPVN GS1	1. Creation of new formal jobs for people in the project boundary who are below the national poverty line. 2. Improvement of income per household of the poverty line. 3. Training dimension.	1. Provide employment to neighbors of the project boundary, who are below the national poverty average, to work in SPVN GS1 2. Hiring under a legal labor regime. 3. Training dimension. A training in gender perspective to hire women. B training in soft and hard skills.	1. Number of jobs provided to residents of the project boundary, who are below the national poverty average, to work in SPVN GS1 2. Number of contracts under the legal labor regime. 3. Training dimension. A Number of training in gender perspective to women hired B Number of training in soft and hard skills.	—
XI: Impact monitoring indicators (exceptional community benefits)	XII: Type of measurement of the project variables indicator	XIII: Formal logic of measurement of project variables	XIV: Data collection instrument for project indicators and Well-being impact indicators in comuniratio group	XV: Sampling for projects and for community group Well-being impacts
1. Number of jobs provided to residents of the project boundary, who are below the national	1. Quantity measurement 2. Quantity measurement	Quantity measurement X and $\leq X$ (X pts. = Very High)	Interview surveys, filling out a survey form	All project boundary residents below the national median poverty

poverty average, to work in SPVN GS1 2. Number of contracts under the legal labor regime. 3. Training dimension. A number of training in gender perspective to women hired. B number of training and training in soft and hard skills.	3. Training dimension: A quantity measurement. B quantity measurement.	$X \leq X \leq X \leq X$ (X pts. = High) $X \leq X \leq X$ (X pts. = Medium) $X \leq X \leq X \leq X$ (1 pts. = Low) 0 (0 pts. = Very Low)		line who have been hired to work at SPVN GS1 and their households
XVI: Monitoring strategy for projects and for community group well-being impacts	XVII: Monitoring methodology for projects and for community group well-being impacts	XVIII: Monitoring frequency for project variables for projects and for community group well-being impacts		
Internal management evaluation	Management evaluation reports	Annual monitoring		

Community Group: Vulnerable people (economic and social vulnerability, with their income and means of subsistence, schooling and food sovereignty in a critical state).				
Change in Well-being 3				
I: Change in Well-being	II: Impacts on Well-Being	III: Impact indicators in Well-being	IV: Type of measurement of Well-being impact indicator	V: Impact measurement logic in Well-being
3. Landscape-scale ecosystem improvements in favor of local project boundary communities.	3. Generation of agreements with small and medium-sized forest owners in the project bounding for forest restoration and reforestation actions or natural vegetation zone and protection of water resources on their own land.	A. existence of agreements with small and medium forest owners in the project boundaries. B. existence of forest restoration and reforestation actions or natural vegetation zone. C. existence of protection of water resources on their own land.	A. nominal measurement (yes-no) B. nominal measurement (yes-no) C. nominal measurement (yes-no)	Dichotomous nominal measurement disjunctive syllogism P V Q ~ P Q
VI: Projects that make Well-being improvements a reality	VII: Long-term benefit variables by project affecting community group Well-being improvement variables.	VIII: Short/medium term variables per project, acting on long term variables per project, affecting community group Well-being improvement variables	IX: Indicators of short/medium term variables by project	X: Impact monitoring indicators (climate change adaptation benefits)

Payment for environmental services	1. PES payment agreements 2. Improvement of the income of local small rural producers. 3. Impact on the family group. 4. Strengthen the performance of sustainable forest management in the neighbors under project, based on indicators established jointly with the producers under project 5. Degree of satisfaction with the project	1. Payments made under the project activity 2. Increase in the level of income of small producers under the project. 3. Increase in the income level of the family group of the small producers under the project. 4. Performance indicators of sustainable forest management 5. Degree of satisfaction with the project.	1. Number of payments made in the project activity 2. Amount of increase in the level of income of the small producer under the project. 3. Amount of increase in the income level of the family group of the small producers under the project. 4. Existence of sustainable forest management performance indicators 5. Degree of satisfaction with the project.	1. Number of payments made in the project activity 2. Amount of increase in the level of income of the small producer under the project. 3. Amount of increase in the income level of the family group of the small producers under the project. 4. Existence of sustainable forest management performance indicators
XI: Impact monitoring indicators (exceptional community benefits)	XII: Type of measurement of the project variables indicator	XIII: Formal logic of measurement of project variables	XIV: Data collection instrument for project indicators and Well-being impact indicators in community group	XV: Sampling for projects and for community group Well-being impacts
1. Number of payments made in the project activity 2. Amount of increase in the level of income of the small producer under the project. 3. Amount of increase in the income level of the family group of the small producers under the project. 4. Existence of sustainable forest management performance indicators	1. Quantity measurement 2. Quantity measurement 3. Quantity measurement. 4. Nominal measurement (yes-no) 5. Ordinal measurement (very satisfied, satisfied, not very satisfied, not at all satisfied)	Quantity measurement X and $\leq X$ (X pts. = Very High) $X \leq X \leq X \leq X$ (X pts. = High) $X \leq X \leq X$ (X pts. = Medium) $X \leq X \leq X \leq X$ (1 pts. = Low) 0 (0 pts. = Very Low) ordinal measurement Lasker scale $(X) \vee (\leq X) \vee (\leq X) \vee (\leq X)$	Interview surveys, filling out a survey form	1. Stimulus group: project boundary solutions under the project activity. 2. Control group: project boundary neighbors not yet under the project activity, by random cluster selection
XVI: Monitoring strategy	XVII: Monitoring	XVIII: Monitoring		

for projects and for community group well-being impacts	methodology for projects and for community group well-being impacts	frequency for project variables for projects and for community group well-being impacts
Management analysis during pilot test. Satisfaction survey. Management evaluation with control group.	Management analysis during pilot test	Annual monitoring

Community Group: Vulnerable people (economic and social vulnerability, with their income and means of subsistence, schooling and food sovereignty in a critical state).				
Change in Well-being 4				
I: Change in Well-being	II: Impacts on Well-Being	III: Impact indicators in Well-being	IV: Type of measurement of Well-being impact indicator	V: Impact measurement logic in Well-being
4. Contributing to access to wild products identified as important to the livelihoods of project boundary communities.	4. Access of woody resources and medicinal plants to rural households with verified dependence on them in the project boundary.	A. Access to woody resources and medicinal plants to rural households with verified dependence on them in the project boundary.	A. Nominal measurement (yes-no)	Nominal dichotomous measurement disjunctive syllogism $P \vee Q$ $\sim P$ Q
VI: Projects that make Well-being improvements a reality	VII: Long-term benefit variables by project affecting community group Well-being improvement variables.	VIII: Short/medium term variables per project, acting on long term variables per project, affecting community group Well-being improvement variables	IX: Indicators of short/medium term variables by project	X: Impact monitoring indicators (climate change adaptation benefits)
Forest security net project	1. Creation of a database of highly vulnerable households with dependence on firewood and medicinal plants 2. Establishment of mechanisms for access to firewood delivered in the winter season to highly vulnerable households. 3. Dimension: benefits of the don antonio project activity.	1. Establishment of the project boundary, together with highly vulnerable households, on their dependence on firewood and medicinal plants. 2. Enrollment in the annual firewood quota delivery in winter 3. Dimension: benefits of the don antonio project activity.	1. Existence of a database created jointly with the highly vulnerable households under the project 2. Number of highly vulnerable households, from the project boundary, enrolled in the delivery of the annual firewood	—

	4. Informality in the procurement of firewood and medicinal plants resources by highly vulnerable households. 5. Monetary losses in the purchase of firewood and medicinal plants by highly vulnerable households.	A: access to medicinal plants. B: training in the use of medicinal plants 4. Reduction of informality in the procurement of firewood and medicinal plants resources by highly vulnerable households. 5. Reduction of monetary losses in the purchase of firewood and medicinal plants of highly vulnerable households.	3. Dimension: benefits of the don antonio project activity. A: number of medicinal plants delivered to households under the project. B: number of trainings in the use of medicinal plants 4. Number of highly vulnerable households registered in the jointly created database. 5. Amount of household income spent on firewood and medicinal plants as a percentage of total household income.	
XI: Impact monitoring indicators (exceptional community benefits)	XII: Type of measurement of the project variables indicator	XIII: Formal logic of measurement of project variables	XIV: Data collection instrument for project indicators and Well-being impact indicators in comuniratio group	XV: Sampling for projects and for community group Well-being impacts
—	1. Nominal measurement (yes-no) 2. Quantity measurement 3. Dimension: benefits of the Don Antonio project activity A: quantity measurement B: quantity measurement 4. Quantity measurement 5. Ordinal measurement (very satisfied, not very satisfied, not at all)	Quantity measurement X and $\leq X$ (X pts. = Very High) $X \leq X \leq X \leq X$ (X pts. = High) $X \leq X \leq X$ (X pts. = Medium) $X \leq X \leq X \leq X$ (1 pts. = Low) 0 (0 pts. = Very Low) dichotomous nominal measurement disjunctive syllogism $P \vee Q$ $\sim P$ Q ordinal measurement Lasker scale	Interview surveys, filling out a survey form	

		$(X) \vee (\leq X) \vee (\leq X) \vee (\leq X)$		
XVI: Monitoring strategy for projects and for community group well-being impacts	XVII: Monitoring methodology for projects and for community group well-being impacts	XVIII: Monitoring frequency for project variables for projects and for community group well-being impacts		
Management indicators analysis. Satisfaction survey. Management evaluation with control group.	Management evaluation reports	Annual monitoring		

Community Group: Vulnerable people (economic and social vulnerability, with their income and means of subsistence, schooling and food sovereignty in a critical state).				
Change in Well-being 5				
I: Change in Well-being	II: Impacts on Well-Being	III: Impact indicators in Well-being	IV: Type of measurement of Well-being impact indicator	V: Impact measurement logic in Well-being
5. Access to products of ethnobotanical interest for family health.	5. Creation of a medicinal plant nursery.	A. Creation of a medicinal plant nursery.	A. Nominal measurement (yes-no)	Nominal dichotomous measurement disjunctive syllogism $P \vee Q$ $\sim P$ Q
VI: Projects that make Well-being improvements a reality	VII: Long-term benefit variables by project affecting community group Well-being improvement variables.	VIII: Short/medium term variables per project, acting on long term variables per project, affecting community group Well-being improvement variables	IX: Indicators of short/medium term variables by project	X: Impact monitoring indicators (climate change adaptation benefits)
Don Antonio: Native medicinal species nursery with an ecotourism and educational approach.	1. Reforestation of native medicinal plants within the project area. 2. Access to medicinal plants. 3. Contribute to the conservation of traditional knowledge and native medicinal	1. To produce medicinal plants in the nursery. 2. To distribute medicinal plants. 3. Construction of a database on medicinal plants and their uses. 4. Training in cultivation and use	1. Production of medicinal plants in the nursery. 2. Quantity of medicinal plants distributed 3. Quantity of medicinal plants distributed 4. Construction of a database on	—

	species. 4. To disseminate the identification, planting, use and conservation of native medicinal plants.	of medicinal plants.	medicinal plants and their uses. 5. Training in cultivation and use of medicinal plants.	
XI: Impact monitoring indicators (exceptional community benefits)	XII: Type of measurement of the project variables indicator	XIII: Formal logic of measurement of project variables	XIV: Data collection instrument for project indicators and Well-being impact indicators in comuniratio group	XV: Sampling for projects and for community group Well-being impacts
—	1. Quantity measurement 2. Quantity measurement. 3. Nominal measurement (yes-no) 4. Measurement of quantity	Quantity measurement X and $\leq X$ (X pts. = Very High) $X \leq X \leq X \leq X$ (X pts. = High) $X \leq X \leq X$ (X pts. = Medium) $X \leq X \leq X \leq X$ (1 pts. = Low) 0 (0 pts. = Very Low) dichotomous nominal measurement disjunctive syllogism $P \vee Q$ $\sim P$ Q	Interview surveys, filling out a survey form	Project boundary neighbors under the forest safety net project activity.
XVI: Monitoring strategy for projects and for community group well-being impacts	XVII: Monitoring methodology for projects and for community group well-being impacts	XVIII: Monitoring frequency for project variables for projects and for community group well-being impacts		
Management indicators analysis. Satisfaction survey. Management evaluation with control group.	Management evaluation reports	Annual monitoring		