



Supply Base Report: TANAC S.A.

Fourth Surveillance Audit

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Completed in accordance with the Supply Base Report Template Version 1.4

For further information on the SBP Framework and to view the full set of documentation see www.sbp-cert.org

Document history

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1 Overview

Producer name: TANAC S.A.

Producer address: Street Romar Demetrio Vanzin, 5001, Industrial District, 96200-970
Rio Grande - RS, Brazil

SBP Certificate Code: SBP-07-07

Geographic position: -32.045400, -52.115900

Primary contact: Freitas Jóice, +55 51 363 240 55, jsfreitas@tanac.com.br

Company website: www.tanac.com.br

Date report finalised: 15 Jun 2022

Close of last CB audit: 30 Jun 2022

Name of CB: NEPCon OÜ

SBP Standard(s) used: SBP Standard 2: Verification of SBP-compliant Feedstock, SBP Standard 4: Chain of Custody, SBP Standard 5: Collection and Communication of Data Instruction, Instruction Document 5E: Collection and Communication of Energy and Carbon Data 1.5

Weblink to Standard(s) used: <https://sbp-cert.org/documents/standards-documents/standards>

SBP Endorsed Regional Risk Assessment: Not applicable

Weblink to SBR on Company website: <https://www.tanac.com.br/sobre/certificacoes/>

Indicate how the current evaluation fits within the cycle of Supply Base Evaluations					
Main (Initial) Evaluation	First Surveillance	Second Surveillance	Third Surveillance	Fourth Surveillance	Re-assessment
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2 Description of the Supply Base

2.1 General description

Feedstock types: Primary, Secondary

Includes Supply Base evaluation (SBE): No

Feedstock origin (countries): Brazil

2.2 Description of countries included in the Supply Base

Country:Brazil

Area/Region: Rio Grande do Sul

Exclusions: No

Black Acacia (*Acacia mearnsii*) was introduced in the state of Rio Grande do Sul in 1918 by Alexandre Bleckmann, director of Companhia Geral de Indústrias, headquartered in São Leopoldo. Mr. Alexandre planted about 700 trees on the land of the company he ran to test the use of this wood as energy (firewood) in the company. The first commercial planting was qualified by Mr. Júlio C. Lohmann, who carried out the first plantings for commercial purposes; 2,000 trees in the municipality of Estrela (Oliveira, 1968). Since then, Acacia has been commercially planted in Rio Grande do Sul for the production of tannin from the bark, used in curtains and energy generation by burning wood, which has a high calorific value due to its high density. Over the years, with the use of wood for various other purposes, such as props for civil construction and for pulp, acacia plantations have expanded, establishing a wide production chain.

The acacia-growing activity in Rio Grande do Sul has a significant social nature, as a large part of the forests are owned by small and medium independent farmers (reforesters), whose main source of income is black wattle wood and bark. . There are currently more than 35,000 families, whose main income is the production and sale of products from the black wattle forests or related activities, such as seedling production, planting, harvesting and transport, among others. The cultivation of black wattle is a forestry activity that preserves the soil from erosion, as it is a tree crop, with a cycle between 6 and 7 years, which enriches the soil with nitrogen due to the leguminous / rhizobia symbiosis, being fully utilized in the recovery of areas degraded.

TANAC was awarded in 1948 in the municipality of Montenegro in the state of Rio Grande do Sul. In an initiative to diversify its activities, in 1995 a Chip Unit was created in the city of Rio Grande, in the extreme south of Brazil, to supply the pulp industry and the Pellets Unit for energy, which started its activities in 2016. This plant has a production capacity of approximately 1,305,000 tons of wood chips and 414,000 tons of pellets per year. With the aim of increasing the volume produced and improving the quality of the pellet, the dosage of pine sawdust was started.

The pulp wood chip segment has expanded its operations in recent years, introducing eucalyptus chips and increasing its supply to the Japanese market and other markets, such as Europe, South Korea, India and China.

TANAC wants to gain space in the energy market with acacia and eucalyptus chips.

Rio Grande do Sul has Eucalyptus as the main planted species. In 2006 a planted area of the genus was 184 thousand ha. Now, after 14 years, eucalyptus plantations are close to 668.3 thousand ha.

The wood from *Acacia mearnsii* and eucalyptus is used for the production of cellulose, charcoal, civil construction, plates and firewood for energy. Planted forests are found predominantly in the southern half of the state

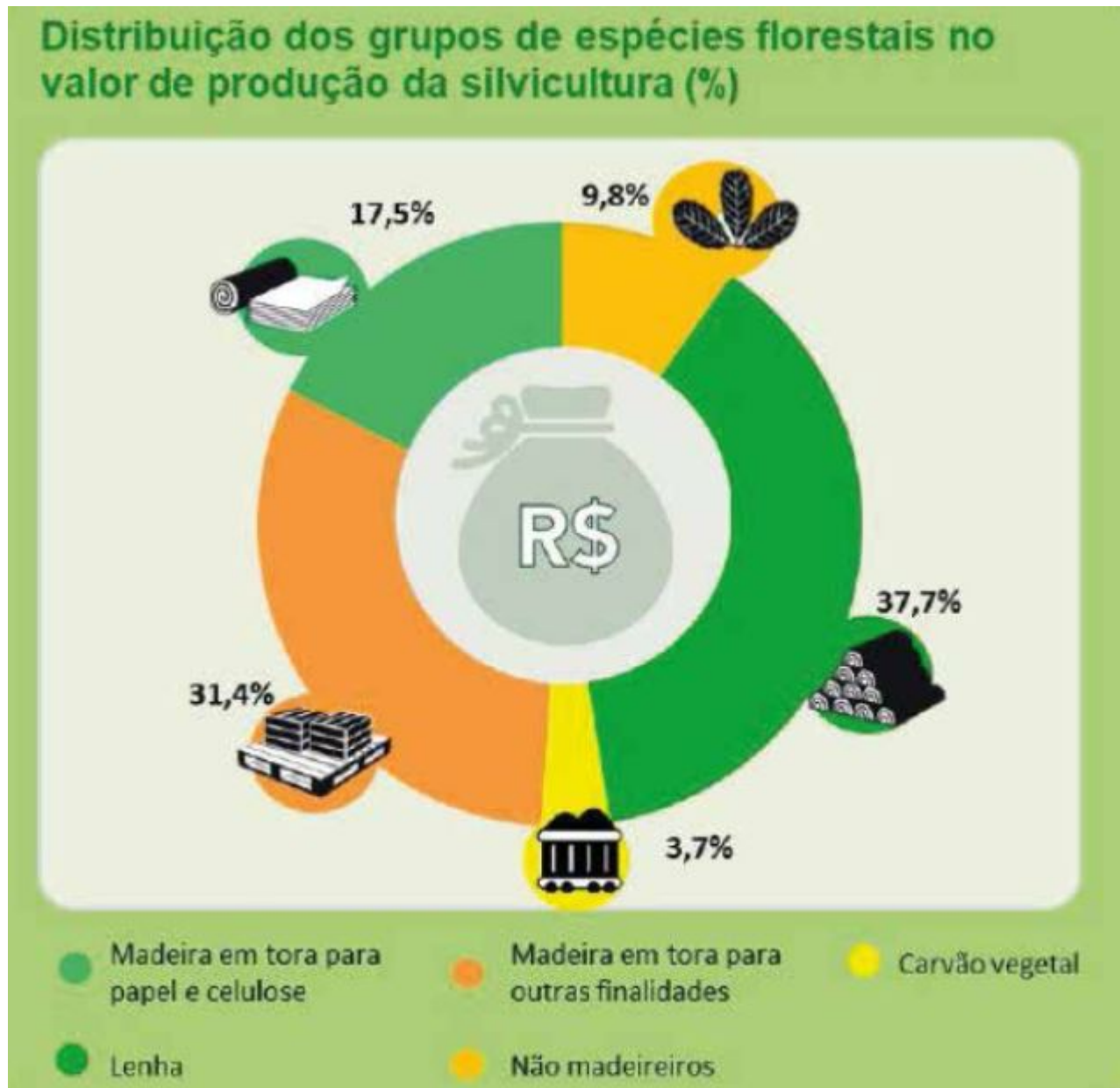


Figure 1: Rio Grande do Sul: Distribution of forest production. Source: Production of Vegetal and Forestry Extraction (PEVS), IBGE. RDK Logs Preparation

The consumption and production of firewood has been growing due to the replacement of firewood from the

extractivism from planted forests. This demand is also associated with the growth of the pulp and paper, ceramics, charcoal steel and agribusiness industries, among others, causing the volume consumed and the production of firewood from planted trees to increase each year.

Firewood from planted forests is used by direct burning or combustion, generating charcoal.

Rio Grande do Sul was responsible for 24% of the volume produced in Brazil. One of the highlights of its use is the tobacco sector. According to the Tobacco Growers Association of Brazil (Afubra), in 2019, in RS, there was consumption of 4.2 million stereo meters (m.st) of firewood, coming from about 16.8 thousand hectares of forests. This represents 23% of the state's firewood production.

The TANAC unit is located near the Port of Rio Grande and receives raw material from different suppliers. The supply of raw material comes from small producers' planting areas, leased areas and from TANAGRO's own areas.

The raw material (100%) comes from the state of Rio Grande do Sul.

All data presented in this report refer to the year 2020. Below (figures 2 and 3) it is possible to observe the location of the state of Rio Grande do Sul in Brazil and the distribution of planted areas in the state.



Figure 2: Rio Grande do Sul – brazil

Encruzilhada do Sul is the most important municipality in terms of planted area with a total of 58,316ha. Of the total planted in the state, the municipality holds 22.5% of the total. Acacia plantations are more concentrated, being present in 84 (17% of the total) of the 497 municipalities in Rio Grande do Sul.

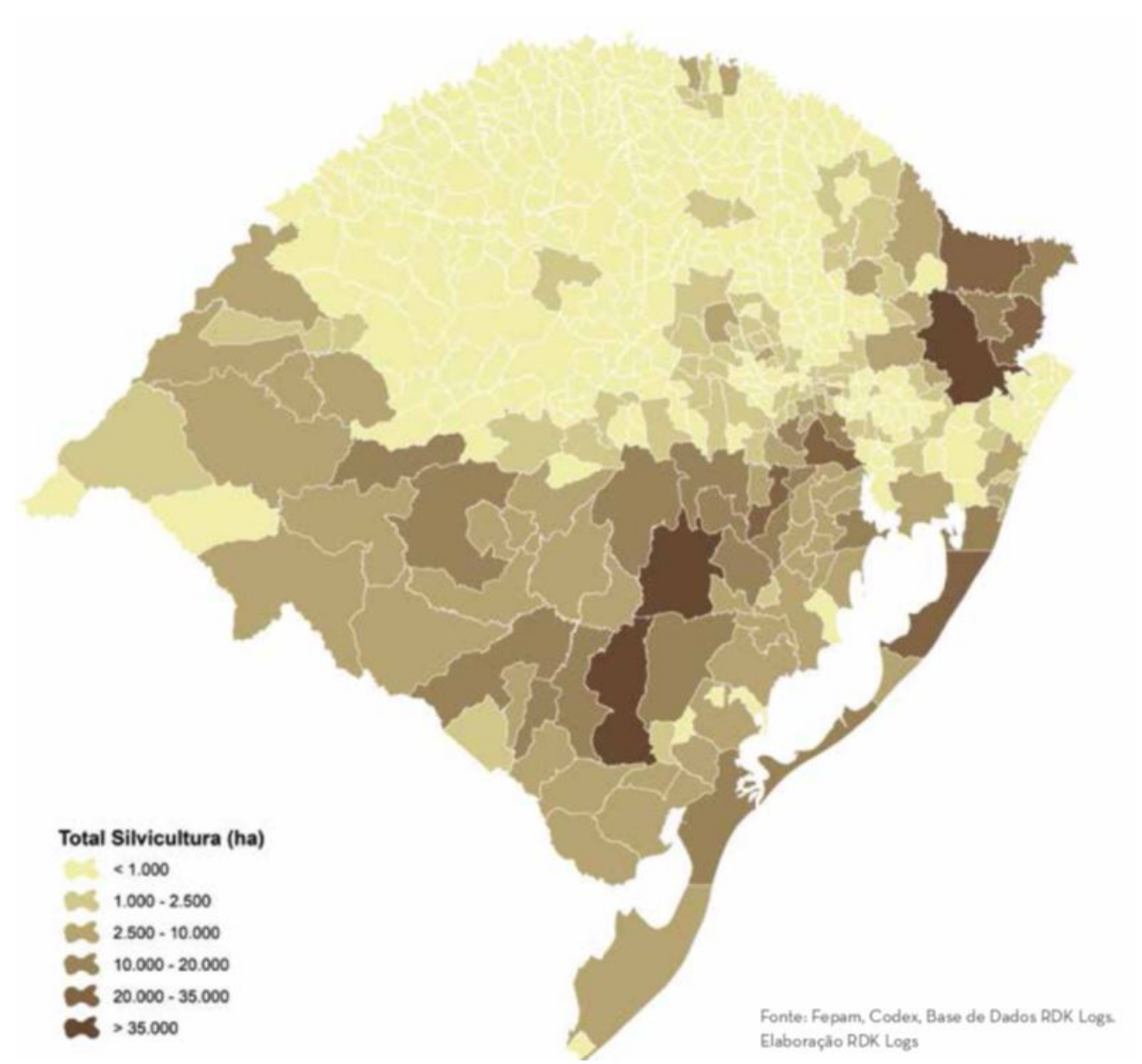


Figure 3: Distribution of planted areas in Rio Grande do Sul. Source: AGEFLOR E CONSUFOR AND RDK LOGS

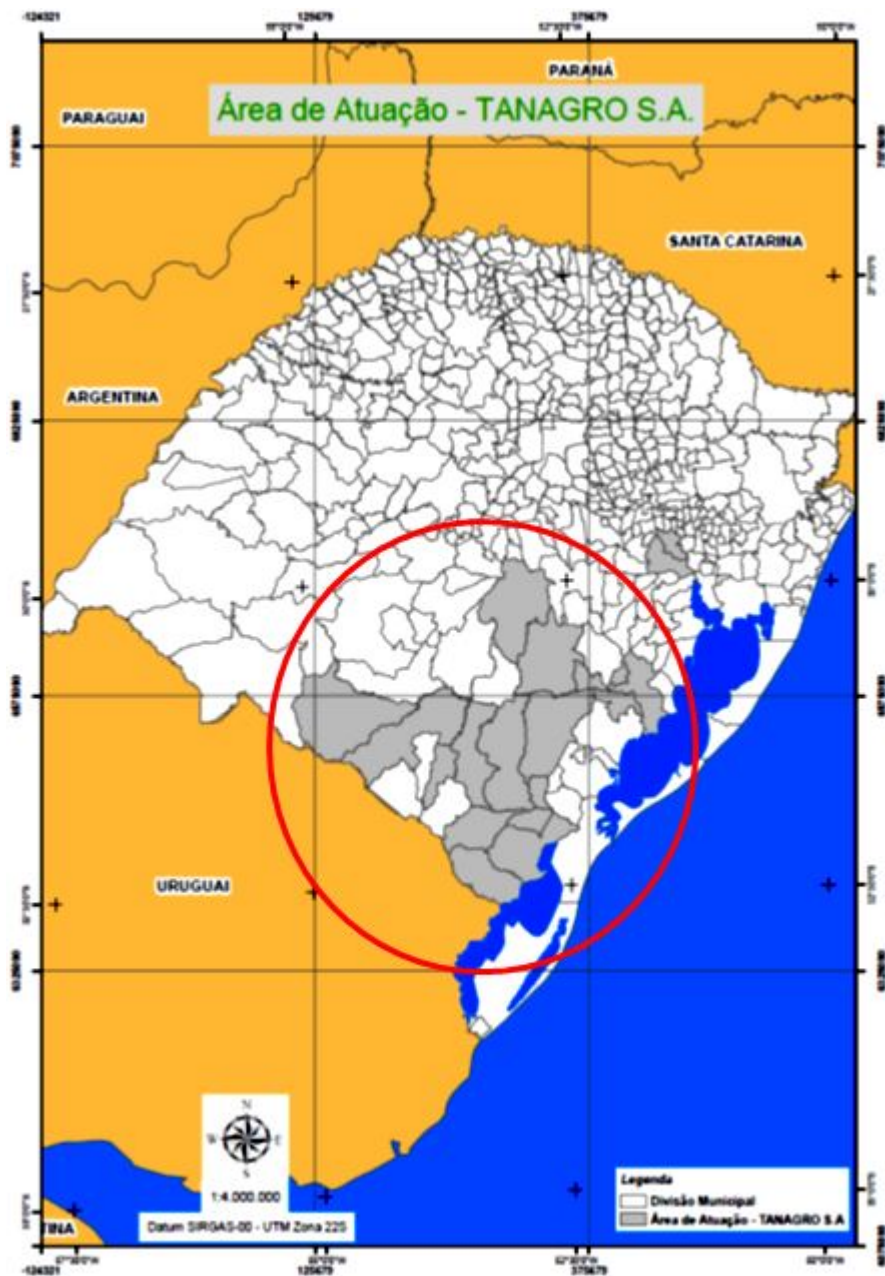


Figure 4: TANAGRO Production Area

Área de Atuação - Compra de Matéria Prima

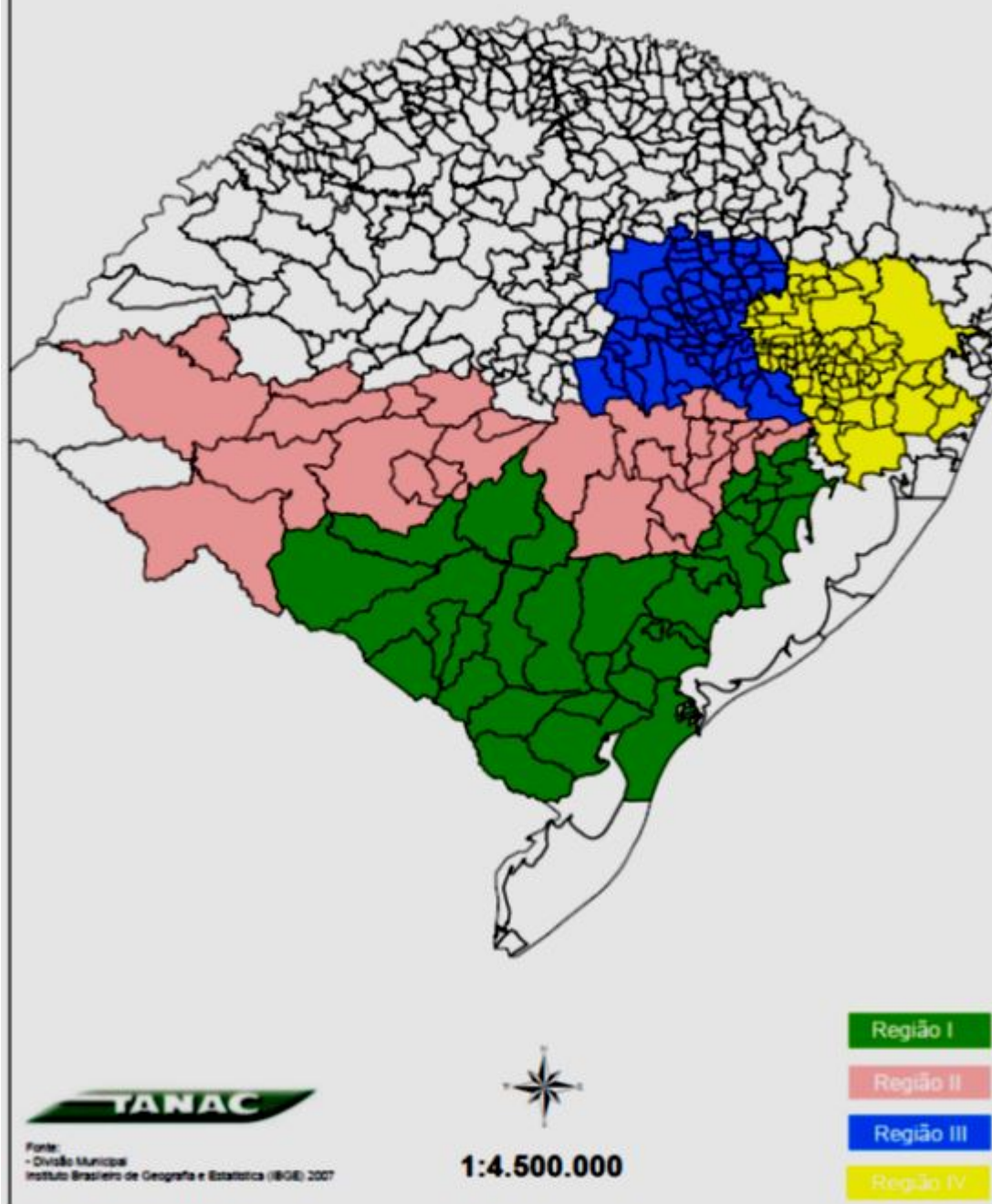


Figure 5: Supply Regions - TANAC - RS

In the figures presented above, figure 4, it is possible to observe the areas of activity of TANAGRO/TANAC (own areas with acacia plantations) and in figure 5, the regions where raw material is purchased (from Acacia, Eucalyptus and Pine suppliers).

The forest management carried out by TANAGRO/TANAC involves several forestry operations and comprises farms/properties owned by the company distributed in 13 municipalities in the State of Rio Grande do Sul. The company also develops partnerships (incentives) with black wattle producers (*Acacia meansii*).



Figure 6: Acacia plantations - Acacia meansii

The raw material (wood) obtained by TANAGRO/TANAC comes exclusively from planted forests. The areas of natural vegetation existing in the Forest Management Units are protected by being in permanent preservation areas, being made a Legal Reserve, or by the policy and norms to conserve and map all the remnants of native forests. Study to Identify High Conservation Values were carried out and in one of the Farms (Ouro Verde, municipality of Cristal) a high value attribute was identified for category 1:

AAVC 1 – Species diversity – concentrations of biological diversity including significant endemic, rare, threatened or endangered species at the global, regional or national level (Common Guidance for the Identification or High Conservation Values, HCV network, 2013).

From the study, work is carried out to monitor and mitigate threats to the attribute. In addition to this study, Environmental Diagnoses were carried out to characterize the fauna and flora and to consolidate an "Environmental Conservation Strategy" with four lines of action:

- a) Making all native forest areas effective as conservation areas;
- b) Protection of endangered or endangered animals;
- c) Control of access to areas for an effective hunting suppression;
- d) Environmental education for workers and the surrounding community in order to know, disseminate and guarantee the result of the proposed actions.

Table 1: Fauna threatened or at risk of extinction observed on the farm monitored by TANAGRO.

Family	Scientific name	Popular name	Registration Location	Category
Felidae	Leopardus wieddi	gato-maracajá	Ouro Verde	Vulnerable
Procyonidae	Nasua nasua	quati	Ouro Verde	Vulnerable
Dasypodidae	Cabassous tatouay	tatu-de-rabo-mole	Ouro Verde	not enough data
Dasypodidae	Dasypus hybridus	tatu-mulita	Ouro Verde	not enough data
Cuniculidae	Cuniculus paca	paca	Ouro Verde	Vulnerable
Dasyproctidae	Dasyprocta azarae	cutia	Ouro Verde	Vulnerable

Source: TecnicyAmb (Fauna Monitoring) and State Decree No. 51,797/2014.

Table 2: Flora threatened or at risk of extinction observed on the farm monitored by TANAGRO.

Sources: (1) Tecnicyamb; (2) A. Guglieri & F.J.M. Caporal; (3) Silas Mochiutti; (4) Biota.

*** De acordo com o Decreto Estadual nº 51.109/2014**

Monitoring is carried out to ensure compliance with actions and, if necessary, act to mitigate threats and/or negative impacts. Results of the studies and monitoring carried out are described in TANAGRO's Forest Management Plan. The Convention on International Trade's list of endangered species of wild flora and fauna does not include *Acacia mearnsii*, *Eucalyptus* or *Pinus* (checklist.cites.org).

Sources: (1) Tecnicyamb; (2) A. Guglieri & F.J.M. Caporal; (3) Silas Mochiutti; (4) Biota.

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Figures 7 and 8: TANAGRO Forest Operations.

Forestry activities (for own activities and development) aim to establish black wattle forests, a pioneer species with fast initial growth, very sensitive to weed-competition and without an aggressive root system. The seedlings are produced in the company's forest nursery, located in the municipality of Triunfo, RS, and the planting is then carried out on clean and cultivated land.

The activities carried out during the implantation are: combating ants, mowing, subsoiling, harrowing, planting and fertilizing. In the initial phase, combating ants gains special attention due to the wide occurrence of several species of the *Acromyrmex* genus and the great attractiveness of Black Acacia seedlings. From the second to the seventh year, maintenance activities are restricted to monitoring and controlling pests.

The rotation adopted by the company is 7 (seven) years. The rotation establishment takes into account the quality of the bark and wood products, due to the increase in tannin content and the increase in wood density over the years. Harvesting (mechanized or manual) starts with planning the cutting activities and is completed with the final deposit of bark and wood products (along roads - piles) for transport to the factories.

Note: Copy the table above for all countries included in the supply base.

Family	Scientific name	Popular name	Category *	Occurrence (Region / Area)
Anacardiaceae	<i>Astronium balansae</i> (<i>Myracrodruon balansae</i>) (1)	aroeirão	In danger	Encruzilhada do Sul / Planície Costeira
Araucariaceae	<i>Araucaria angustifolia</i> (1)	pinheiro-brasileiro	Vulnerable	Camaquã / Planície Costeira
Bromeliaceae	<i>Dyckia remotiflora</i> (4)	gravatá	Vulnerable	Faz. Do Seival
Cactaceae	<i>Frailea gracillima</i> (4)	tuna	Vulnerable	Faz. Do Seival
Cactaceae	<i>Frailea pygmaea</i> (4)	tuna	Vulnerable	Faz. Do Seival / Do Cerrito
Cactaceae	<i>Gymnocalycium denudatum</i> (4)	tuna	In danger	Faz. Luis Rodrigues

Cactaceae	Parodia erinacea (4)	tuna	In danger	Faz. Do Seival
Cactaceae	Parodia linkii (4)	tuna	Vulnerable	Faz. Do Seival
Cactaceae	Parodia mammulosa (4)	tuna	Vulnerable	Faz. Do Seival
Cactaceae	Parodia ottonis (4)	tuna	Vulnerable	Faz. Do Seival / Do Cerrito / Luis Rodrigues
Cactaceae	Parodia oxycostata (4)	tuna	Vulnerable	Faz. Do Seival
Cactaceae	Parodia permutata (4)	tuna	In danger	Faz. Do Seival
Lauraceae	Licaria armeniaca	canela	Critically in Danger	Faz. Camboatá
Lauraceae	Ocotea lanceolata (1)	canela-amarela	In danger	Camaquã / Piratini / Planície Costeira
Melastomaceae	Tibouchina asperior (2)	douradinha	In danger	Faz. Ouro Verde
Myrtaceae	Eugenia dimorpha (4)	-	Vulnerable	Faz. Luis Rodrigues
Orchidaceae	Baptistonia riograndense	orquídea	Vulnerable	Faz. Ouro Verde
Orchidaceae	Cattleya intermédia (1)	orquídea	Vulnerable	Faz. Ouro Verde
Oxalidaceae	Oxalis refracta	azedinha	Critically in Danger	Faz. Santa Fé
Poaceae	Chascolytrum bulbosum (Erianthecium bulbosum)	-	In danger	Faz. Cerro Branco / Santa Fé
Solanaceae	Solanum viscosissimum (2)	joá-cipó-melado	In danger	Faz. Santa Fé

2.3 Actions taken to promote certification amongst feedstock supplier

TANAC, as a sponsor, has the project to support Certification, by the biomass producer, for small acacia producers, which is under development. In 2020, five (5) suppliers and (six) 6 FMUs were FSC® certified. Currently, the group has 6 suppliers and 9 FMUs in its scope.

2.4 Quantification of the Supply Base

Supply Base

- a. **Total Supply Base area (million ha):** 30104,00
- b. **Tenure by type (million ha):**30104.00 (Privately owned)
- c. **Forest by type (million ha):**30104.00 (Tropical)
- d. **Forest by management type (million ha):**30104.00 (Plantation)
- e. **Certified forest by scheme (million ha):**30104.00 (FSC)

Describe the harvesting type which best describes how your material is sourced: Clearcutting

Explanation: The rotation adopted by the company is 7 (seven) years. The rotation establishment considers the quality of the bark and wood products, due to the increase in tannin content and the increase in wood density over the years. Harvesting (mechanized or manual) begins with planning the cutting activities and is completed with the final deposit of bark and wood products (along roads - piles) for transport to the factories.

Was the forest in the Supply Base managed for a purpose other than for energy markets? Yes - Majority

Explanation: All Pellet production is handled for the energy market. (18%) Most of the chips produced from raw material inputs are destined for the pulp market.

For the forests in the Supply Base, is there an intention to retain, restock or encourage natural regeneration within 5 years of felling? No

Explanation: Areas of natural forests, called APP (Permanent Preservation Areas), are maintained. However, the areas of planted forests are mostly replanted.

Was the feedstock used in the biomass removed from a forest as part of a pest/disease control measure or a salvage operation? No

Explanation: Biomass comes from planted forests.

Feedstock

Reporting period from: 01 Jan 2021

Reporting period to: 31 Dec 2021

- a. **Total volume of Feedstock:** 800,000-1,000,000 tonnes
- b. **Volume of primary feedstock:** 800,000-1,000,000 tonnes
- c. **List percentage of primary feedstock, by the following categories.**
 - Certified to an SBP-approved Forest Management Scheme: 20% - 39%

- Not certified to an SBP-approved Forest Management Scheme: 0%
- d. List of all the species in primary feedstock, including scientific name:** Acacia mearnsii (acacia); Eucalyptus spp (eucalipto); Pinus spp (pinus);
- e. Is any of the feedstock used likely to have come from protected or threatened species?** No
 - Name of species: N/A
 - Biomass proportion, by weight, that is likely to be composed of that species (%): N/A
- f. Hardwood (i.e. broadleaf trees): specify proportion of biomass from (%):** 99,72
- g. Softwood (i.e. coniferous trees): specify proportion of biomass from (%):** 0,28
- h. Proportion of biomass composed of or derived from saw logs (%):** 0,00
- i. Specify the local regulations or industry standards that define saw logs:** N/A
- j. Roundwood from final fellings from forests with > 40 yr rotation times - Average % volume of fellings delivered to BP (%):** 0,00
- k. Volume of primary feedstock from primary forest:** 0 N/A
- l. List percentage of primary feedstock from primary forest, by the following categories. Subdivide by SBP-approved Forest Management Schemes:**
 - Primary feedstock from primary forest certified to an SBP-approved Forest Management Scheme: N/A
 - Primary feedstock from primary forest not certified to an SBP-approved Forest Management Scheme: N/A
- m. Volume of secondary feedstock:** 1-200,000 tonnes
 - Physical form of the feedstock: Sawdust
- n. Volume of tertiary feedstock:** 0 N/A
 - Physical form of the feedstock: N/A

Proportion of feedstock sourced per type of claim during the reporting period				
Feedstock type	Sourced by using Supply Base Evaluation (SBE) %	FSC %	PEFC %	SFI %
Primary	0,00	100,00	0,00	0,00
Secondary	0,00	0,00	0,00	0,00
Tertiary	0,00	0,00	0,00	0,00
Other	0,00	0,00	0,00	0,00

3 Requirement for a Supply Base Evaluation

Is Supply Base Evaluation (SBE) is completed? No

N/A

4 Supply Base Evaluation

4.1 Scope

Feedstock types included in SBE: N/A

SBP-endorsed Regional Risk Assessments used: Not applicable

List of countries and regions included in the SBE:

Country: N/A

Indicator with specified risk in the risk assessment used:
N/A

Specific risk description:

4.2 Justification

N/A

4.3 Results of risk assessment and Supplier Verification Programme

N/A

4.4 Conclusion

N/A

5 Supply Base Evaluation process

N/A

6 Stakeholder consultation

N/A

6.1 Response to stakeholder comments

N/A

7 Mitigation measures

7.1 Mitigation measures

N/A

7.2 Monitoring and outcomes

N/A

8 Detailed findings for indicators

Detailed findings for each Indicator are given in Annex 1 in case the Regional Risk Assessment (RRA) is not used.

Is RRA used? N/A

9 Review of report

9.1 Peer review

N/A

9.2 Public or additional reviews

N/A

10 Approval of report

Approval of Supply Base Report by senior management			
Report Prepared by:	Kerlei Furtado da Costa	Supervisora de Qualidade e Meio Ambiente	15 Jun 2022
	Name	Title	Date
The undersigned persons confirm that I/we are members of the organisation's senior management and do hereby affirm that the contents of this evaluation report were duly acknowledged by senior management as being accurate prior to approval and finalisation of the report.			
Report approved by:	Juliano Bevilaqua de Oliveira	Diretor Comercial	15 Jun 2022
	Name	Title	Date

Annex 1: Detailed findings for Supply Base Evaluation indicators

N/A