INTERNATIONAL TROPICAL TIMBER ORGANIZATION

ITTO

PROJECT DOCUMENT

TITLE	ENHANCING THE VALUE OF SECONDARY NATURAL FORESTS THROUGH THEIR SUSTAINABLE USE, GENERATING RURAL EMPLOYMENT IN A POST-COVID CONTEXT
SERIAL NUMBER	PP-A/59-353 [CN-21004]
COMMITTEE	REFORESTATION AND FOREST MANAGEMENT
SUBMITTED BY	GOVERNMENT OF COSTA RICA
ORIGINAL LANGUAGE	SPANISH

SUMMARY

Costa Rica has an internationally recognized track record for forest and biodiversity conservation, as well as effective actions to combat climate change. This has allowed Costa Rica's forests to become a net sink for greenhouse gases since 2014. Despite the progress made in the conservation agenda, the country's forest sector faces several challenges to improve its performance, as the forest industry is currently underdeveloped and obsolete, requiring support in the development of innovation in production processes and forest products.

This project includes the following main activities: (i) Identify the potential of secondary forests, through structural and floristic analyses of 100 plots established throughout the country, as well as other sources; (ii) Select various native species for the potential development of high-value products for niche markets; (iii) Involve women and youth from local communities in the different processes of the value chain; (iv) Conduct a preliminary market survey of potential high-value products that can be manufactured in the country; (v) Design and manufacture prototypes of these products in a selected production facility, estimating production costs.

EXECUTING AGENCY	FORESTRY TIMBER & INDUSTRY CHAMBER ASSOCIATION OF COSTA RICA
COLLABORATING AGENCIES	CARBON REVENUE SERVICES S.A. (CRS)
DURATION	12 MONTHS
APPROXIMATE STARTING DATE	MARCH 2023

PROPOSED BUDGET AND OTHER FUNDING SOURCES	Source	Contribution in US$
	ITTO	**250,000**
	Government of Costa Rica	114,500
	TOTAL	**364,500**

PROJECT BRIEF

Costa Rica has an internationally recognized track record in forest and biodiversity conservation, as well as effective actions to combat climate change. This has allowed Costa Rica's forests to become a net sink for greenhouse gases since 2014. Despite the progress made in the conservation agenda, the country's forest sector faces several challenges to improve its performance, as the forest industry is currently underdeveloped and obsolete, requiring support in the development of innovation in production processes and forest products.

Nearly one million hectares of secondary forests in the country are threatened with degradation, because the available timber resources are hardly used, preventing society from fully appreciating the value of the available resource base. This proposal aims to provide tools to address these challenges, on the one hand, by contributing to reducing pressure on mature forests and, on the other, by improving the sustainable management and valuation of secondary forests through the production and marketing of high-value timber products from a variety of native species with the participation of local communities.

Importantly, most of these forests are owned by small producers, which can result in a more dynamic local economy and contribute to reducing the vulnerability of rural areas. Project activities will incorporate the gender action plan of the National REDD+ Strategy and the Gender Equality in Production Units Award (GIGUP) and will involve local communities, particularly women and youth, providing them with new opportunities for decent work and thus improving their livelihoods.

This project includes the following main activities: (i) Identify the potential of secondary forests, through structural and floristic analyses of 100 plots established throughout the country, as well as other sources; (ii) Select various native species for the potential development of high-value products for niche markets; (iii) Involve women and youth from local communities in the different processes of the value chain; (iv) Conduct a preliminary market survey of potential high-value products that can be manufactured in the country; (v) Design and manufacture prototypes of these products in a selected production facility, estimating production costs.

For the implementation of the proposed actions, local companies with extensive experience in secondary forest management and the development of high-commercial-value products have been encouraged to participate in and contribute to the different stages of the project.

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LIST OF ACRONYMS AND ABBREVIATIONS

AFE: Administración Forestal del Estado *(State Forestry Administration)*

CAF: Certificado de Abono Forestal *(Forestry Certificate)*

CIAGRO: Colegio de ingenieros agrónomos *(Society of Agricultural Engineers)*

CIF: Cost, Insurance and Freight

CODEFORSA: Comisión de Desarrollo Forestal de San Carlos *(Forest Development Commission of San Carlos)*

COMEX: Ministerio de Comercio Exterior de Costa Rica *(Ministry of Foreign Trade of Costa Rica)*

ERF: Estado de los Recursos Forestales *(Status of Forest Resources)*

FAO: Food and Agriculture Organization of the United Nations

FAOSTAT: FAO Statistical Portal

FOB: Free on Board

FONAFIFO: Fondo Nacional de Financiamiento Forestal *(National Fund for Forest Financing)*

FRA: Global Forest Resources Assessment (FAO)

FSC: Forest Stewardship Council

FTA: Free Trade Agreement(s)

FUNDECOR: Fundación para el Desarrollo de la Cordillera Volcánica Central *(Foundation for the Development of the Central Volcanic Range)*

GDP: Gross Domestic Product

ha: hectare(s) (10,000 m^2)

ITTO: International Tropical Timber Organization

km: kilometer

MEIC: Ministerio de Economía, Industria y Comercio de Costa Rica *(Ministry of Economics, Industry and Trade of Costa Rica)*

MINAE: Ministerio de Ambiente y Energía de Costa Rica *(Ministry of Environment and Energy of Costa Rica)*

m^3: cubic meter(s)

m^3(r): cubic meter(s) of roundwood equivalent

ONF: Oficina Nacional Forestal *(National Forestry Office)*

PES: Payment for Environmental Services

Pmt: Pulgada maderera Tica *(unit of measurement used in Costa Rica)*

SEMEC: Informe Anual Estadísticas SINAC *(SINAC Yearly Statistical Report)*

SETENA: Secretaría Técnica Ambiental *(Environmental Technical Secretariat)*

SFOs: Sustainable Forestry Operations

SINAC: Sistema Nacional de Áreas de Conservación *(National System of Conservation Areas)*

SOFO: The State of the World's Forests

TEC: Instituto Tecnológico de Costa Rica *(Institute of Technology of Costa Rica)*

UNA: Universidad Nacional *(National University)*

USD: US dollar(s)

UTN: Universidad Técnica Nacional *(National Technical University)*

MAP OF PROJECT AREA

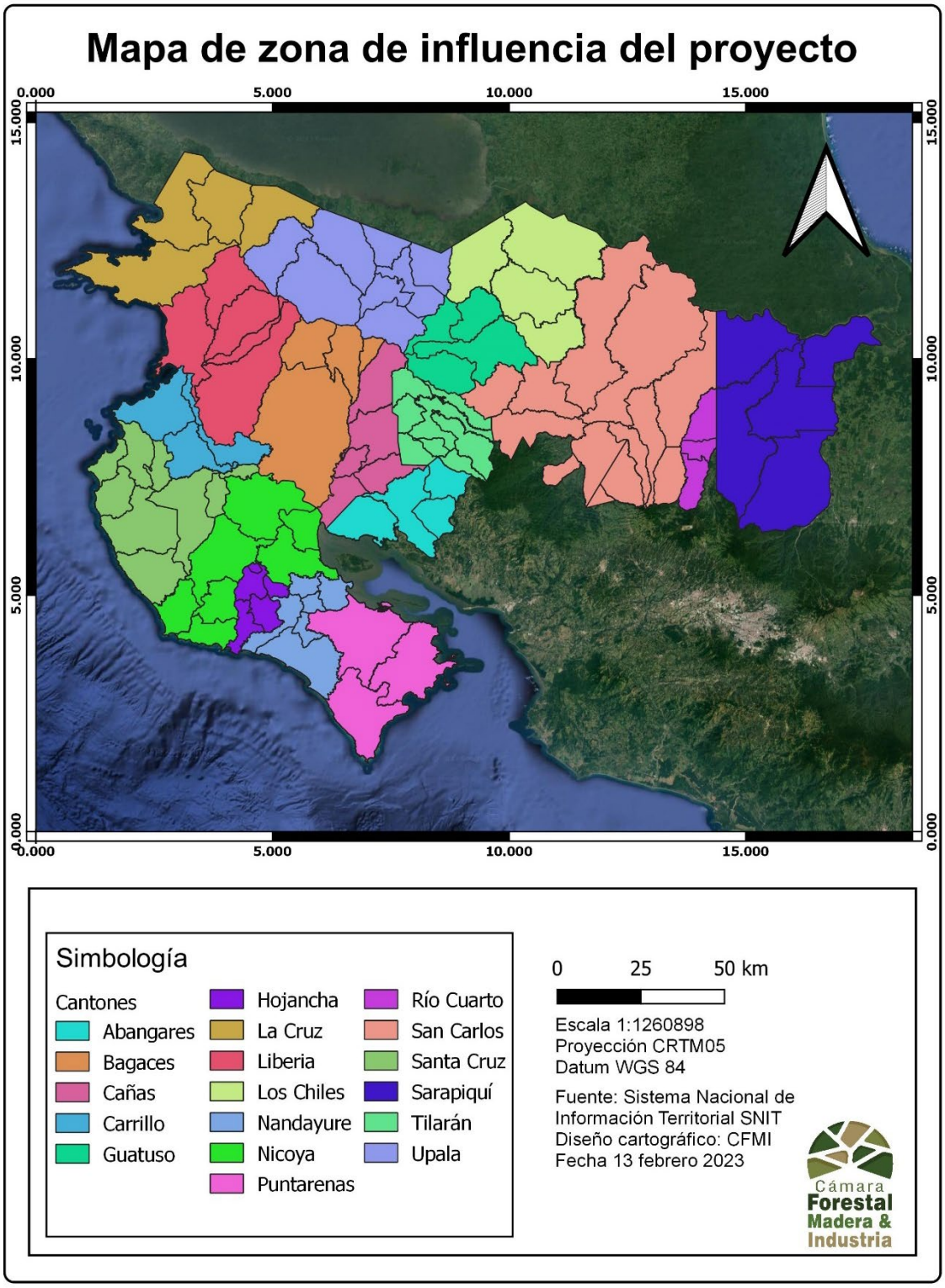


Figure 1. Map of project area, CFMI 2023.

Part 1. PROJECT CONTEXT

1.1 Origin

Secondary natural forests in Costa Rica account for 18.37% of the national territory, representing approximately 940,820.31 ha (INF 2014). These areas offer multiple environmental and social benefits such as water resource protection for human consumption, irrigation, industry, energy production, biodiversity protection, forest patch connectivity and community livelihoods.

More than 20 years ago, Costa Rica began efforts to study these ecosystems, which served as a basis for generating extensive knowledge on ecological aspects of this type of forest. Against this background, technical studies have been carried out to acquire in-depth knowledge of the growth dynamics and composition of these ecosystems, as well as to develop a regulatory framework to support their sustainable use.

This has led to the enactment of Decree No. 39952-MINAE "Sustainability standards for secondary forest management: principles, criteria and indicators, code of practice and procedural manual". Although the country has made progress in the secondary forest management agenda, there is still a weakness in the identification and study of new species with potential for the design of high-value-added products that can be marketed in specialized niche markets.

A project on ecology and silviculture of secondary forests in Costa Rica was implemented in 2018 with the objectives of identifying secondary forests, determining their development stages, selecting silvicultural strategies for different parts of the country, and transferring knowledge to forest sector stakeholders. As an ongoing process of study and improvement of enabling conditions, the Forestry Timber & Industry Chamber Association of Costa Rica (CFMI) has developed this project proposal, which is aimed at conducting an analysis of the floristic composition and structure of these forests so as to identify the species with the greatest available volume and with characteristics that will facilitate the development of new innovative, high-quality products with potential to access new markets.

A number of public and private partners with extensive experience in the management and use of native timber species and secondary forests have been considered for the implementation of this project. It is also vitally important to involve the academic sector, such as public universities and the National Forest Financing Fund (*Fondo Nacional de Financiamiento Forestal* – FONAFIFO), which has been instrumental in the successful submission of this project to the International Tropical Timber Organization (ITTO).

1.2 Relevance

The Costa Rican forest sector has managed to position itself globally thanks to its fight against climate change, the expansion of forest cover, and the implementation of public policies in favour of the environment; however, there are a number of factors limiting opportunities for producers, one of which is the excessive paperwork required for forest harvesting, especially at the forest site. This situation has created a social paradigm that jeopardizes the continued existence of secondary forests, mainly due to the devaluation of this ecosystem and the legal insecurity generated.

Based on these factors, this project has been formulated with the aim of increasing the value of secondary natural forests through their sustainable use, contributing to climate change mitigation and rural employment. It is vitally important that this initiative can generate capacities and opportunities for the country's rural population, especially youth and women, by empowering them in issues related to the management and sustainable use of secondary forests.

Thus, the project will contribute to the process of sustainable development, based on national policies and strategies, improving the capacity of the private sector to develop and produce innovative, high

quality timber products for domestic and international markets from sustainably managed secondary forests. In addition, it will promote the expansion and diversification of sustainable and legal sources by generating a range of high-quality products targeted at niche markets.

The research and development of innovative products through the definition of production processes and quality control, together with the industrial processing of timber products from secondary forests, actively contributes to employability in rural areas, creating new decent work opportunities for local and export markets. Furthermore, the increase in this coverage favours the restoration and rehabilitation of degraded forest lands with the participation of local communities, particularly women and young people, a contribution that adds value to a strategy for the marketing of high-value timber products.

1.2.1 Conformity with ITTO objectives and priorities

The project is consistent with ITTO's overall objective (as set out in Article 1 of the ITTA, 2006), namely, to promote the expansion and diversification of international trade in tropical timber from sustainably managed and legally harvested forests and to promote the sustainable management of tropical timber producing forests, as described below:

- Contributing to sustainable development and to poverty alleviation by generating rural employment through the secondary forest value chain (objective c);
- Enhancing the capacity of secondary forest owners and processors, as well as public institutions, to implement strategies for achieving exports of timber products coming from sustainably managed sources (objective d);
- Promoting improved understanding of conditions in national and international markets, including factors affecting market access, consumer preferences and prices, and conditions leading to prices that reflect the costs of sustainable secondary forest management (objective e);
- Promoting and supporting knowledge of secondary forest structure and composition, with a view to improving forest management and efficiency in the utilization of available species, as well as increasing the capacity to conserve and enhance other forest values in timber producing secondary forests (objective f);
- Improving market intelligence on innovative products, including the development of forest legality requirements, particularly for markets with established regulations for importing legally sourced and deforestation-free products (objective h);
- Promoting increased and further processing of tropical timber from sustainably managed secondary forests (objective i).

In addition, this project is consistent with the priorities established in the ITTO Strategic Action Plan 2022-2026. The main aspects considered in the proposal are as follows:

- Promote good governance and policy frameworks to enhance legal and sustainable forest product supply chains and related trade (Strategic priority 1)
- Increase the contribution of secondary forests to national and local economies and resilient livelihoods, including through the further processing and trade of innovative timber products (Strategic priority 2)
- Reduce secondary forest deforestation and degradation by enhancing their value and sustainable use, as well as through the marketing of innovative products (Strategic priority 3)
- Improve the quality and availability of information on innovative timber product markets, supply chains and international trade, including challenges and opportunities related to market access, expansion and diversification (Strategic priority 4)

All of this includes the contribution of sustainably produced timber products to climate change mitigation and the generation of rural employment with the involvement of women and youth.

1.2.2 Relevance to submitting country´s policies

The most important instrument of Costa Rica's national planning is the National Development Plan, where the following objective has been included in the Strategic Area on Infrastructure, Mobility and Land Use Planning, to which the project will directly contribute, in particular by advancing towards carbon neutrality with the broad contribution of the forest sector and other key sectors such as public transport, agriculture and livestock production, and by promoting the involvement of local governments in climate change mitigation.

Likewise, project activities are framed within the National Decarbonization Strategy, in focus area 10 - objective 10.1, which states "10.1 Implement the REDD+ Strategy to promote the reduction of emissions from deforestation, avoided degradation and conservation of forests and ecosystems, both in rural and urban areas". At the level of objectives that can be impacted by REDD+, it is proposed to stop deforestation and rehabilitate degraded lands through forest restoration and reforestation.

In addition, Costa Rica's Nationally Determined Contribution (NDC) proposes the need to maintain and increase forest cover as an element of climate change mitigation and adaptation. The country also has a National REDD+ Strategy that establishes, *inter alia*, that one of the drivers of deforestation is the lack of an efficient and successful forest sector in the production, industrialization and marketing of timber products.

The Strategy also has two relevant policies that are considered in project activities: Policy 3: Incentives for conservation and sustainable forest management; and Policy 4: Restoration of forest landscapes and ecosystems, including, more specifically, Measure 3.3.1 Promotion throughout the wood and forest products value chain; and Measure 4.1.1 Restoration in degraded watersheds.

1.3 Target area

1.3.1 Geographic location

The project will focus on two regions of Costa Rica, the Chorotega Region and the Northern Huetar Region.

1.3.1.1 Chorotega Region

The study area comprises the province of Guanacaste and the Nicoya Peninsula, located to the west of the country. The main economic activities in this region are centered on tourism, agriculture and livestock production, and more recently, the real estate sector.

The Guanacaste area is dominated by the presence of tropical dry forests, an ecosystem vulnerable to droughts, temperature rises and other consequences of climate change. These forests are home to endemic biodiversity and sites of conservation significance (RAMSAR, CITES), and hold countless attractions for national and international tourism.

1.3.1.2 Huetar Norte Region

The North Huetar area includes the cantons of Upala, Los Chiles, Guatuso, San Carlos, Río Cuarto (all belonging to the province of Alajuela) and Sarapiquí (belonging to the province of Heredia). It is recognized for being a region with significant agricultural productivity as well as many areas rich in natural resources to support tourism development, which are the two main production activities of the region.

The North Huetar region is one of the areas with the highest number of forest plantations in the country, covering about 3% of the region. About 10% of the area is covered by forests, which have been recognized for their production potential.

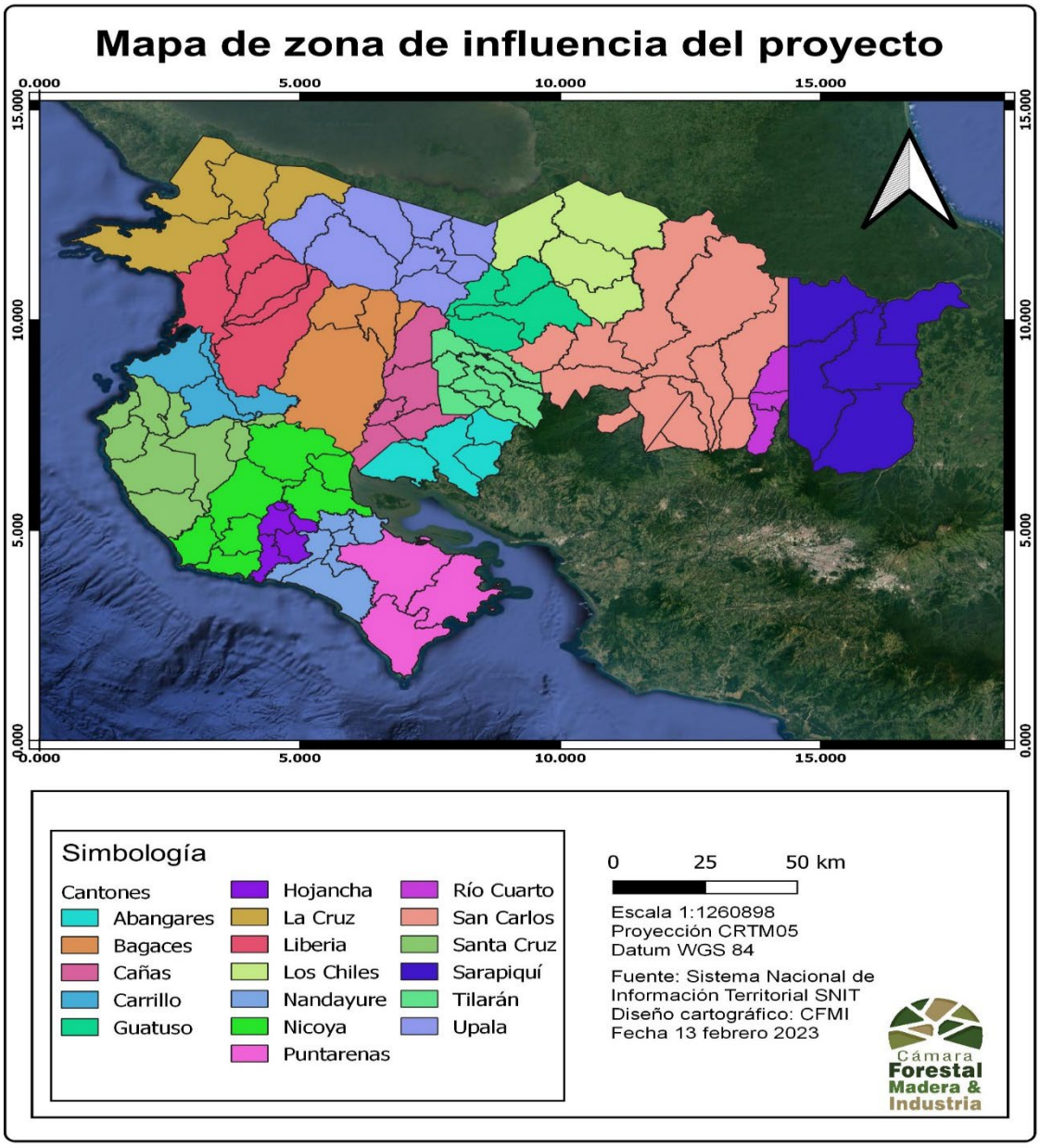


Figure 2. Project target area

1.3.2 Social, cultural, economic and environmental aspects

The project will promote greater participation of women and enhance their role as key stakeholders, which is in line with ITTO's Policy Guidelines on Gender Equality and Empowering Women.

Its design is aligned and consistent with the principles and standards of ITTO's Environmental and Social Management Guidelines, especially those related to the forest industry, such as Environmental and Social Standard - ESS 7: Forest product production and processing.

1.3.2.1 Social, cultural, economic and environmental aspects in the Chorotega Region

In the Chorotega Region, the conditions of the population have improved at a slower pace, maintaining limited access to universities and technical education, with a graduation rate of less than 20% at this level. Likewise, this low level of education has led to manpower migration from the central area of the country, affecting indigenous professionals in the target area.

Furthermore, the level of household income has increased over time, but despite this, inequality among people still persists, with some of the population earning ten times more than the poorest segment of the population. Similarly, although the unemployment rate is 7.5%, for the sector of the population with the lowest income it is 15 percentage points higher. This more vulnerable population segment is involved in activities with little vitality or with marked seasonality, such as tourism, which causes them to remain unemployed for nine months of the year in some cases.

Because the area is used for agricultural activities, its environmental quality is low, coupled with medium water stress, which is high in cantons such as Hojancha and Nandayure, resulting in limited resource availability.

1.3.2.2 Social, cultural, economic and environmental aspects in the North Huetar Region

The North Huetar Region has cantons with low or very low human development indexes, suggesting low-income levels in the area. The low productive diversification and low qualification levels of the labor force limits the possibility of working in other higher-income or higher-salary activities.

There are a number of aspects impacting the North Huetar region, including flooding, degradation of border ecosystems, increased poverty, soil degradation and water contamination due to monocultures, and overexploitation of natural resources, which are all aspects that worsen over time, causing a loss of quality of life for the local communities.

The region is characterized by the participation of the community in different forms of organization. There are approximately 50 active organizations in the productive sector, belonging to different agricultural chains and receiving assistance from public institutions.

1.4 Expected outcomes at project completion

The following outcomes are expected to be achieved:

- Increased commercial value of secondary forests as a source of income for small landholders.
- Development of new timber products and identification of market niches.
- Increased involvement of women and youth in the forest value chain.
- Improvement of local economy.

- Use of processing, innovation and development technologies in industrial processes.
- Reduction of time, costs and processes in the design and manufacture of prototypes.

As previously stated, the project's expected outcomes will have a high impact on rural areas and their population. It is expected that at the end of the project, capacities will have been built to improve the livelihoods of families and increase productive networks; the sustainability of outcomes over time must be accompanied by business policies and the participation of local governments and the private sector.

Part 2. PROJECT RATIONALE AND OBJECTIVES

2.1 Rationale

This project aims to contribute to rural development and climate change mitigation through the management and sustainable use of secondary forests. This ecosystem represents nearly one million hectares of Costa Rican territory and has great potential for the production of timber products, thus providing development opportunities through high-value production for certain market niches.

In addition, the project represents an opportunity to identify the potential value of secondary forests in the Chorotega and North Huetar Regions, as well as the associated value chain. It also allows for the incorporation of strategies involving women and youth from rural communities in the processes of forest management, design, manufacturing, marketing and sale of identified products and services, improving their livelihoods.

The production of high-quality product prototypes will offer small and medium-sized producers the opportunity to benefit from technological change and process innovation. The following elements are important to achieve these objectives: private sector participation as a facilitator of innovation and technology, public sector participation in the development of applied research, and institutional participation to facilitate project management and implementation processes.

2.1.1 Institutional set-up and organizational issues

The country has a robust institutional framework with the Ministry of Environment and Energy (MINAE) as the governing body. Actions for the management of forest resources are undertaken through the State Forest Administration (AFE) attached to the National System of Conservation Areas (SINAC) in collaboration with FONAFIFO and the National Forestry Office (ONF). These institutional stakeholders promote different agendas that require an integrated strategy for forest planning, management and industry projects in the country, linking them to the academic sector through the country's public and private universities.

At present, the private forest sector is not sufficiently capable of adapting to the changing environment of local and international markets. In this context, the leadership of CFMI in conjunction with other institutional stakeholders becomes relevant, generating a cluster model that integrates the State, the private sector and academia for the transition to a model focused on innovation, the participation of local stakeholders and the implementation of technology. All of this makes it possible to determine an organizational structure that will facilitate the full implementation of the project.

To strengthen its technical capacity, CFMI has signed a Consortium Agreement with the consulting firm "Carbon Revenue Services S.A." (CRS), for the implementation of projects that require experts in different areas, such as forest management and administration, forest policies and governance, forest harvesting, timber industry, commercialization and marketing.

Thus, CRS is proposed to be subcontracted for the implementation of some of the activities under the supervision of CFMI.

CRS has experts with extensive experience in forestry, forest investment funds, forest industry, wood products commercialization, marketing and climate change.

2.1.2 Stakeholder analysis

Table 1. Stakeholder analysis

Stakeholder group	Characteristics	Problems, needs, interests	Strengths	Involvement in the project
Primary stakeholders				
Forestry Timber & Industry Chamber *(Cámara Forestal Madera e Idustria -CFMI)*	Trade association representing the private forest sector in Costa Rica.	Strengthening its operational capabilities and leadership role in the development of the private forest sector.	Backing of 30 member companies, including % representation of forest, plantations, international experts, honorary members	Coordination and counterpart contribution
Carbon Revenue Services S.A. (CRS)	Consultancy firm specialized in the forest sector and climate change.	Providing technical support to CFMI	A team of experts with extensive experience	Collaborating agency
Sectoral institutions	FONAFIFO, ONF, SINAC, MINAE, CIAGRO.	Improving forest governance	National coverage and financing possibilities	Support and uptake of project results
Private sector	Small and medium-sized producers, industrialists, organizations.	Lack of associations, financial and human capital, technological improvement and management updating.	Resource managers and owners	Beneficiaries and counterpart
Communities	Water Committee *(Liga del Agua)* (Guanacaste), Development Associations, Management associations of communal water supply and sewerage systems *(ASADAS)* in Costa Rica, other community organizations.	No comprehensive vision of landscape management, high levels of unemployment and low levels of schooling, which generates migration to the Greater Metropolitan Area.	Manpower, networking capacity	Beneficiaries
Secondary stakeholders				
Municipalities	Local governments.	Poor capacity to implement actions aimed at improving livelihoods through forest resources; faced with challenges in addressing vulnerability to climate change.	Supporting legislation for the appropriate management of land use planning.	Beneficiaries
Academia	UNA, TEC, UTN, UCR, EARTH, CATIE, private agencies (Veritas, Invenio).	Curriculum updating and research relevance	Intellectual capacity with financial support	Beneficiaries and counterpart
Complementary institutions	MEIC, PROCOMER, COMEX, MAG, CFIA, CACR	Lack of integration of the forest sector in the policies and strategies of each institution due to weak sector involvement.	Support to enabling conditions, national and international presence	Support and uptake of project results

2.1.3 Problem analysis

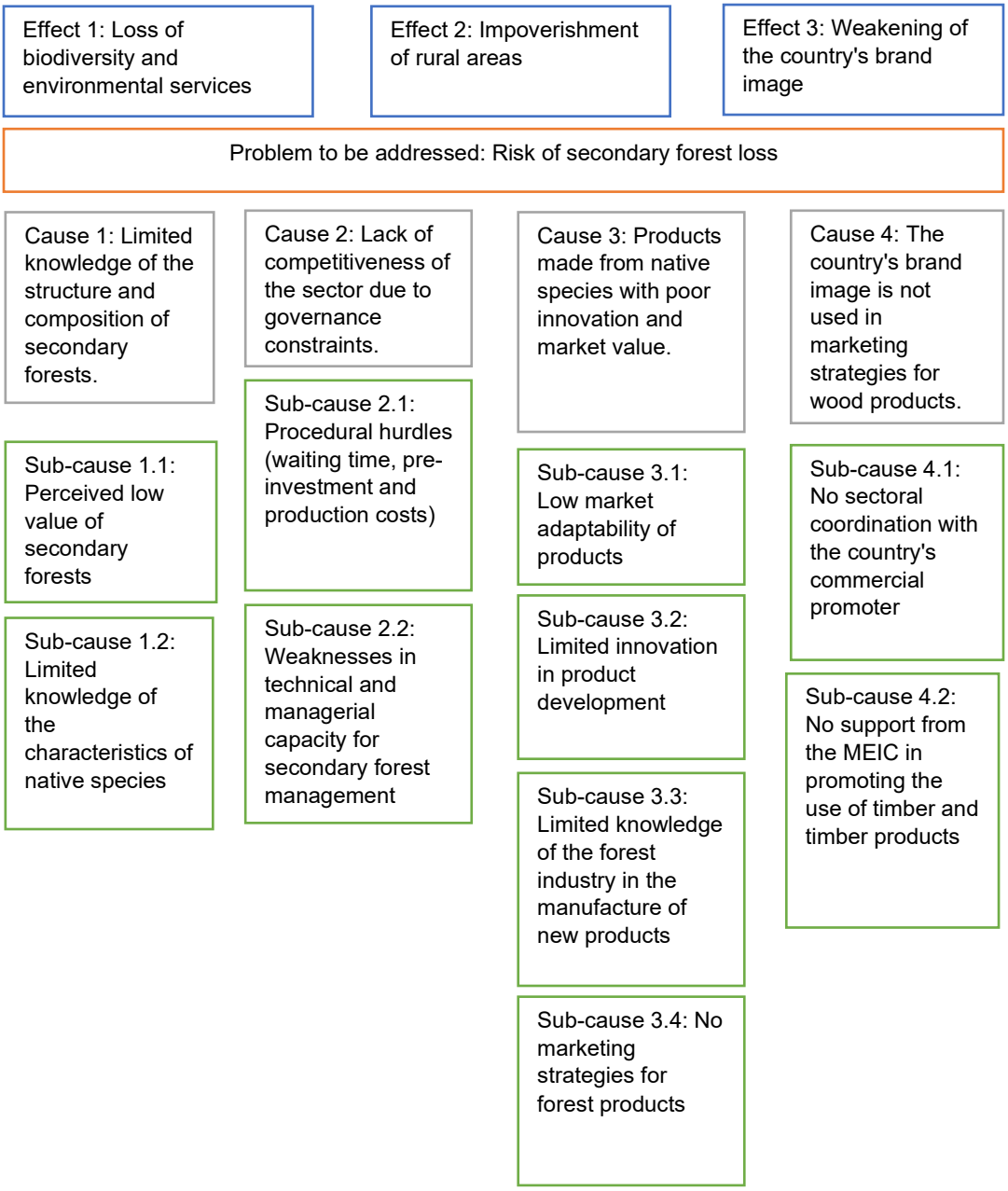


Figure 3. Problem Tree, CFMI 2023.

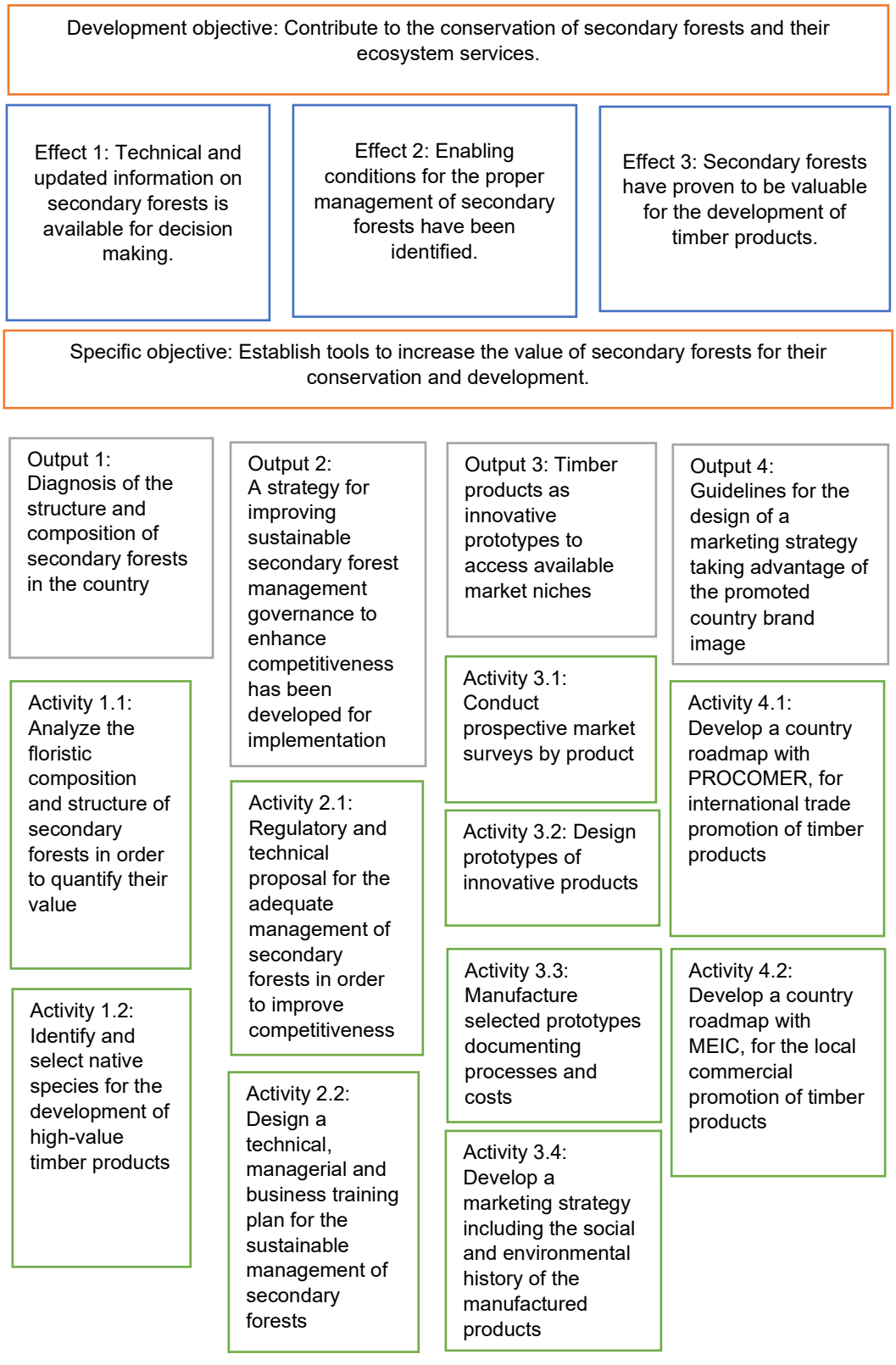


Figure 4. Solutions Tree CFMI 2023

2.1.4 Logical framework matrix

Table 2. Project logical framework matrix 2023

Intervention strategy	Measurable indicators	Means of verification	Key assumptions
Development objective Contribute to the conservation of secondary forests and their ecosystem services	***Impact indicators*** By the end of the project, CFIM is generating proposals for changes to improve secondary forest management policy	A secondary forest management policy proposal document has been submitted to the MINAE	***Sustainability assumptions*** Positive response from authorities and other stakeholders
Specific objective: Establish tools to increase the value of secondary forests for their conservation and development	***Outcome indicators*** At least two companies begin actions for the sustainable management of their secondary forests	Statements from companies to initiate actions	***Development scenario linking the specific objective with the development objective*** Commitment of trade associations, companies, as well as secondary forest owners. Willingness of the government to initiate the proposed changes.
Outputs	***Output indicators***	***Sources and methods***	***Operational assumptions linking outputs with specific objective***
1. Diagnosis of the structure and composition of secondary forests in the country	By the second half of 2023, a technically sound document will be available systematizing data from 100 plots of secondary forest already established	The document has been submitted and disseminated to relevant stakeholders	The database for established plots is available
2. A strategy for improving sustainable secondary forest management governance to enhance competitiveness has been developed for implementation	A strategy proposal is available by the end of 2023	The strategy document has been agreed upon by CFIM members and other stakeholders and submitted to MINAE	There is constructive participation by the different relevant stakeholders
3. Timber products as innovative prototypes to access available market niches	By the first quarter of 2024, at least three innovative wood products have been designed and manufactured	The outputs have been presented at a public event, with the participation of key stakeholders	Raw materials and manufacturing equipment are available and economically viable
4. Guidelines for the design of a marketing strategy taking advantage of the promoted country brand image	By the first quarter of 2024, guidelines for the formulation of a marketing strategy are available	The document has been submitted to and approved by CFIM's Board of Directors	PROCOMER and MEIC are open to a marketing initiative

2.2 Objectives

2.2.1 Development objective and impact indicators

Table 3. Development objective and impact indicators

Objective	Impact indicators
Development objective: Contribute to the conservation of secondary forests and their ecosystem services	Solutions are proposed for increasing the value of secondary forests through their sustainable use, contributing to climate change mitigation and generating rural employment, in a post-COVID context.
	A strategy is agreed upon to benefit rural communities, forest landowners and adjacent communities through options for the use of environmental goods and services from secondary forests.
	Scientific knowledge is obtained on the availability of raw materials from secondary forests, which strengthens local communities, generating new employment options for women and youth, as well as contributing to community development.
	There is a verified awareness by government, private sector and civil society of the critical role of sustainably managed secondary tropical forests in contributing to the three pillars of sustainability (economic, social and environmental), including the achievement of SDGs and other global forest-related goals and commitments.
	Evidence of the potential to increase capacity for the manufacture of timber products from legal and sustainable sources, facilitating product traceability and enabling due diligence procedures.
	Improved information on national and international markets for timber products that meet forest legality and sustainability requirements, particularly for markets with established regulations on legality, sustainability and deforestation-free processes.

2.2.2 Specific objective and outcome indicators

Table 4. Specific objective and outcome indicators

Objective	Outcome indicators
Specific objective: Establish tools to increase the value of secondary forests for their conservation and development	Options for improving the living conditions of the population linked to the secondary forest value chain are proposed.
	Suitable species have been identified for the manufacture of innovative products of adequate quality and volume from secondary forests, and proposals have been submitted to improve their management.
	Enabling conditions have been identified for the development of a proposal to improve the regulatory framework for the proper management of secondary forests by MINAE, SINAC, FONAFIFO and others in the first six months of the project.
	Availability of brochures of the proposed products showing positive social and environmental aspects, including carbon footprint.
	Availability of roadmaps for the national and international markets of products from secondary forests as from the second semester of the project.

Part 3. DESCRIPTION OF PROJECT INTERVENTIONS

3.1 Outputs and activities

3.1.1 Outputs

The following outputs are expected to be produced in the project:

- Output 1: Diagnosis of the structure and composition of secondary forests in the country.
- Output 2: A strategy for improving sustainable secondary forest management governance to enhance competitiveness has been developed for implementation.
- Output 3: Timber products as innovative prototypes to access available market niches.
- Output 4: Guidelines for the design of a marketing strategy taking advantage of the promoted country brand image.

A cross-cutting intergenerational and gender approach will be used in the production of each output with the aim of generating opportunities for the most vulnerable communities in the project's target area.

3.1.2 Activities

A number of activities and sub-activities will be implemented for the production of each output to ensure the success of the project. These activities are listed below:

For Output 1: Diagnosis of the structure and composition of secondary forests in the country

Activity 1.1: Analyze the floristic composition and structure of secondary forests: this activity will be carried out through a statistical analysis of the 100 secondary forest plots available in the country. This analysis will include the importance value index (IVI) of forest species, basal area, frequency, dominance, species list, commercial volume and other indices of ecological diversity. In addition, a complementary geospatial analysis will be developed to biogeographically characterize secondary forests and complement the forest landscape analysis.

Activity 1.2: Identify and select native species for the development of high-value timber products: based on the results of activity 1.1, the species with the greatest potential and availability for the supply of raw materials from secondary forests will be prioritized; in addition, information will be compiled on the cultural use of selected species by the local population, the local forest industry and other relevant stakeholders.

For Output 2: A strategy for improving sustainable secondary forest management governance to enhance competitiveness has been developed for implementation

Activity 2.1: Regulatory and technical proposal for the adequate management of secondary forests: a review of the legislation, regulations and standards related to secondary forests will be carried out based on secondary sources and interviews with experts in the field; the results will be used to identify barriers and develop a proposal to improve the regulatory framework. In addition, a workshop will be held to share the proposal with key stakeholders.

Activity 2.2: Design a technical, managerial and business training plan for the sustainable management of secondary forests: based on a consultation process, the training needs of project beneficiaries and key stakeholders in the technical, managerial and business areas will be identified. Based on the needs identified, three training plans will be developed.

For Output 3: Timber products as innovative prototypes to access available market niches.

Activity 3.1: Conduct prospective market surveys by product: market surveys will be conducted for the timber products to be designed and manufactured based on the species selected in activity 1.2 and on identified (local and international) markets, considering market trends, design, transport logistics, market size, export requirements, sales and distribution, among others.

Activity 3.2: Design prototypes of innovative products: based on the results of activities 1.2 and 3.1, prototypes of innovative products of the selected species will be designed; to this end, laboratory farms will be selected in the project target area.

Activity 3.3: Manufacture selected prototypes: based on the results of activity 3.2, product prototypes will be manufactured in the selected manufacturing laboratory.

Activity 3.4: Outline the social and environmental history of manufactured products: Based on the results of activities 1.2, 3.1, 3.2 and 3.3, the social and environmental history of manufactured products will be systematized and prepared, highlighting the marketing approach. In addition, a sustainability label will be proposed for manufactured products, with applicability to other timber products.

For Output 4: Guidelines for the design of a marketing strategy taking advantage of the promoted country brand image

Activity 4.1: Develop a country roadmap with PROCOMER, for international trade promotion of timber products: based on the results of activities 2.1, 2.2, 3.1, 3.2, 3.3 and 3.4, a country roadmap for timber product access to international markets will be established.

Activity 4.2: Develop a country roadmap with MEIC, for the local commercial promotion of timber products: based on the results of activities 2.1, 2.2, 3.1, 3.2, 3.3 and 3.4, a country roadmap for timber product access to national market niches will be established.

In addition to these activities, project actions will also include administrative and coordination processes such as the preparation and delivery of reports, organization of workshops, meetings of the project steering committee, as well as meetings with counterparts and follow-up with ITTO.

3.2 Implementation approaches and methods

The project will be implemented in cooperation with stakeholders and beneficiaries who are directly or indirectly involved in the sustainable management and valuation of secondary forests, as well as in the manufacture and marketing of innovative timber products. A participatory approach, including both men and women, as well as youth, will be ensured to achieve the proposed objective. Participation in the implementation of activities will be promoted through a shared vision aimed at raising the level of competitiveness of secondary forest owners and the timber product industry, to favour rural development, natural resource conservation, and their contribution to climate change mitigation.

The project will have a clear gender equity approach, as a cross-cutting aspect of all project activities, to ensure the equal participation of men and women throughout the production chain from forest management, timber harvesting, industrialization and marketing of products. In each activity, the project will ensure that gender, forest and forest industry issues are given due attention.

In addition, a participatory approach will be used during the different stages of the project through consultations with local stakeholders, producers and timber processors to determine training needs in the management, conservation and restoration of secondary forests and their value chain.

The project will consider technical studies on the management of secondary forests, complemented by participatory consultation processes, while strategic research on national and international markets will be carried out through interviews and secondary sources, in strategic partnership with PROCOMER and MEIC. A participatory consultation process with timber traders, consumers and processors, CFIA, INA and timber research centers is also foreseen to identify the most suitable designs for the markets.

Cultural aspects will be taken into consideration, with a gender focus, as well as the environmental and intergenerational benefits and contribution to climate change mitigation, through interviews with stakeholders involved in the management and restoration of secondary forests.

For the implementation of the different activities, the Forestry Timber & Industry Chamber has established a Consortium agreement with the consulting firm Carbon Revenue Services S.A. (CRS), which will act as a "collaborating agency" and which has professionals with extensive experience in forest management and administration, GIS techniques, forest policy, governance, training, timber product design, commercialization and marketing.

3.3 Work plan

Table 5. Project work plan

Outputs/Activities	Responsible party	Month											
		1	2	3	4	5	6	7	8	9	10	11	12
Output 1: Diagnosis of the structure and composition of secondary forests in the country	Coordinator												
Activity 1.1: Analyze the floristic composition and structure of secondary forests in order to quantify their value	CRS												
Activity 1.2: Identify and select native species for the development of high-value timber products	CRS												
Output 2: A strategy for improving sustainable secondary forest management governance to enhance competitiveness has been developed for implementation	Coordinator												
Activity 2.1: Regulatory and technical proposal for the adequate management of secondary forests in order to improve competitiveness	CRS												
Activity 2.2: Design a technical, managerial and business training plan for the sustainable management of secondary forests	CRS												
Output 3: Timber products as innovative prototypes to access available market niches	Coordinator												
Activity 3.1: Conduct prospective market surveys by product	CRS												
Activity 3.2: Design prototypes of innovative products	CRS												
Activity 3.3: Manufacture selected prototypes documenting processes and costs	CRS												
Activity 3.4: Develop a marketing strategy including the social and environmental history of the manufactured products	CRS												
Output 4: Guidelines for the design of a marketing strategy taking advantage of the promoted country brand image	Coordinator												
Activity 4.1: Develop a country roadmap with PROCOMER, for international trade promotion of wood products	CRS												
Activity 4.2: Develop a country roadmap with MEIC, for the local commercial promotion of wood products	CRS												

3.4 Budget

3.4.1 Master budget schedule

Table 6. Project master budget

Outputs/Activities	Description	Budget component (US$)	Quantity	Unit	Unit cost (US$)	Total cost (US$)	Counterpart
Output 1: Diagnosis of the structure and composition of secondary forests in the country							
Activity 1.1: Analyze the floristic composition and structure of secondary forests in order to quantify their value							
	Forester.	21.2	30	Day	400	12 000	
	Forester/GIS Specialist	21.3	20	Day	400	8 000	
	Local transport	33,1	2	Month	300	600	
	DSA	31,1	5	Day	120	600	
	Satellite images	44,3	100	copy	20	2 000	
Activity 1.2: Identify and select native species for the development of high-value timber products							
	Forester	21.2	22	Day	400	8 800	
	Timber Industry Specialist	21.4	22	Day	400	8 800	
	Local transport	33,1	2	Month	300	600	
	DSA	31,1	5	Day	120	600	
Output 2: A strategy for improving sustainable secondary forest management governance to enhance competitiveness has been developed for implementation							
Activity 2.1: Regulatory and technical proposal for the adequate management of secondary forests in order to improve competitiveness							
	Forest Policy Specialist	21.6	25	Day	400	10 000	
	Forester	21.2	10	Day	400	4 000	
	Local transport	33,1	2	Month	300	600	
	Rental of venue for workshop	61	2	Day	200	400	
	DSA	31,1	40	Day	50	2 000	
	Vehicle rental	43	7	Day	120	840	
	Fuel	52	50	Liter	2	100	
	Lunch and coffee break	61	40	Person	30	1 200	
Activity 2.2: Design a technical, managerial and business training plan for the sustainable management of secondary forests							
	Forester	21.2	18	Day	400	7 200	
	Timber Industry Specialist	21.4	12	Day	400	4 800	
	Forest Policy Specialist	21.6	15	Day	400	6 000	
	Local transport	33,1	2	Month	300	600	
	Rental of venue for workshop	61	2	Day	200	400	
	DSA	31,1	40	Day	120	4 800	
	Vehicle rental	43	10	Day	120	1 200	
	Fuel	52	60	Liter	2	120	
	Lunch and coffee break	61	40	Person	30	1 200	

…Table 7 (cont.) – Master budget

Outputs/Activities	Description	Budget component (US$)	Quantity	Unit	Unit cost (US$)	Total cost (US$)	Counterpart
Output 3: Timber products as innovative prototypes to access available market niches							
Activity 3.1: Conduct prospective market surveys by product							
	Marketing Specialist	21.5	18	Day	400	7 200	
	Timber Industry Specialist	21.4	6	Day	400	2 400	
	Forester	21.2	6	Day	400	2 400	
	Local transport	33,1	2	Month	300	600	
	Vehicle rental	43	10	Day	120	1 200	
	Fuel	52	60	Liter	2	120	
	DSA	31,1	15	Day	120	1 800	
Activity 3.2: Design prototypes of innovative products							
	Timber Industry Specialist	21.4	18	Day	400	7 200	
	Marketing Specialist	21.5	22	Day	400	8 800	
	Forester	21.2	10	Day	400	4 000	
	Local transport	33,1	2	Month	300	600	
Activity 3.3: Manufacture selected prototypes documenting processes and costs							
	Timber Industry Specialist	21.4	16	Day	400	6 400	
	Vehicle rental	43	12	Day	120	1 440	
	Fuel	52	80	Liter	2	160	
	Raw materials and inputs	22.1	1	Unit			7 000
	Transport of products	22.2	1	Unit			5 000
	Equipment maintenance	22.3	1	Unit			22 000
	Timber cutting at forest site	22.4	1	Unit			5 000
	Fuel	22.5	5 200	Liter	2		10 400
	Use of laboratory equipment	22.6	1	Unit			35 000
	Laboratory staff	22.7	50	Day	500		25 000
	Local transport	22.8	6	Month	250		1 500
	DSA	22.9	30	Day	120		3 600
Activity 3.4: Develop a marketing strategy including the social and environmental history of the manufactured products							
	Marketing Specialist	21.5	17	Day	400	6 800	
	Forester	21.2	10	Day	400	4 000	
	Graphic Designer	21.1	15	Day	200	3 000	
	Local transport	33,1	2	Month	300	600	

…Table 7 (cont.) – Master budget

Outputs/Activities	Description	Budget component (US$)	Quantity	Unit	Unit cost (US$)	Total cost (US$)	Counterpart
Output 4: Guidelines for the design of a marketing strategy taking advantage of the promoted country brand image							
Activity 4.1: Develop a country roadmap with PROCOMER, for international trade promotion of wood products							
	Marketing Specialist	21.5	6	Day	400	2 400	
	Timber Industry Specialist	21.4	6	Day	400	2 400	
	Forester	21.2	6	Day	400	2 400	
	Forest Policy Specialist	21.6	6	Day	400	2 400	
	Local transport	33,1	1	Month	300	300	
	Lunch and coffee break	61	40	Person	40	1 600	
Activity 4.2: Develop a country roadmap with MEIC, for the local commercial promotion of wood products							
	Marketing Specialist	21.5	12	Day	400	4 800	
	Timber Industry Specialist	21.4	12	Day	400	4 800	
	Forester	21.2	12	Day	400	4 800	
	Forest Policy Specialist	21.6	12	Day	400	4 800	
	Local transport	33,1	1	Month	300	300	
	Lunch and coffee break	61	60	Person	40	2 400	
Office equipment							
	Computer	44,1	2	Unit	1 200	2 400	
	Laptop	44,1	2	Unit	1 000	2 000	
	Communication equipment (mobile)	44	2	Unit	400	800	
	Projector	44	1	Unit	600	600	
	Portable screen	44	1	Unit	300	300	
	Flat screen (TV)	44	1	Unit	1 500	1 500	
	A4 Color printer	44	1	Unit	400	400	
	A4 Black and white printer	44	1	Unit	200	200	
Office supplies							
	Stationery, licenses, ink	54	1	Unit	1 505	1 505	
Sub-total						**189 285**	**114 500**
Fellowships and training		15				18 929	
Sub-total						**208 214**	
ITTO monitoring and evaluation						10 000	
Project audit funds to be retained by ITTO						5 000	
ITTO programme support cost						26 786	
Total						**250 000**	**114 500**

3.4.2 Consolidated budget by component

Table 7. Consolidated budget by component

Item	Description	Total Cost (US$)	ITTO (US$)	Counterpart (US$)
15	**Fellowships and training**	**18 929**	**18 929**	
20	**Sub-contracts**	**265 100**	**150 600**	**114 500**
21.1	Graphic designer	3 000	3 000	
21.2	Forester	49 600	49 600	
21.3	Forester/GIS Specialist	8 000	8 000	
21.4	Timber Industry Specialist	36 800	36 800	
21.5	Marketing Specialist	30 000	30 000	
21.6	Forest Policy Specialist	23 200	23 200	
22.1	Raw materials and inputs	7 000		7 000
22.2	Transport of products	5 000		5 000
22.3	Equipment maintenance	22 000		22 000
22.4	Timber cutting at forest site	5 000		5 000
22.5	Fuel	10 400		10 400
22.6	Use of laboratory equipment	35 000		35 000
22.7	Laboratory staff	25 000		25 000
22.8	Local transport	1 500		1 500
22.9	DSA	3 600		3 600
30	**Travel**	**14600**	**14 600**	
31,1	DSA	9 800	9 800	
33,1	Local transport	4 800	4 800	
40	**Capital items**	**14 880**	**14 880**	
43	Vehicle rental	4 680	4 680	
44	Office equipment	10 200	10 200	
50	**Consumable items**	**2 005**	**2 005**	
52	Fuel	500	500	
54	Stationery, licenses, ink	1 505	1 505	
60	**Miscellaneous**	**12 200**	**12 200**	
61	Sundry	7 200	7 200	
62	Auditing	5 000	5 000	
Sub-total		**327 714**	**213 214**	**114 500**
80	**Project monitoring and administration**			
81	ITTO monitoring and review	10 000	10 000	
83	ITTO programme support costs	26 786	26 786	
Sub-total			**36 786**	
Total		**364 500**	**250 000**	**114 500**

3.4.3 ITTO budget by component

Table 8. ITTO budget by component

Item	Description	ITTO (US$)
15	**Fellowships and training**	**18 929**
20	**Sub-contracts**	**150 600**
21.1	Graphic designer	3 000
21.2	Forester	49 600
21.3	Forester/GIS Specialist	8 000
21.4	Timber Industry Specialist	36 800
21.5	Marketing Specialist	30 000
21.6	Forest Policy Specialist	23 200
22.1	Raw materials and inputs	
22.2	Transport of products	
22.3	Equipment maintenance	
22.4	Timber cutting at forest site	
22.5	Fuel	
22.6	Use of laboratory equipment	
22.7	Laboratory staff	
22.8	Local transport	
22.9	DSA	
30	**Travel**	**14 600**
31,1	DSA	9 800
33,1	Local transport	4 800
40	**Capital items**	**14 880**
43	Vehicle rental	4 680
44	Office equipment	10 200
50	**Consumable items**	**2 005**
52	Fuel	500
54	Stationery, licenses, ink	1 505
60	**Miscellaneous**	**12 200**
61	Sundry	7 200
62	Auditing	5 000
Sub-total		**213 214**
80	**Project monitoring and administration**	
81	ITTO monitoring and review	10 000
83	ITTO programme support costs	26 786
Sub-total		**36 786**
Total		**250 000**

3.4.4 Executing agency budget

Table 9. Executing agency budget

Item	Description	Counterpart (US$)
15	**Fellowships and training**	
20	**Sub-contracts**	**114 500**
21.1	Graphic designer	
21.2	Forester	
21.3	Forester/GIS Specialist	
21.4	Timber Industry Specialist	
21.5	Marketing Specialist	
21.6	Forest Policy Specialist	
22.1	Raw materials and inputs	7000
22.2	Transport of products	5000
22.3	Equipment maintenance	22000
22.4	Timber cutting at forest site	5000
22.5	Fuel	10400
22.6	Use of laboratory equipment	35000
22.7	Laboratory staff	25000
22.8	Local transport	1500
22.9	DSA	3600
30	**Travel**	
31,1	DSA	
33,1	Local transport	
40	**Capital items**	
43	Vehicle rental	
44	Office equipment	
50	**Consumable items**	
52	Fuel	
54	Stationery, licenses, ink	
60	**Miscellaneous**	
61	Sundry	
62	Auditing	
Total		**114 500**

3.5 Assumptions, risks and sustainability

3.5.1 Assumptions and risks

Table 10. Project assumptions and risks, CFMI 2023.

Key assumptions	Risks
Sustainability assumptions Positive response from authorities and other stakeholders	The priorities of authorities/stakeholders and the administrative procedures might slow down the progress of the project.
Development scenario linking the specific objective with the development objective Commitment of trade associations, companies, as well as secondary forest owners. Willingness of the government to initiate the proposed changes.	Some forest landowners and companies may not be interested in project activities, which reduces the government's interest in managing the proposed changes.
Operational assumptions linking outputs with specific objective	
The database for established plots is available	The available information may not be readily accessible due to bureaucratic formalities.
There is constructive participation by the different relevant stakeholders	Poor participation due to lack of credibility on the part of the relevant stakeholders.
Raw materials and manufacturing equipment are available and economically viable	Response times in the paperwork for logging permits in the selected secondary forest plot.
PROCOMER and MEIC are open to a marketing initiative	Historical lack of interest of the productive forest sector in working together with PROCOMER and MEIC.

3.5.2 Sustainability

The aspects that will ensure the sustainability of the project are as follows:

- Political leverage of the project and positive impact on beneficiaries and participants.
- Sufficiently sound technical, scientific and economic outputs of the project for employment generation (mainly women and youth) and biodiversity conservation.
- The executing agency has the required connections to access the database.
- Engaging capacity by showing the economic, social and environmental significance of the project.
- Timely completion of requirements and paperwork, thus contributing to the public interest of project outcomes.
- The executing agency has the tools and information to encourage the engagement of stakeholders with PROCOMER and MEIC.

Part 4. IMPLEMENTATION ARRANGEMENTS

4.1 Organization structure and stakeholder involvement mechanisms

Stakeholder and beneficiary involvement mechanisms will be coordinated by the executing agency; to this end, an organizational chart is detailed below, together with actions and mechanisms required for due compliance.

4.1.1 Executing agency and partners

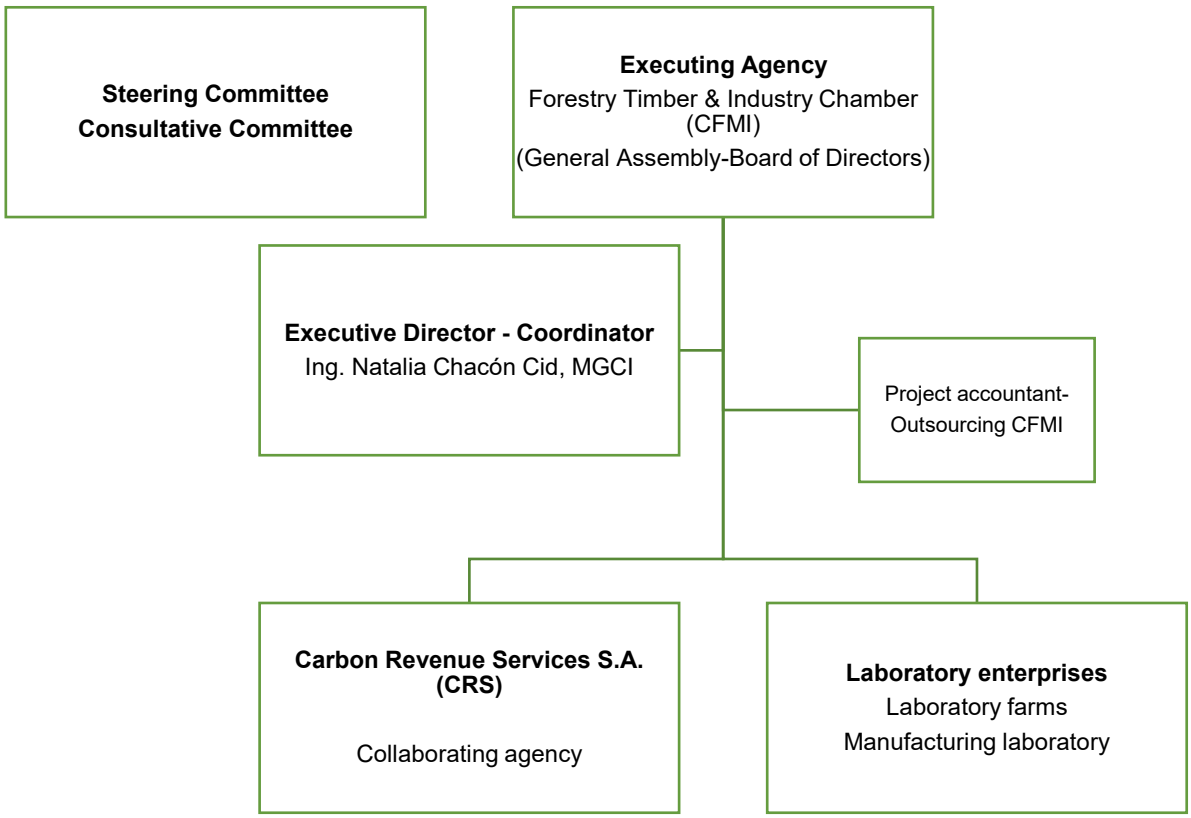


Figure 5. Project organization structure

4.1.2 Project management team

The Forestry Timber & Industry Chamber Association (CFMI) of Costa Rica will be the executing agency, with the technical support of the firm "Carbon Revenue Services S.A." as a Collaborating Agency, with which it has created a Consortium as it has the benefit of a technical team with extensive experience in forestry issues, climate change, forest financing, industry, forest product commercialization and marketing.

CFMI will act as the coordinator, under the direction of engineer Natalia Chacón Cid, MGCI, who will provide the management team with office space and Internet access for the management of the project and adequate production of outputs proposed in this project.

It should be noted that the CFMI was established in 1994 to lead and integrate the forestry value chain, and currently has 30 associated companies and the support of 8 honorary members. Its main activities are: (a) Promoting the development and integration of the forestry and timber industry sectors; (b) Promoting the use of legal timber from sustainable sources by identifying new market opportunities; (c) Promoting a change in the perception of forest harvesting and the use of timber.

In addition, it has a declaration of public interest certified by the Ministry of Justice and Peace of Costa Rica, which provides security and support to implemented projects. Since 2019, it has been developing consulting projects for national agencies such as FONAFIFO through REDD+ and international agencies such as the World Bank, all with the objective of generating tools to improve the current conditions of the country's productive forest sector.

Recent consultancies include:

2019-2020 "Development of a strategic and operational plan for the Forest Cluster in Guanacaste (including the Nicoya Peninsula), in order to contribute to sustainable forest management and enhance forest carbon stocks" – FONAFIFO-REDD+.

2022 “Rapid Assessment of Opportunities for Recovery via Productive Uses of Natural Assets in the Forest Sector” – World Bank.

As a complement to these actions, CFMI carries out a commercial, political and operational agenda with the business and academic sectors. This allows it to keep abreast of legislative and market changes, which is a comparative advantage for the development of updated technical and technological information. Furthermore, CFMI has a positive budget record for the 2021-2023 period, including consultancy projects, tender management (promoting the use of timber in construction and developments), membership and contributions from members (private companies), and internal management projects, which have enabled the organization to manage an average total annual income of US$70,000 and a total annual outflow of US$66,000.

4.1.3 Project Steering Committee

The Project Steering Committee will be made up as follows:

- Chair of CFMI
- A representative of CRS
- A representative of ITTO
- A representative of participating ministries (MINAE-MEIC-COMEX)
- A representative of academia
- A representative of NGOs
- A representative of donors (Government of Japan)
- Project Coordinator

4.1.4 Stakeholder involvement mechanisms

Stakeholder participation mechanisms will focus on the organization of workshops with a participatory approach and virtual and/or face-to-face sessions to raise awareness of the outcomes and proposals outlined in the activities. Based on this consultation process, a consultative committee will be established, with representatives of local leaders, organizations, authorities and experts in the field. In each case the relevant announcement will be made and the required materials or tools will be provided according to the participation modality.

4.2 Reporting, review, monitoring and evaluation

This section includes a schedule for reporting on project progress and finances, all in accordance with the Manual on Standard Operating Procedures for the ITTO Project Cycle.

These activities will be carried out virtually through the zoom platform in coordination with ITTO. In the case of the workshop and completion report, ITTO will provide on-site follow-up.

Project stakeholders will be consulted in the workshops to be organized and in work sessions for the monitoring and awareness-raising process. The monitoring process will verify compliance with the impact and outcome indicators outlined in sections 2.2.1 and 2.2.2 of this project document.

Table 11. Proposed schedule for project reporting and monitoring

Activity/Output	Delivery date
Report I – Output 1: *Diagnosis of the structure and composition of secondary forests*	31 May 2023
Submission of Report I to ITTO	First week of June 2023
Report II – Output 2: *Strategy to improve the governance of sustainable secondary forest management*	31 October 2023
Submission of Report II to ITTO	First week of November 2023
Report III – Output 3: *Timber products as innovative prototypes to access niche markets*	31 January 2024
Submission of Report III to ITTO	First week of February 2024
Report IV - Output 4: *Guidelines for the formulation of a marketing strategy*	20 February 2024
Closing workshop	Second week of February 2024
Completion report	29 February 2024
Submission of completion report to ITTO	Last week of February 2024

4.3 Dissemination and mainstreaming of project learning

Actions will be implemented to disseminate and share project experiences, including actions aimed at various sectors such as beneficiaries (secondary forest owners, timber industrialists, institutions, ministries, architectural specifiers, carpenters, builders, and joiners, among others) with the objective of maximizing the scope of project outcomes and achieving project sustainability over time.

4.3.1 Dissemination of project results

Three types of materials will be used to disseminate project results: brochures, infographics and documents (reports, summaries, newsletter articles), all in digital format. Each of these materials will be shared through face-to-face workshops, talks and virtual meetings, in addition to dissemination through social networks and websites of strategic partners and collaborating agencies.

4.3.2 Mainstreaming of project learning

For the mainstreaming of project learning, a media plan will be incorporated for the design and digital marketing of the materials generated. Dissemination media will include web pages, social networks, newsletters, participatory workshops, consultation sessions and academic journals. Complementary virtual events are planned for the launching and conclusion of the project; for project closing, the adoption of improved enabling conditions is expected through proposals to enhance the institutional regulatory and operational framework, as well as the involvement of local community members, mainly women and youth.

ANNEXES

Annex 1. Profiles of executing agency and collaborating agencies

Profile of the Executing Agency

1) Background information

Name: Forestry Timber & Industry Chamber Association

Location of Headquarters: Sabana Norte, Mata Redonda, San José, Costa Rica

Institutional mission:

Promote the development, integration and national recognition of the forest, timber and industry sectors in Costa Rica, through an adequate representation of the interests of its members before the public sector, non-governmental organizations, international cooperation and the different social, economic and environmental sectors of the country.

Promote the use of legal timber from sustainable sources as an environmentally friendly material with a low carbon footprint, identifying new market opportunities for our members.

Promote the appropriate legal framework to ensure legal security and enabling conditions for the sector.

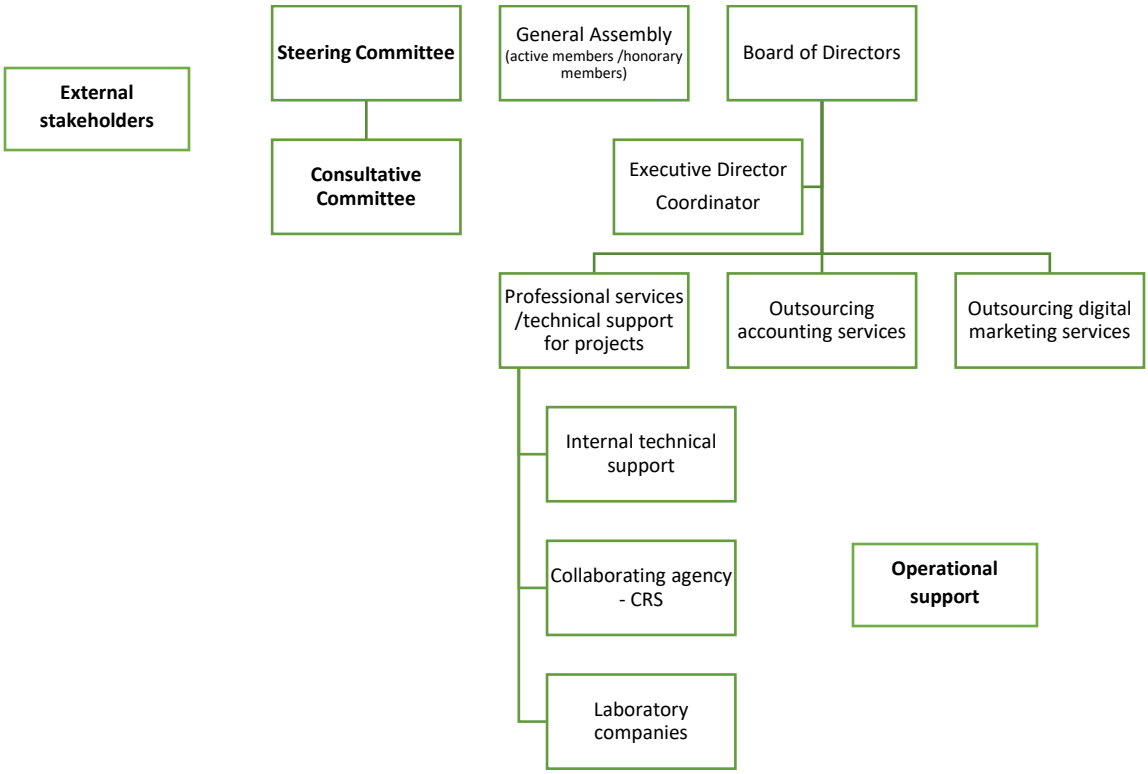
Establish modern and participatory communication channels among sector stakeholders, promoting information sharing in search of better development opportunities for members.

Promote a change in the culture and perception of forest harvesting and timber use.

Date of establishment: 1994

Fields of expertise: Private forest sector development, marketing and promotion of forest products, forest policy agenda, business agenda, and rural and urban forest landscape development.

Organizational chart:



List of the main projects and studies undertaken in the past three years

2019-2020 "Development of a strategic and operational plan for the Forest Cluster in Guanacaste (Including the Nicoya Peninsula), in order to contribute to the sustainable management of forests and the enhancement of forest carbon stocks", financed by the REDD+ strategy, FONAFIFO.

2021-2024 “Habitat, Innovation and Wood" tender project, financed by the Swiss Embassy in Costa Rica.

2022 INNOVAMBIENTE" tender project, financed by the Swiss Embassy in Costa Rica.

2022 “Rapid Assessment of Opportunities for Recovery via Productive Uses of Natural Assets in Forest Sector”, financed by the World Bank.

List of projects and pre-projects submitted to ITTO

ID:CN-21004. Enhancing the value of secondary natural forests through their sustainable use, contributing to climate change mitigation and generating rural employment, within a post-Covid context. Approved - financed.

2) Infrastructure

CFMI has offices, meeting rooms and a dining area located in San José, Costa Rica, with wireless Internet access and furniture available for the implementation of the project. In addition, its members have laboratory farms and manufacturing laboratories that will support the organization's counterpart contribution.

3) Budget

CFMI has a positive budget record for the 2021-2023 period, including consultancy projects, tender management (promoting the use of timber in construction and developments), membership and contributions from members (private companies), and internal management projects, which have enabled the organization to manage an average total annual income of US$70,000 and a total annual outflow of US$66,000.

4) Personnel

CFMI has recruited two people for the development of the different agendas as follows:

- Full-time Executive Director, with a master´s degree.
- Part-time technical-administrative support, with a bachelor´s degree.

Profile of Carbon Revenue Services S.A. (CRS)

Carbon Revenue Services S.A. (CRS) is a service company established in 2008 with headquarters in San Jose, Costa Rica. During the first few years, it provided services to private sector clients to understand and implement the opportunities offered by carbon reduction and climate change mitigation activities. The use of biomass in the form of wood pellets or charcoal briquettes was then its main business, with clients in Asia, Europe and Central America, while promoting project opportunities based on the Clean Development Mechanism (CDM) of the Kyoto Protocol.

In 2022, a team of international experts with more than 30 years of experience took over the company's activities. They have sound expertise in forest and climate change issues, including investment mechanisms and funds in the forest sector, reducing emissions from deforestation and forest degradation (REDD+), monitoring of emission reductions, forest management, as well as innovative timber processing practices and markets.

Business models are developed based on existing mechanisms and standards for forest carbon credit trading and results-based payments, monitoring, reporting and verification of emission reductions and safeguards.

CRS professionals have vast experience in the design and implementation of projects, including concept notes, pre-feasibility and feasibility studies, which have been implemented in several Latin American countries.

The company's technical team members are:

- Héctor Arce, Financial mechanisms for the forest sector, timber industry
- Jorge Rodríguez Quirós, Forest policy and governance
- Gustavo Solano, Forest management, rural development
- Olman Serrano, Forest industries and marketing
- Fernando Sepliarsky, Timber product development and marketing
- Luis Ángel Aguilar Salas, GIS expert.

The geographical area of work of the members of the technical team has included Latin America, sub-Saharan Africa, Europe and some Asian countries. The team’s working languages include Spanish, English, German, French, Italian and Portuguese.

Expertise

The members of the technical team of Carbon Revenue Services S.A. have more than 30 years of experience in the design, development and implementation of multiple projects in the areas of climate change, natural resources, indigenous groups, water harvesting, investment funds, financial mechanisms and instruments with a special focus on forests, and promotion of carbon sequestration through innovative timber processing practices and market access.

Clients include regional and international development agencies (World Bank, CABEI, UNDP, FAO, COSUDE, WWF, GIZ, HELVETAS, European Union) and government institutions, as well as the private sector.

Web page: www.carbonrevenuecr.com

Annex 2. Tasks and responsibilities of key experts provided by the Executing Agency

The tasks and responsibilities will be developed by the Consortium under the coordination and monitoring of the executing agency, according to the Terms of Reference included in Annex 3. The CVs of the consultants are listed below:

- *Natalia Chacón Cid, Costa Rica national*

Education

2015 Degree in Forest Engineering, National University of Costa Rica.

2019 Higher Bachelor's Degree in Forest Engineering with a major in Forest Product Trade.

2022 MSc in International Trade Management. International Center of Economic Policy for Sustainable Development. National University. Forest Trade Expert.

Work experience

International consultant for various international cooperation agencies including the World Bank, UNDP, CABEI and FAO, on issues related to local and international trade in forest products and green growth strategies.

She was President, Founder and Northern Coordinator of the Latin American Association of Forestry Science Students (ALECIF), Costa Rica headquarters, actively participating in the development of the Latin American Congress of Forestry Science Students, during the period 2014-2021.

She participated in the Forestry Outreach project aimed at sectoral projection from the Institute of Forestry Research and Services (INISEFOR) of the National University. She was coordinator of volunteer-led projects with the National University, coordinating workshops, and participating in the achievement of goals and objectives according to the established guidelines.

As an assistant at INISEFOR of the National University, she collaborated in the project "In Search of Exemplary Cases of Sustainable Forest Management in Latin America and the Caribbean", of the Food and Agriculture Organization of the United Nations (FAO), in the systematization and evaluation of sustainable forest management cases in Costa Rica. She participated in the project "Plan for Ecosystem Intervention and Restoration in Carara National Park and La Cangreja National Park", in the development, systematization and execution of the project, in conjunction with the International Institute for Conservation and Wildlife Management (ICOMVIS) and the National System of Conservation Areas (SINAC).

She has participated in several seminars as coordinator through the Forestry Timber and Industry Chamber on tree breeding, FSC certification, management and commercial training. She has been a facilitator of wood construction tender processes (Habitat, innovation and wood 2021 and 2022) and forest entrepreneurship tender processes (Innovambiente 2022). She is currently the Executive Director of the Chamber of Forestry, Timber and Industry, performing administrative tasks, project coordination, legislative agenda and institutional liaison commissions at the national and international levels. She is the treasurer of the Union of Private Forest Sector Organizations of Mexico, Central America and the Dominican Republic (UNIFOR), Guatemala Office.

- *Natalia Marín Matarrita, Costa Rica national, English: B1+*

Education

Forest Engineer, National University of Costa Rica.

Work experience

She has taken several courses on software management (Windows), scientific writing, evaluation of forest plantations, SMEs and entrepreneurship.

She was a researcher at the forest nursery of the National University of Costa Rica where she was in charge of the identification of seedlings and seeds of tropical species, which led to the publication of 6 digital guides on Costa Rican fruits, seeds and seedlings with the technical team.

She has been part of the technical outreach and research team of the National University's project on "Productive Development of Bamboo in Costa Rica", where she coordinated bamboo constructions in rural areas of Costa Rica (greenhouses and community gardens), as well as coordinating the nursery of the "Bamboo Processing Center" of the National University.

She has worked in multiple consultancies, especially with the Forestry, Timber and Industry Chamber, on issues of carbon storage inventories and timber markets and trade in the Chorotega region.

She was part of measurement crews of the National Institute of Forestry Services (INISEFOR) of the National University of Costa Rica for carbon stock inventories and data processing, as well as assistant of the project on forest management of native species in Costa Rica.

She is currently working as a project coordinator for the Forestry Timber and Industry Chamber where she is developing the Forestry Directory of Costa Rica, including the mapping of updated forestry activities in the country. In addition, she coordinated the Innovambiente 2022 tender process for nature-based developments, mapping environmental and forestry developments in the country.

In addition, she provides services to the National Forest Office of Costa Rica as a delegate of the Costa Rican industry census for the updating of prices and uses of wood in 2023. Both activities have enabled the institution to establish close ties with important stakeholders in the forest value chain.

- *Olman Serrano - Nationality: Costa Rican-Italian. Proficient in oral and written Spanish, English, German, Italian, French and Portuguese.*

Education

1970 - 1974 Lycée Franco-Costaricien, San José, Costa Rica, High School Certificate

1975 - 1976 Instituto Tecnológico de Costa Rica, Wood Technology (not completed since he continued his studies in Germany).

1976 - 1978 Studienkollege, Coburg, Germany, German University Level.

1978 - 1982, Fachhochschule Rosenheim (University of Applied Sciences), Engineering in wood technology, Rosenheim, Germany, Dipl.-Eng. (FH)

Work experience

Member of the CRS advisory team. Honorary member of the Forestry Timber & Industry Chamber. Expert in forest industry and marketing.

He has worked in timber industry facilities in different countries. He has also worked for FAO (Food and Agriculture Organization of the United Nations) in different positions for industry issues, including timber processing, timber products trade, wood supply and climate change.

He was President of the International Tropical Timber Technical Association (ATIBT). He was Emergencies Coordinator, FAO Mozambique and FAO Representative for Mozambique and Equatorial Guinea in his fields of expertise: agriculture, livestock, forestry, climate change, nutrition and fisheries.

He was Coordinator of the Mountain Partnership Secretariat, Director of Economics, Policy and Forest Products, Associate Secretary of the Forest Products and Industries Division and Head of the Timber and Non-Timber Products Service for FAO (Food and Agriculture Organization of the United Nations).

He was the Technical Department Manager, Director and Project Engineer at Heilborn GmbH, Rosenheim, Germany, where he managed multiple forest industry projects, including technical assistance and product marketing.

He was Operations Manager and CEO for Viphya Plywoods and Allied Industries Ltd. (Viply) where he managed forest industry and timber processing operations.

- *Gustavo Adolfo Solano Garro, Costa Rica national*

Education

Forest Engineer, Technological Institute of Costa Rica.

Master's degree in business administration from the Inter-American University of Costa Rica.

Work experience

Member of the CRS advisory team and current honorary member of the Forestry, Timber & Industry Chamber. Forest Engineer from the Technological Institute of Costa Rica with a Master's in business administration from the Inter-American University of Costa Rica; with thirty years of professional experience in the Latin American environmental sector, mainly in Costa Rica, Nicaragua, Ecuador, Peru, El Salvador, Honduras, Panama, Bolivia and Colombia. He has maintained a direct relationship with the public sector as well as with private entrepreneurs and groups of indigenous people in different countries. He has been a technical advisor on climate change policies, REDD, forest sector development, biodiversity conservation, community development, community forestry, combating illegal logging, and the design, development and implementation of programs for the payment of environmental services, as well as environmental business in general.

He has been a facilitator in multiple workshops and seminars, both nationally and internationally, in activities promoted by state organizations and cooperation agencies such as UNDP, EU, GIZ, JAICA, German Agro-Action.

He has been an advisor to different organizations on climate change and REDD issues (CATIE, HELVETAS, German Agro Action, WWF, GIZ, COSUDE; FAO, among others). Advisor to the Minister of Agriculture and Irrigation of Peru (2015) on Climate Change and REDD. He has participated in the development of four concept notes for the Green Climate Fund (GCF).

He has performed different consultancies on forestry and environmental issues for several governments (Peru, Ecuador, Costa Rica, Nicaragua) and institutions such as IICA, the World Bank and REDD+.

- *Jorge Rodríguez Quirós, Costa Rica national*

Education

Engineering Degree, National Agricultural School, Chapingo

WORK EXPERIENCE

Member of CRS's advisory team and current member of the Forestry Timber & Industry Chamber. Graduate of the National Agricultural School, Chapingo, Mexico.

He was Environment, Energy and Telecommunications Minister of the Government of Costa Rica; he has held positions as Vice-minister of the Environment in two administrations and Director General of Forestry in Costa Rica. He was the founder and three-times president of the *Fundación para el Desarrollo de la Cordillera Volcánica Central* - FUNDECOR (Foundation for the development of the Central Volcanic Range), Director of the Forestry Program of the ITCR (Costa Rica Institute of Technology) and Director of the Civil and Forestry Programs of the ITCR.

In Central America, he facilitated the signing of the Central American Convention on Biodiversity and the Regional Convention for the Management and Conservation of Natural Forest Ecosystems and the Development of Forest Plantations by six presidents of the Central American Region and the Prime Minister of Belize.

He is the author of several publications on politics, governance and financial strategies for the forest sector.

He has been a consultant and part of technical teams for institutions such as the World Bank, IUCN Ecuador, IICA, AIDER-Costa Rica, IDB Honduras, PROFONAMPE Peru, United Nations Conference for Sustainable Development Rio+20, CATIE, the Government of Peru, the Government of Costa Rica and the Government of Honduras.

- *Héctor Julio Arce Benavides, Costa Rica national*

Education

National University, Graduate in Forest Engineering.

Technological Institute of Costa Rica, Bachelor of Forest Engineering

Haywood Community College. Technician in Sawmilling and Saw Doctoring. Clyde, North Carolina, USA

Work experience

Member of the CRS advisory team. Knowledge of Forest Carbon Standards (FCPF, ART and LEAF). Development of the financial strategy for forest carbon in Costa Rica. Knowledge of the timber sector and the forest industry in Costa Rica. Written and verbal communication skills in English.

He served as the Director of the National REDD+ Strategy at the Costa Rican National Forest Financing Fund (FONAFIFO), responsible for coordinating the negotiations with the Forest Carbon Partnership Facility (FCPF), UNDP, the GCF and the Emergent Coalition, and responsible for the preparation REDD+ financing strategy in Costa Rica.

He served as the Director of Forestry Promotion at the Costa Rican National Forestry Financing Fund (FONAFIFO), responsible for the development of financing mechanisms for small and medium-sized forestry producers. He was responsible for a credit portfolio of over USD6 million.

He was Chair of the Sustainable Biodiversity Trust Fund (FUNBAM) Committee and Director General of Forestry.

- *Fernando Sepliarsky Minadeo - Nationality: Italian-Argentinian. Living in Spain since 2003.*

Education

1990 Course for Head of Distribution of Wood Processing Installations CSR Training Center. Company S.C.M. Italy.

1987-1993 Forest Engineer. UNSE Argentina.

1998-2002 Master's degree in strategic business administration. UNAM. Argentina.

2018-Present. PhD in Wood Technology. University of Valladolid. Spain.

Speaking, reading and writing ability in Spanish, Italian, English, Portuguese, French and German.

WORK EXPERIENCE

2008-2023 Technical Director Intasa As Pontes. Multilayer parquetry and veneered panels factory. 12 hardwood dryers. 2 Engineered flooring production lines. Product development, investments and export markets. 0.7 million m^2/year.

2003- 2007 Head of Processed Wood Operations. ENCE. Including commercial management. Trading, product development and new projects. 1 Offset plant, 1 traditional hardwood sawmill and 1 Chipper-canter sawmill. 300 workers. Sales €12 M. Reporting to New Business Division Management.

1997-2003 Manager FORESTADORA TAPEBICUA. Responsible for the operation of the entire industrial plant. Sawmill, Remanufacturing, Drying, Compensated, Maintenance and Steam Generation. 450 operators. Reporting to the CEO

1994-1997 Manager, Palo Rojo Esperanza, Santa Fe. Factory of solid wood flooring made of non-traditional woods and laminated beams. 1994-1997. In charge of the company's management, reporting to the company's president.

1993-1994 GTZ Project. Technical cooperation from the German government. Agroforestry development project. Salta. Responsible for Small Industries. Technical-commercial development of enterprises. Technical training of working groups. Market studies.

1990-1991 Production Manager. Ali Wood Flooring. Republic of San Marino. Production scheduling Three wood flooring production lines. Sawing of hardwoods. Drying of hardwoods in 9 drying kilns. 1 Vacuum, 2 Condensation.

RELEVANT PROJECTS - PRODUCT AND MARKET DEVELOPMENT

- Argentina: For GTZ, marketing of small forest industry products. For Palo Rojo, development of parquetry (sawing, drying and profiling) from non-traditional woods from the Chaco region. Jury member of the Patagonia Wood Design Award.
- Spain: Development of various types of wood flooring and *Eucalyptus globulus* plywood. Export of sawn timber to China, Singapore, United Kingdom, Taiwan and Malaysia.
- Paraguay: For the Ministry of Industry - Timber Board. Sectorial consultancy for the wood flooring industry. Financed by the Inter-American Development Bank.
- Singapore, Viet Nam and Malaysia: Sale of wood for Juncker-type engineered flooring.
- USA: Sale of wooden components for sofa framing and pallets.

- *Luis Ángel Aguilar Salas, Costa Rica national*

Education

Forestry Engineer, Costa Rica Institute of Technology.

Master's degree in information resources administration from Universidad Latina.

WORK EXPERIENCE

Private forestry consultant, current member of CRS.

May 1995 to August 2016: Foundation for the Development of the Central Volcanic Range (FUNDECOR): From specialist in forest management and inventories to Research and Development Manager.

More than 27 years' experience in the development and management of institutional programs and innovative (bottom-up) projects in Rural Development linked to the management and conservation of natural resources, through the implementation of REDD activities, adaptation activities in productive systems to maintain and/or improve biodiversity, water, carbon and soil conservation and the livelihoods of local communities. Valuation of environmental goods and services and use of technologies to ensure the sustainability of natural resources, as well as experience in projects with the application of technologies for data management and generation of useful information.

Experience in silvicultural data management (forest management and conservation, permanent sample plots, forest production, among others); geospatial databases for the management and registration of properties at the regional or national levels and overlapping analysis to reduce risk in the identification of corresponding rights; databases for Payments for Environmental Services (PES); Registration and long-term monitoring for natural forest management; geospatial databases for registration and management of applications and potential beneficiaries (indigenous territories, protected areas and private landowners) for the Emissions Reduction Program (ERP) of the REDD Secretariat in Costa Rica; Design and construction of spatial databases for the calculation of carbon, growth and composition of tropical forests.

Member of the Observatory of Forest Ecosystems - The observatory manages 372 Permanent Sample Plots in primary and secondary natural forests, totalling an area of 194.3 hectares, with measurements taken since the 1990s and in the case of OTS since 1969, with approximately 500,000 records of measurements in 90,000 registered trees. Design and supervision of technological tools for the implementation of national public policies, such as SIG-UMF first and currently SIPLAMA for the implementation of SINAC's National Forest Management Standards (sirefor.go.cr). Costa Rica Forest Zoning Study based on floristic information from the 2013 National Forest Inventory, Permanent Sample Plots and standardized Forest Management Plans.[1]

[1] https://www.sirefor.go.cr/pdfs/Documento-final-de-la-consultoria-14-06-18_3.pdf

Annex 3. Terms of reference for ITTO-funded staff, consultants and subcontracts

TERMS OF REFERENCE

FOR THE CONSORTIUM ESTABLISHED BETWEEN THE FORESTRY TIMBER & INDUSTRY CHAMBER ASSOCIATION AND CARBON REVENUE SERVIVES S.A.

Enhancing the value of secondary natural forests through their sustainable use, generating rural employment in a post-COVID context

1. Background

Costa Rica is a country with an internationally recognized track record in forest and biodiversity conservation, as well as in effective actions to combat climate change. However, the forest sector still faces several challenges to improve its performance. The current timber industry is underdeveloped and obsolete.

Nearly one million hectares of secondary forests are under threat, as the available timber resources are hardly used. It is thus necessary, on the one hand, to contribute to reducing pressure on mature forests and, on the other, to improve the sustainable management and valuation of secondary forests through the production and marketing of high-value timber products from a variety of native species, with the participation of local communities.

Most of these secondary forests are owned privately by small landowners, and the main challenges they face are: deforestation and degradation threats, which are already evident today; this ecosystem is not perceived as valuable due to low demand and the lack of a competitive timber processing industry; and illegal logging activities negatively affect the environment and the economy of rural areas.

A secondary effect is the increase in unemployment in rural areas, especially among women and young people, which was worsened by the impact of Covid-19.

2. Development objective

Contribute to the conservation of secondary forests and their ecosystem services.

3. Specific objective

Establish tools to increase the value of secondary forests for their conservation and development.

In order to achieve these objectives, the following outputs are expected to be produced:

(1) Diagnosis of the structure and composition of secondary forests; (2) A strategy for improving sustainable secondary forest management governance; (3) Timber products as innovative prototypes to access available market niches; and (4) Guidelines for the design of a marketing strategy.

4. Scope of work

In order to obtain the proposed outcomes, the Consortium will carry out the following activities, within the timeframes set forth in the Work Plan and according to the costs detailed in the proposed budget:

Output 1: Diagnosis of the structure and composition of secondary forests
Activity 1.1: Analyze the floristic composition and structure of secondary forests to be able to quantify their value
Activity 1.2: Identify and select native species for the development of high-value timber products.
Output 2: A strategy for improving sustainable secondary forest management governance to enhance competitiveness has been developed for implementation
Activity 2.1: Regulatory and technical proposal for the adequate management of secondary forests so as to improve competitiveness.
Activity 2.2: Design a technical, managerial and business training plan for the sustainable management of secondary forests.
Output 3: Timber products as innovative prototypes to access available market niches
Activity 3.1: Conduct prospective market surveys by product
Activity 3.2: Design prototypes of innovative products
Activity 3.3: Manufacture selected prototypes documenting processes and costs
Activity 3.4: Develop a marketing strategy including the social and environmental history of the manufactured products
Output 4: Guidelines for the design of a marketing strategy taking advantage of the promoted country brand image
Activity 4.1: Develop a country roadmap with PROCOMER, for international trade promotion of timber products
Activity 4.2: Develop a country roadmap with MEIC, for the local commercial promotion of timber products

5. Duration

The duration, as detailed in the Work Plan, will be 12 months from the date of signature of the contract between the Forestry Timber & Industry Chamber Association and ITTO.

6. Specific criteria

The Consortium has the technical and administrative capabilities and time availability for the implementation of activities, through national and international personnel with extensive experience in forestry, rural development, industry and marketing of forest products (see CVs of team members).

7. Method of payment

Payments will be made as established by ITTO.