

PUBLIC SUMMORY OF THE

FOREST MANAGEMENT PLAN 2022

**MUCURI** 



PUBLIC SUMMARY OF THE

# FOREST MANAGEMENT PLAN 2022

### **MUCURI**

1st EDITION | AUGUST 2023

### **SUMMARY**



08.	THE IMPORTANCE OF PLANTED FORESTS	
09.	FOREST MANAGEMENT	
10.	environmental management	
11.	CKNOWLEDGEMENT OF AND RESPECT FOR OUR PROFESSIONALS	
12.	SOCIAL MANAGEMENT	
	COMMUNICATION WITH STAKEHOLDERS	

### PROCEEDINGS

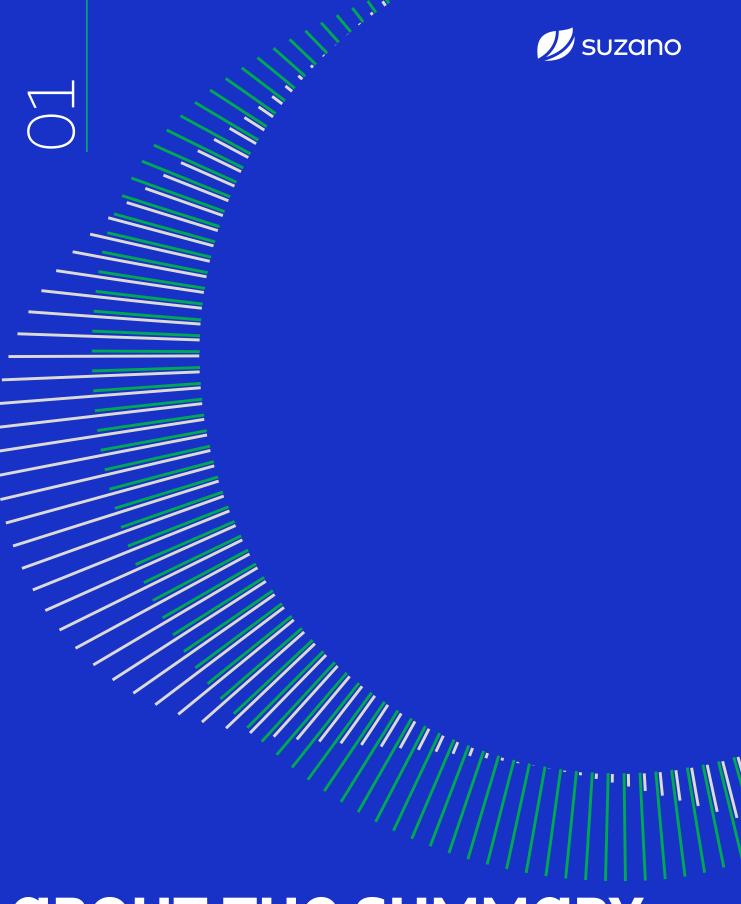
Every year, Suzano S.A. prepares its Forest Management Plan for the regions where it operates based on data from the previous year and according to results for monitoring and control or significant changes in forestry operations, responsibilities and socioeconomic or environmental conditions.

Cpver

Brown howler
(Alouatta guariba)

**Images** 

Érica Assunção Araújo - CEREIAS (Center for the Reintroduction of Wild Animals)



# **about the summary**



### $\bigcirc \bot$ about the summary

In this public summary of the Forest Management Plan, Suzano S.A. presents information on the forestry activities in the region, including responsibilities, available resources and strategies used in the adoption of responsible forest management focusing on sustainable development.

It is a synthesis of the Forest Management Plan based on the main forest certifications: FSC® -Forest Stewardship Council®, FSC-STD-BRA-01-2014 V1-1 PT FSC and NBR 14.789:2012 CERFLOR (Forest Certification). Each system has its own principles and criteria.

Suzano S.A.'s Forest Business Units (FBU) under the scope of the forest certifications are licensed under the following codes: FSC-C009927 , FSC-C100704 , FSC-C110130, FSC-C155943 and FSC-C118283.

In addition to the printed version, the Public Summary of the Forest Management Plan is emailed to the Company's main stakeholders: Society, public authorities, neighbors and communities located in its areas of operation, as well as employees and vendors.

Have a pleasant reading!

Additional information, questions, feedback and suggestions that may arise from this reading should be sent to: suzanoresponde@suzano.com.br or calling:

0800 022 1727





**GBOUT SUZANO S.A.** 



## O2 about suzano s.a.

Suzano is a global reference for the development of sustainable and innovative solutions from renewable sources and is committed to renewing life from trees.

World leader in the manufacturing of eucalyptus pulp and one of the major manufacturers of paper in Latin America, Suzano exports to over 100 countries and its products are part of the lives of more than 2 billion people. With eleven operating plants and the joint operation Veracel, its installed capacity is 10.9 million tons of market pulp and 1.4 million tons of paper per year

Suzano has approximately 40 thousand direct and indirect collaborators and has been investing in innovative solutions in eucalyptus crops to allow the replacement of fossil fuels by raw materials from renewable sources. The company has the highest degrees of Corporate Governance with B3, in Brazil, and New York Stock Exchange (NYSE), in the USA - stocks where its shares are traded.

We plant and grow trees. We transform this renewable raw material into innovative and sustainable bioproducts that are part of your daily life.









## PEOPLE WHO INSPIRE AND TRANSFORM



## we create and share value

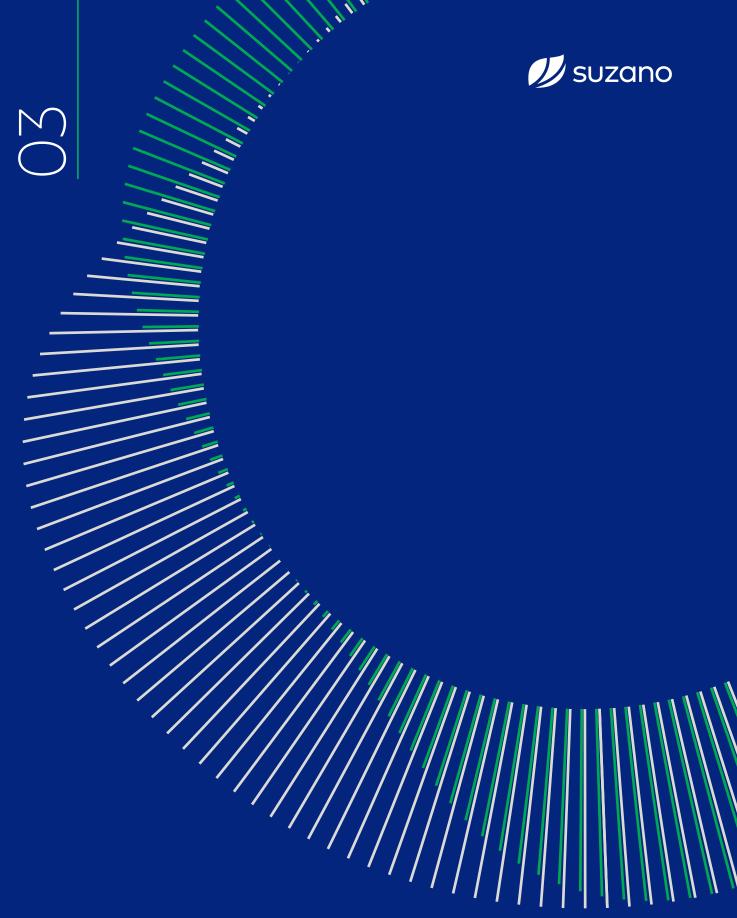




Renewing life from trees.
This is our purpose. We need to renew our ways of producing, consuming, distributing value, and relating with nature. Each eucalyptus seedling carries solutions for sustainable and innovative ideas for society.

For Suzano, trees are a symbol of renovation. With them, we plant a future of innovation and sustainability. This is what we call "innovability". We believe that trees are the basis for it and that our crops can generate renewable inputs for several businesses. That's how we evolve more and more.

We operate responsibly based on our expertise in eucalyptus crops. This means that we always use the best management practices in cropping - that is how we contribute for the maintenance of fertility and protection against erosion and degradation.



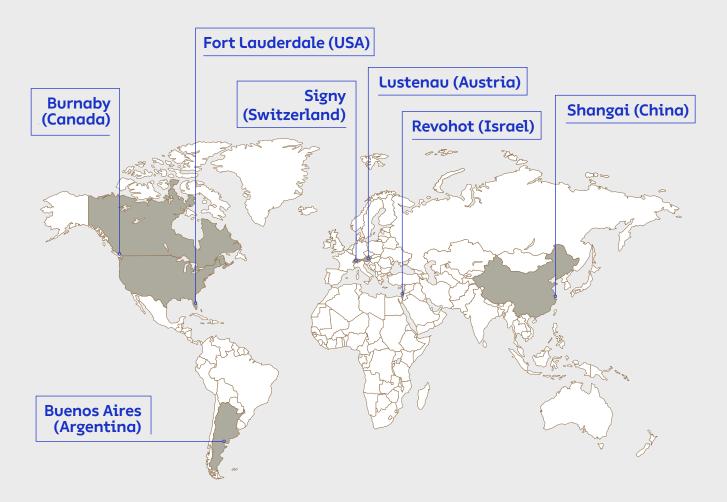
# where we are



## O3 where we are

We have business offices abroad in Argentina, Austria, Canada, China, USA, Finland, Israel and Switzerland.

### **Business Offices**



### **Distribution Centers**

**United States (4)** 

Europe (6)

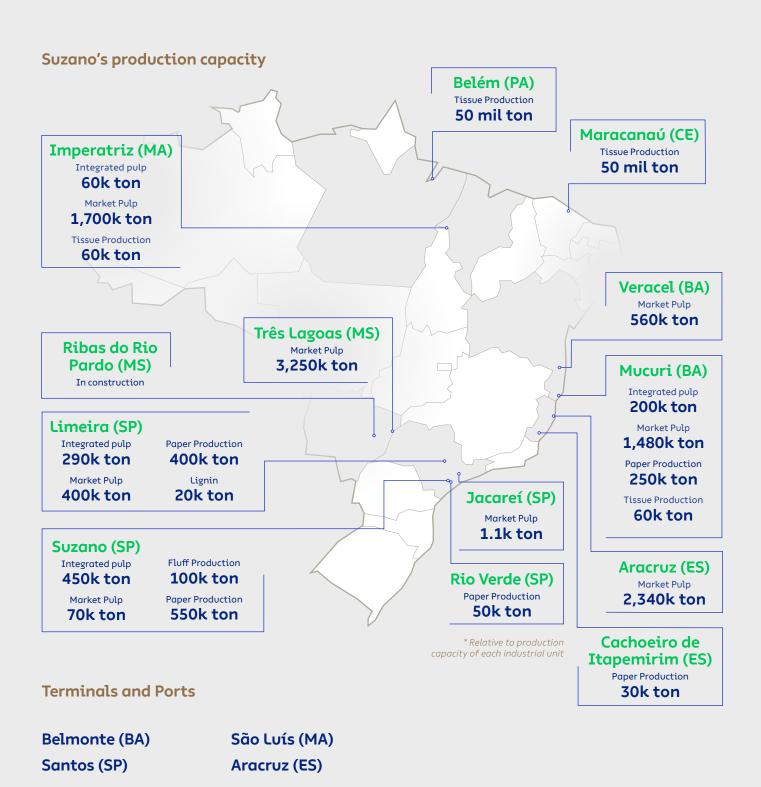
Asia (2)





Our organization includes administrative offices in Salvador (state of Bahia) and São Paulo (state of São Paulo), industrial plants and FuturaGene, which is responsible for the genetic development of forest crops and biofuels, with research laboratories in Israel and China. In 2021, Suzano started building a new plant in the municipality of Ribas do Rio Pardo, MS.

We provide products and services from 1.4 million hectares of planted forests and 1 thousand hectares of preserved forests in the states of Bahia, Espirito Santo, Minas Gerais, São Paulo, Mato Grosso do Sul, Maranhão, Tocantins, Para and Piaui.





# FOREST OPERATION area



# O4 FOREST OPERATION area

### Forest assets with certification

Suzano's forest competitiveness ensures its operation in different regions with adequate productivity.

### OWNED AND LEASED AREAS AND PARTNERSHIPS

Business unit	Total Crop area (ha)	Preservation area (ha)	Infrastructure (ha)	Total (ha)
Aracruz/Mucuri	392,157.32	295,231.28	28,295.46	715,684.06
Imperatriz	219,367.39	296,976.01	18,055.49	534,398.89
Limeira/Suzano/Jacareí	219,794.69	133,534.72	16,588.59	369,918.00
Três Lagoas / Cerrado	293,342.61	143,129.82	163,524.23	599,996.66
Total	1,124,662.01	868,871.83	226,463.77	2,219,997.61

Data relative to May/2022

### FOREST AREAS WITHIN THE SCOPE OF FSC® AND CERFLOR CERTIFICATIONS FOR EACH FOREST BUSINESS UNITS - FBU

FBU	Certified areas FSC® and PEFC (ha)			
FBU BA	338,014.74			
FBU ES	233,202.94			
FBU MA	487,011.02			
FBU SP	348,341.16			
FBU MS	436,702.57			
Suzano S.A. Total	1,843,272.42			

Data relative to Dec/2022





# FOREST CERTIFICATION



### 05 **FOREST CERTIFICATION**

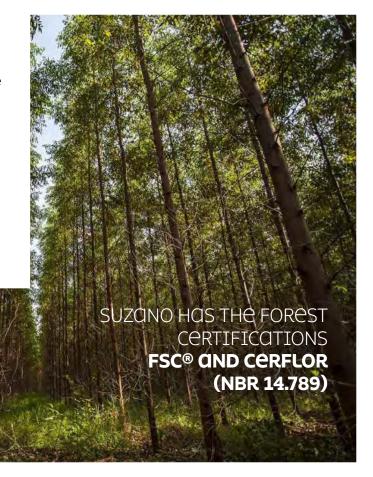
Suzano S.A. is committed to its goal of guiding its Forest Management system according to the Principles and Criteria set forth by the FSC® Certification and CERFLOR NBR 14.789 Forest Management, aiming to provide long-term business sustainability, continuous improvement of its activities and performance, as well as the adoption of environmentally correct and socially responsible practices.

To this end, the company has incorporated the environmental, social and economic dimensions into its forest management basic guidelines, as follows:

- To seek technological innovations and to support research to apply the best forestry techniques in its forest production units.
- To contribute to the professional development of direct and indirect collaborators.
- To implement the Forest Production Plan based on environmental aspects, such as landscape and microbasins management, monitoring of fauna, maintenance of biodiversity corridors, and compliance with the applicable federal, state and city legislation, as well as international agreements of which Brazil is signatory.
- To contribute to the maintenance or improvement of communities surrounding the forest management units
- Through open dialog channels, participative follow-up of social indicators, sharing of relevant information and promotion of recreation areas or environmental

### **Timber traceability**

Every timber harvested from eucalyptus crops in certified areas have their traceability ensured (stewardship chain of custody), i.e., origin guaranteed from planting to transportation to the industry, thus eliminating the risk of a mix up with logs from uncertified areas (timber controlled by Due Diligence assessment).





# FORESTRY BUSINESS UNIT MUCURI



### 06 FBU BQ

Suzano S.A. Forest Business Unit in Mucuri-BA is responsible for the forest management of the areas that supply the industrial unit. The forest management areas are located in the municipalities of Alcobaça, Caravelas, Ibirapuã, Lajedão, Medeiros Neto, Mucuri, Nova Viçosa, Prado, Teixeira de Freitas and Vereda in the state of Bahia and Carlos Chagas, Itanhomi, Nanuque, Pavão, Senador Modestino Gonçalves, Teófilo Otoni, Tumiritinga, Turmalina, Umburatiba and Virgem da Lapa in the state of Minas Gerais.

Crops are planted in owned lands, leased lands or in partnership with rural producers. With a forest base of 417,738.06 hectares, of which, 177,744.99 hectares are destined to the conservation of biodiversity (data relative to Dec./2022), Suzano BA's forest management targets the combination of eucalyptus crops and the conservation of natural resources, technological innovations and respect to communities.

The entire production is based on renewable eucalyptus crops, with the aim of supplying the industrial complex Mucuri - BA, with capacity to produce annually 1.48 thousand tons of bleached eucalyptus pulp, over 250 thousand tons of print and white paper and 60 thousand tons of tissue. The industrial unit Mucuri - BA operates in compliance with environmental control technology aimed at monitoring emissions, air and water quality, and the proper disposal of waste.

FBU MUCURI HAS A FOREST BASE OF 417,738.06 HQ, OF WHICH, GBOUT 177.744.99 HQ are destined to CONSERVATION

The seedlings are created with clonal technology, from a certified partner nurseries and hold the most advanced genetic database for the production of pulp.

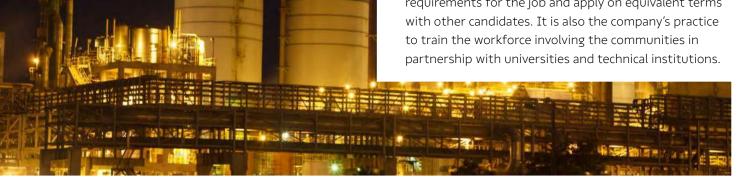




The harvesting process respects the region characteristics and uses efficient systems that rely on state-of-the-art equipment that allow for a safe, efficient and environmentally adequate operation.

To ensure success in all stages of the process, the company constantly invests in research, technology, and professional training.

Suzano's practice is to recruit candidates from the regions where it operates, provided that they meet the requirements for the job and apply on equivalent terms to train the workforce involving the communities in



### AREA OF OPERATION PER MUNICIPALITY

Municipality	Municipality's area (ha)	Total area Farm (ha)	Total area of occupancy (%)	Preservation area (ha)	Total area Crop (ha)	Other uses (ha)
BA						
Alcobaça	147,792.90	75,632.25	51%	32,859.77	40,061.77	2,710.71
Caravelas	237,788.90	97,497.13	41%	36,826.08	57,375.55	3,295.50
Ibirapuã	77,109.80	6,414.97	8%	2,982.74	3,102.96	329.27
Lajedão	62,435.30	3,501.07	6%	1,301.55	2,102.92	96.60
Medeiros Neto	131,173.90	2,485.08	2%	1,677.29	685.74	122.05
Mucuri	178,762.60	70,593.22	39%	24,368.59	43,346.07	2,878.56
Nova Viçosa	131,637.90	70,771.56	54%	24,582.35	43,371.57	2,817.64
Prado	169,210.00	16,596.02	10%	8,365.36	7,454.85	775.81
Teixeira de Freitas	116,562.20	14,889.48	13%	7,602.86	6,709.43	577.19
Vereda	78,215.90	5,822.29	7%	3,624.56	2,039.82	157.91
Subtotal Bahia	-	364203.07	-	144191.15	206250.68	13761.24
MG						
Carlos Chagas	320,298.40	19,752.66	6%	11,983.92	7,082.96	685.78
Diamantina	389,165.90	479.35	0%	394.81	71.31	13.23
Itanhomi	48,884.30	731.57	1%	725.88	0.00	5.69
Nanuque	151,816.60	24,683.92	16%	15,881.98	8,151.41	650.53
Pavão	60,119.00	507.22	1%	501.82	0.00	5.40
Sen. Modestino Gonçalves	95,205.50	979.31	1%	186.57	755.74	37.00
Teófilo Otoni	324,227.00	191.98	0%	189.98	0.00	2.00
Tumiritinga	50,007.30	1,961.69	4%	1,920.64	0.00	41.05
Turmalina	115,311.10	981.71	1%	470.74	467.80	43.17
Umburatiba	40,583.40	1,151.03	3%	871.14	255.82	24.07
Virgem da Lapa	86,891.40	2,114.55	2%	426.36	1,652.95	35.24
Subtotal Minas Gerais	-	53,534.99	-	33,553.84	18,437.99	1,543.16
Overall Total	-	41,7738.06	-	177,744.99	224,688.67	15,304.4

Consolidated municipalities Bahia/Minas Gerais - 6/28/2023 Data based on registry and DPN class (available for use)

The municipalities of Diamantina, Senador Modestino Gonçalves, Turmalina and Virgem da Lapa, do not currently supply Suzano's units.



### **Environmental aspects**

The forest areas and other native phytophysiognomies in FBU BA offer possibilities for the conservation of the regional biodiversity. We are in the Atlantic Forest domain (Dense Ombrophile, Semi Deciduous Seasonal Forest and associated formations), that contains broad biodiversity, traditional communities, a rich cultural heritage, tourist sites and water springs.

### Soil, climate and hydrography

The soil in FBU-BA is mostly acid, deep, highly weathered, well drained, cohesive, resistant to erosion and compaction; very hard when dry and brittle when humid; low in organic matter; with low natural fertility. There's prevalence of Ultisols, Spodosols and Latosols in Bahia's southernmost region, with high percentages of cohesive soil.

As per the terrain in the FBU-BA areas, it is characterized as small elevations and low slopes, being the highest local elevation the historical Monte Pascoal, 586 mt above sea level.

Suzano's crops are centered in a region of tropical warm humid and tropical super-humid climate, where the annual average rainfall is between 1,000 and 1,400 mm/year. The crops in Minas Gerais occupy an area where average annual rainfall range from 800 mm to 1,000 mm/year.

The main watersheds in the state of Bahia, in Suzano's area of influence, are Mucuri, Jucuruçu (south branch), Itanhém (or Alcobaça) and Peruípe Rivers. In the state of Minas Gerais, we can highlight the Rivers Itaúnas and Mucuri basins.







### Fauna and Flora

The areas of FBU-BA are inserted into different mosaics of forest coverage and house several phytophysiognomies of the Atlantic Forest biome. Generally, our areas encompass forest fragments capable of contributing to the conservation of several species, especially threatened species or endemic to the biome.

The environmental characterization in Suzano's areas of operation is done through the monitoring of the fauna and flora.

In a general way, the studies seek to identify, randomly or systematically, the local fauna and flora species, to allow the identification of critical species (protected by law), mapping the habitats of endemic, rare and endangered species, and finding opportunities for more detailed studies, restorative actions on the flora, or improvement of environmental conditions for the fauna. The fauna monitoring campaigns are carried out every three years, while flora monitoring is carried out every four years and it includes expeditions during dry and rainy seasons.



# SOCIOECONOMIC aspects



# O7 SOCIOECONOMIC ASPECTS

### **Forest areas**

Characterizing and identifying the main socioeconomic and cultural aspects present in the Forest Centers to support the work of the company in defining the specific strategies in its area of operation.

The extensive area of operation in the FBU-BA is characterized by different social, economic and cultural realities and by small, essentially rural, municipalities.

Eucalyptus crops are the most dynamic activity in this region, being responsible for important social and productive changes, although traditional activities such as cattle ranching, subsistence agriculture and fishing have great relevance in the local economy.

The region of *Costa das Baleias* (Mucuri, Nova Viçosa, Caravelas, Alcobaça, Prado and Teixeira de Freitas) host a number of small and disperse communities, not linked to one another. The southernmost region of Bahia hosts an indigenous community of the *Trika* tribe, in the municipality of Prado, where Suzano does not own any planted areas. In 2013, a locality named *Aldeia Renascer* was identified in the

municipality of Alcobaça-BA, in the community *Pau da Garrafa*. This locality has traces of indigenous traditions, from the indigenous tribe of *Pataxó Hã Hã Hãe*, from Porto Seguro-BA. Its location is acknowledged by FUNAI.

In the east of Minas Gerais, the closest indigenous tribe is *Maxakalí*, located in the municipalities of Bertópolis and Santa Helena de Minas, over 100 km from Suzano's crop areas.

The company identifies the social assets by means of tools and procedures to frame the profiles of the localities. These procedures and tools are used to understand and map the main social economic characteristics of the localities nearby and, in this way, guarantee a strategic direction of the activities for the public, set forth by the Director of Sustainability planning and prioritization tools.

ARCHAEOLOGICAL INFORMATION

The archaeological sites and locations with significant historical and/or cultural relevance located in the company's areas or surroundings are identified in our cartographic base.

Among the main actions performed, we highlight: identifying sites of special historical, archaeological, cultural, ecological, economic or religious significance for the communities and training field staff on archaeological heritage.



### Distribution of Suzano's farms, conservation units and management Units for Water Resources

Conservation Units are legally recognized areas, with relevant natural features with the role of securing the representativeness of significant and ecologically viable samples of the different populations, habitats and ecosystems.

The remaining native vegetation and crops have an important role in the set of actions to promote biodiversity conservation locally, regionally or state-wide.

The techniques provided by the company to protect fragments and manage commercial crops have relevant positive effects on the close conservation units since they host important shares of biodiversity and maintain the functionality of key biological and ecological processes.

Furthermore, understanding where the company's areas are inserted relative to the river basins helps us to plan new implementation areas, and to maintain existing crops.

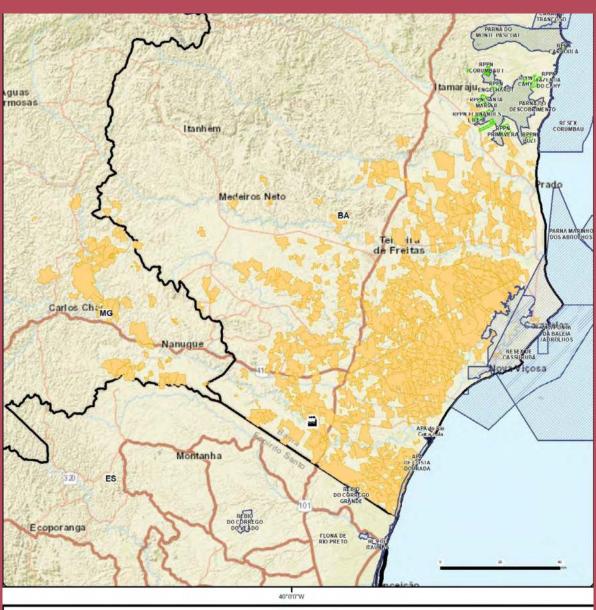
The use of water by operational activities is regulated by state and federal bodies, that define the availability of each resource and the volume needed by other users, and establishes the maximum volume of water to be used by the company, thus granting the supply of other users of the basin.

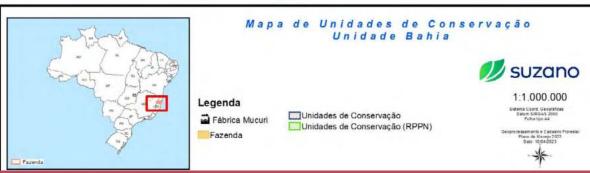




Some Conservation Units adjoined to Suzano - Mucuri Unit areas are the Cassurubá Extractive Reserve, the Abrolhos National Marine Park and the Descobrimento National Park, in BA, and the Córrego Grande and Córrego do Veado Biology Reserves, in northern ES.

### MAP OF CONSERVATION UNITS







# THE IMPORTANCE OF PLANTED FORESTS



# **O8** THE IMPORTANCE OF PLANTED FORESTS

### What is forest management?

Forest Management is the administration of forest resources with the aim of achieving economic and social benefits aligned with the mechanisms for ecosystem support by employing the best practices of Eucalyptus farming. The goal is to reach high productivity in balance with environmental conservation.

### Objective

The goal of Suzano's forest management is to supply the industrial Units with eucalyptus timbers, according to the parameters described in the following, either for short or long terms.

- The goal of Suzano's forest management is to supply the industrial Units with eucalyptus timbers, according to the parameters described in the following, either for short or long terms.
- Availability and rational use of areas for the cultivation of eucalyptus through directives and procedures for the purchase and lease of land.
- Development of new genetic material and monitoring of soil nutritional levels, pests and others, defined in operational routines and specific research projects.
- Standardization, reporting and continuous improvement of procedures related to seedling production, implementation, restoration, forestry practices, construction and conservation of roads, harvesting, and transportation of forestry products.
- Outlining of programs concerning the environment, healthcare and safety at work, as well as socioenvironmental aspects, always in compliance with the applicable law.
  - It is an exotic species (non-native), like coffee, corn, soy and sugar cane and several other crops widely planted throughout the country.
  - If managed properly, water consumption is similar to that of native forests and their roots stay away from the water table.
  - The eucalyptus takes approximately seven years to harvest and can be cropped in low fertility soils.
- If managed properly, the eucalyptus contributes to the protection and conservation of biodiversity, as observed in the results of biodiversity monitoring in Suzano's areas.
- It captures carbon dioxide (CO2) from the atmosphere, thus helping to reduce the effects of climate change and to maintain important environmental services to society, such as water resources.

# THE EUCALYPTUS



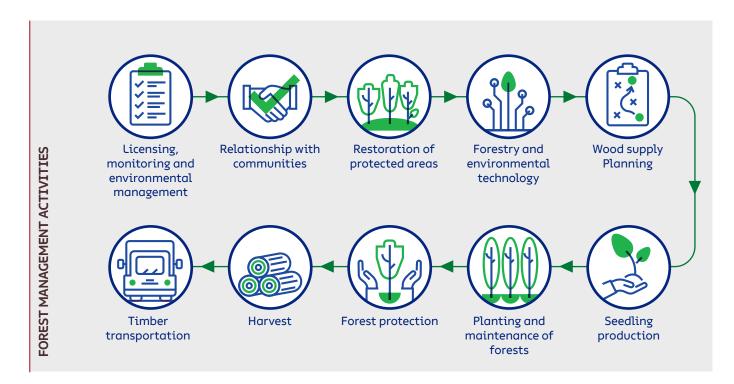
### Compliance with the law

Suzano is always up-to-date with the applicable environmental, labor and tax laws with preliminary surveys carried out by an environmental law consulting firm.

### **Managed forest resources**

To supply the demands of the industry for eucalyptus timbers, we rely on crops of the genus *Eucalyptus*, which encompasses more than 600 species that are adapted to many different soil and weather conditions. Eucalyptus originates from Australia and Indonesia. It was chosen due to its higher potential for timber production for pulp when compared with other forestry species and to its adaptability to the environmental conditions in Brazil, including soil and weather.

THE AVERAGE ANNUAL PRODUCTION OF FBU BA IS AROUND 37.4 M³/HA.YEAR





### **Technology and innovation**

Suzano maintains advanced Technology Centers that develop studies and research on forestry and industry. These activities aim to a consistent enhancement of its operations and technological innovations, focusing on the company's sustainability.



Technology and Innovation works mainly on Genetic Improvement, Genomics, Forest Protection, Forest Management, Ecophysiology and Biotechnology, defining models of planted forest management that support an increase in forest biomass productivity.

Suzano's crops are mostly formed by hybrids obtained from the crossbreeding of *Eucalyptus grandis* and *Eucalyptus urophylla*.

Those species were selected following several cycles of improvement and research because they are better adapted to the local soil and weather conditions. Currently, the tree is harvested in six years in average, varying from five to seven years. After the first harvest, the area is managed for a new planting or for regrowth.

### **Partnerships**

Suzano develops studies and research in collaboration with outstanding public and private institutions in Brazil and abroad. All projects and activities seek to meet market and operational demands, legal requirements, new tendencies, technologies and products of internal research strategies.

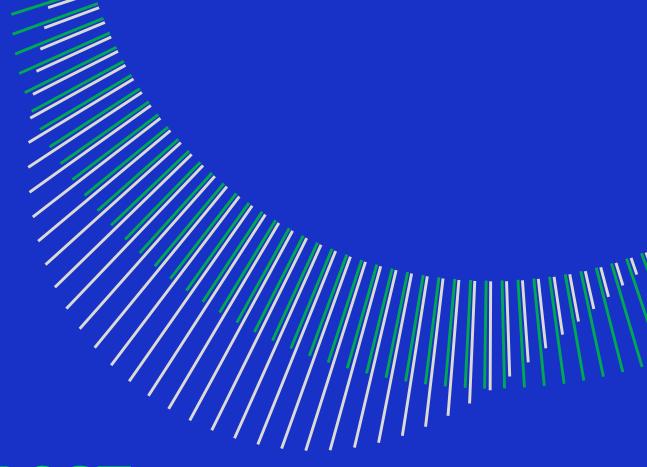
As a result, Suzano stands out in developing and recommending new genetic materials, in monitoring and recommending forest management practices and fertilization, in using new technologies in forest protection and more sustainable production practices. In addition to the results highlighted in forestry, Suzano sustains solid and robust results in the development of Research and Development of the industry and new businesses.



Meet our partners in research and innovation in: www.suzano.com.br/ a-suzano/documentos



6



# FOREST MANAGEMENT



## 09 FOREST MANAGEMENT

### **Forest protection**

The company continuously monitor for pests, diseases and weed with regular field visits.

The objective is the early detection of pests and weed, and the assessment of the competition level of eucalyptus with weed. The information gathered are used to guide decisions on control and to define the method to be adopted, seeking for the rational use of pesticides.

Suzano also prioritizes the use of biological control agents in occasional pest management, and selection and planting of clones resistant to the main crop diseases, complementing the integrated management.







### **Forest Inventory**

On its first 120 days, the forest is monitored through a Qualitative Inventory that allows inferences on the quality and homogeneity of the crops. In regrowth forests, performance is monitored at 90 and 180 days upon harvesting also through qualitative forest inventory.

The continuous forest inventory uses sampling techniques to gather data that allow an estimate of the planting volume per hectare and per tree for a given age. This information is used in the decision making process on the best harvest time. It is also important for the proper planning of timber supply to the Industrial Unit.

### **Planning**

Planting and harvesting planning for timber supply comprises short, medium and long term achievements, aiming at the best utilization of natural resources and minimizing occasional socioenvironmental impacts. In this way, forest planning keeps track of forest ordering to ensure the industry supply. The proper management of planted forests favors crop productivity and contributes to disease and pest control, biodiversity conservation, and protection of springs and ecosystem services - creating a virtuous cycle.

### **Operational Excellence**

This area studies new technologies focusing in equipment and processes for a continuous improvement of forestry, harvest and logistics activities, working in several fronts such as: Routine management, strategic deployment, education and qualification, innovations, quality program, Digital hub, corporate maintenance and fleet management.





### **Seedling production**

The plant nursery is where the eucalyptus seedlings are produced and managed through several stages until reaching the proper size to be planted in the field.

The seedling development time ranges from 90 to 120 days. To produce seedlings of outstanding quality, the distance between them needs to be increased when they reach 60 days so that they can grow healthier.

### **Planting**

The main activities related to trees planting are: preplanting mechanized chemical cleaning, mechanized soil tillage, mechanized fertilization, planting, mechanized and semi-mechanized irrigation, and replanting.

Planting can be carried out in reform areas (where an eucalyptus crop already exists), or in implantation areas (where there is no eucalyptus crop). Suzano only implants forest in areas not covered by native forests.

Soil is prepared using minimum tillage, which consists in preparing strips of soil in the planting line. About 70% of the land remains undisturbed, which favors the maintenance of soil characteristics, avoiding erosion and loss of organic matter.

## IN 2022, FBU BG GCHIEVED TOTALING 23,800 HQ 1,500 Ha **7,100 Ha** 32,400 HQ **IMPLANTATION** RESTORATION **REGROWTH** <u>as an Installed</u> **APACITY TO PRODUCE 31 MILLION SEEDLINGS**



### **Forest Maintenance**

This stage consists in a set of activities carried out between planting and harvest (5 to 7 years) to ensure growth and productivity.

The main forest maintenance activities are: manual or mechanical mowing, chemical or mechanical weeding, fertilizing, control of leafcutter ants, prevention of forest fire and diseases and pest control.

### **Timber transportation**

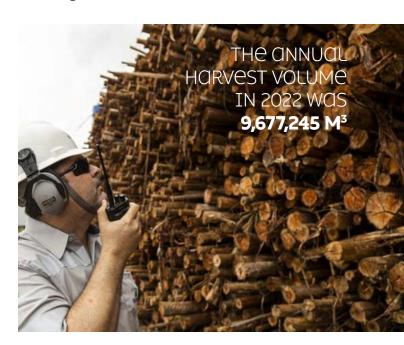
Forest Logistics main responsibility is to transport timbers from the forest areas to the Industrial Units. The harvested timbers are transported according to the Annual Transportation Planning. Once this process is defined, loading, routes and trucks distribution are determined considering the requirements defined on the area's operational procedures.

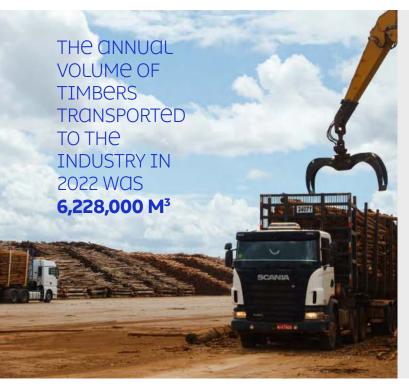
The routes for timber transportation are defined in agreement with Suzano's Sustainability sector in order to minimize the possible impacts of forestry activities on the neighboring communities.

#### Harvest

As soon as the forest reaches its ideal point, timbers are harvested to supply the industrial plant. Harvest encompasses all the processes from tree harvest to the disposition of logs (cutting, forwarding, stacking and fueling), up to the point where they can be transported by trucks.

During harvest, eucalyptus trees are cut toward the center of the plot, avoiding any possible damage to the native vegetation.





### Trucks equipped with telemetry

FBU BA uses precision technology to manage operations. Our fleet is equipped with telemetry to monitor operations, distribution and positioning of the trucks on the company's roads and farms, control of loading and unloading, and to support our partners in the management of operation safety, such as monitoring the drivers working hours and detecting occasional violations of speed limits.

With this system in place, Suzano strengthens the culture of daily routine management with partner companies in logistics operations, thus maximizing personnel safety standards, and operational efficiency based on reliable data.



### Road Network - roadways

The road network in the forest area comprises municipal and state roads, arterial, collectors and firebreaks, whose maintenance is defined according to the company's internal criteria to secure forestry operations and avoid erosive processes in the conservation areas.

- Drainage structures, such as containment boxes, are built to store rain water and avoid erosion on the roads.
- Existing roads are repaired and new roads can be opened to improve operation quality and safety.
- Firebreaks are kept to secure the access of fire brigade teams.

### **Road moistening**

To keep the road wet during certain earthworks, the company uses a tank truck. The goal is to reduce dust around houses and settlements caused by the traffic of trucks transporting timber to the company.

### Road safety

Health and safety are the company's permanent commitment. Suzano maintains a set of rules that guides its employees and the carriers' employees into safer driving habits, protecting everyone's lives.







### **Forest integrity**

Suzano's team of professionals involved in the productive processes of forestry focus largely on prevention and control of wildfires.

That is why the company provides continuous training to its brigade and forest protection teams that are not only apt to monitor, but also act as support to fight fire in neighboring farms.

We carry out Forest Protection work along with the competent authorities, aiming to reduce the Forest Fire incidents, as well as other issues found in our premises.

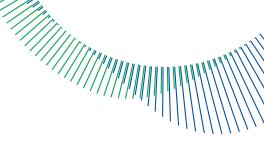
To maintain our forest crops and conservation areas, we rely on the daily monitoring of the Property Surveillance Staff and cameras to indicate problems and fires.

The Forest Fire Brigade acting on the crops and conservation areas, consists of the combination of property surveillance and firefighting activities, that work preventively, by monitoring the areas and effective readiness to act upon call of forest fire.



### Safety and protection of Forest Areas

Suzano has an electronic forest fire monitoring system implemented in Bahia and Minas Gerais with monitoring towers with 360° view operated by one central station. This system covers over 95% of the forest area, including crop and preservation areas.





Location of teams



Night incident detection



Daylight incident detection



Detection of pests and diseases













# **ENVIRONMENTAL**MANAGEMENT



# 10 11 environmental management

#### **High Conservation Value Areas**

The term High Conservation Value Areas (HCVA) was created along with the standards for the forest management certification and refers to areas with important features for the conservation of biodiversity and to maintain people's quality of life.

Examples are: native forests that house endemic (that can't be found anywhere else) or endangered animals and plants, and forests that provide essential resources for the local population.

Suzano uses this concept to guide its conservation efforts, evaluating the HCVAs present in its areas according to the following attributes: biological, ecological, social or cultural values considered notably meaningful or of extreme importance at the national, regional or global levels. Those are the values that need protection.

In the first semester of 2021, the FBU adjusted the methodology for the evaluation of HCVA attributes 1 to 4 (environmental attributes), through a corporate technical task group for biodiversity using as reference the criteria adapted from the Guide for Good Practices to evaluate High Conservation Value, developed by the ProForest Network.

During the process of reviewing the environmental HCVAs (1 to 4), Suzano consulted with the stakeholders, according to the criteria for the identification of HCVAs in order to validate the defined threats and measures for protection, conservation and monitoring for the maintenance of these areas. During the development of the diagnosis, researchers and specialists were consulted about the items in their areas of expertise in order to provide Suzano with the security to make decisions about the proper identification and management for HCVAs.





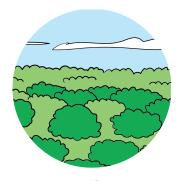
Suzano consulted with stakeholders, in accordance to the criteria for HCVAs and SML (Special Meaning Localities), to develop management regimes for the maintenance of HCVAs and SML and assess their efficacy.

The key to define a given area as HCV is identifying if it fits one or more attributes as described below:



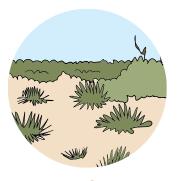
AVC 1

Areas containing significant amount of value for biodiversity.



AVC 2

Extensive and preserved areas of native vegetation, of global, national or regional relevance for biodiversity.



AVC 3

Areas that are inserted in or contain rare, threatened or endangered ecosystems.



**AVC 4** 

Areas capable of promoting environmental services in critical situations, such as the protection of water basins and erosion control.



HCV 5

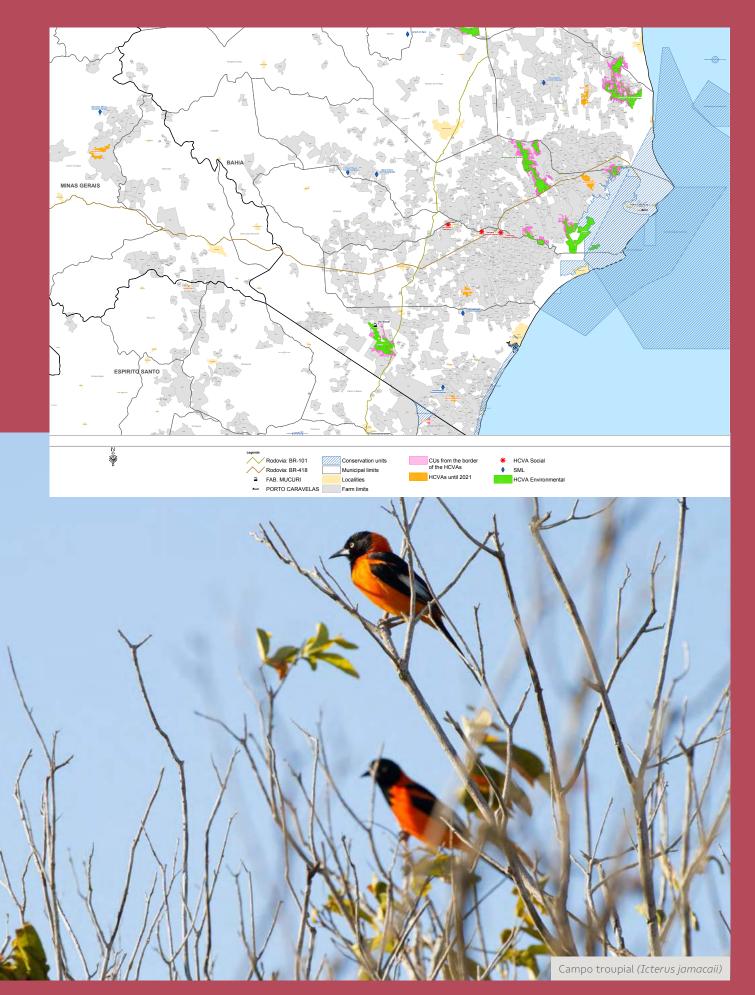
Important areas to meet the basic needs of communities, such as those related to health and subsistence.



HCV 6

Important areas for the traditional cultural identity of communities.





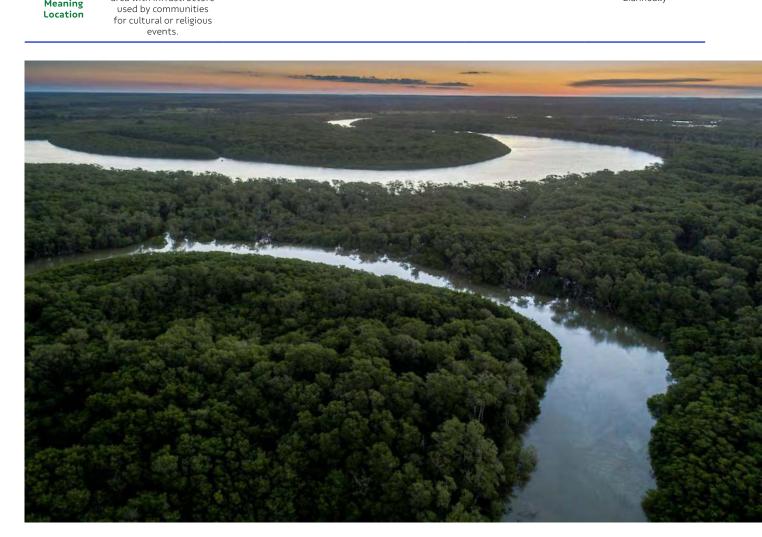


## Measures of protection and monitoring according to attributes of High Conservation Values

High Conservation Values	Characteristics	Risks and threats	Impact	Protection measures	Monitoring	
					<b>₹</b>	
HCV 1	Endemic, rare, threatened or endangered species at the global, national or regional level	a. Illegal practices (wildfires, theft of wood and native flora deforestation for alternative use of soil, mineral theft, predatory hunting and	wildfires, theft of wood and native vegetation coverage colla for alternative use of soil, mineral theft,  b. Reduction in native wawar awar colla colla on the borders  b. Reduction in native awar awar awar colla colla colla colla con the borders  b. Prog Assis		Anthropic actions: Bimonthly Birds and mammals: Triannual Flora: Every 4 years	
HCV 2	Significantly wide areas at the global, national or regional level, containing viable populations of naturally occurring species.	fishing, trespassing, among others) b. Operational damage	fishing, trespassing, among others)  b. Operational damage to fauna and flora  c. Non-authorized presence of domestic animals or ranching  d. Propagation of invasive species of flora and fauna  ecosystem e. Reduction of the gene flow  f. Disturbance of wildlife  f. Disturbance of wildlife  e. Peri with special derivative species of flora and fauna  ecosystem e. Reduction of the gene and the gene flow  f. Disturbance of wildlife  e. Peri with special derivative spec	shing, trespassing, mong others)  perational damage flow f. Disturbance of wildlife gene from and of firefighting f. Disturbance of wildlife gene flow f. Disturbance of wildlife surveillance; for an and flora for a constant flow f. Disturbance of wildlife gene flow f. D	preventative measures and of firefighting d. Patrimonial surveillance; e. Periodic patrolling with a team specialized in identifying events	Anthropic actions: Bimonthly  Vegetation coverage with satellite imaging: Annual  Birds and mammals: Triannual (fast diagnostics)  Flora: Every 4 years (fast diagnostics)
HCV 3	Ecosystems, habitats or refuges for rare, threatened or endangered biodiversity			f. Environmental recommendation in operational book g. Planning for the promotion of ecological connections i. Placement of identification signs in	Anthropic actions: Bimonthly Birds and mammals: Triannual (fast diagnostics) Flora: Every 4 years (fast diagnostics)	
HCV 4	Areas capable of promoting environmental services in critical situations	a. Illegal practice (wildfire, deforestation for alternative use of soil, mineral theft, trespassing, among others) b. Operational damage to flora c. Non-authorized presence of domestic animals or ranching d. Illegal and inadequate disposal of residues e. Erosion and sedimentation	a. Reduction in native vegetation coverage b. Loss of soil c. Soil compaction d. River silting e. Reduction in water availability f. Reduction in water quality	j. Updating of the company's registration database (maps) with the location of HCVAs k. Prioritizing, whenever possible, ecological restoration l. Suzano's commitment with Zero deforestation policy	Anthropic actions: Bimonthly Vegetation coverage with satellite imaging: Annual	



High Conservation Values	Characteristics	Risks and threats	Impact	Protection measures	Monitoring
			Ø		<b>₹</b>
HCV 5	Essential areas and resources to meet the local communities, indigenous peoples or traditional peoples basic needs	a. Illegal practices (wildfires, native wood and plants theft, deforestation for alternative use of soil, mineral theft, trespassing, among others) b. Deforestation c. Operational damage d. Loss of access to cultural values and resources	<ul> <li>a. Loss of biodiversity;</li> <li>b. Scarcity of resources for extraction;</li> <li>c. Reduction in water availability.</li> </ul>	<ul> <li>a. Patrimonial surveillance;</li> <li>b. Implementation of preventative measures (ex. maintenance of roads and firebreaks) and of firefighting.</li> <li>c. Environmental education actions</li> <li>d. Access granting guarantee</li> <li>e. Placement of signposts</li> </ul>	Anthropic actions and community opinion: Quarterly
HCV 6	Areas with special cultural, archaeological, or historical meaning at the global or national level and/or of critical importance for the traditional culture of local communities, indigenous peoples or traditional peoples.	a. Patrimonial damage and depreciation     b. Operational damage c. Water availability d. Fire     e. Loss of access to cultural values and resources	a. Devaluation or loss of cultural identity;      b. Deterioration of the cultural, historical or archaeological heritage;      c. Disfigurement of places with cultural traditional, ecological, or religious	f. HCVA identification or SML g. Open dialog with the community h. Identification on the operation maps i. Maintenance of physical structures	
SML (Special Meaning Location	It is a natural or anthropic area or an area with infrastructure used by communities for cultural or religious		importance		Anthropic actions and community opinion: Biannually





#### **Biodiversity management**

Suzano understands Biodiversity Monitoring as the tracking of development and changes in components and parameters of the landscapes and communities of fauna and flora, aiming to assess the effects of forest management on the environment.

#### Fauna

In 2022, the biodiversity monitoring was carried out in an integrated way, encompassing the states of Bahia, Minas Gerais and Espirito Santo.

In the Mucuri unit, 12 HCVAs are part of the biodiversity monitoring program: Alcoprado, Complexo Aparaju, Complexo Rio Itanhentinga, Fábrica, Muçunungas de Juerana and Peruípe. In addition to that, four farms are monitored (three in the state of Minas Gerais and one in the state of Bahia) regarding compliance with the specific condition for the License for Operation of the forestry entrepreneurship.

Birds accounted for 453 species in the FBU's database. Among those, 29 are considered threatened at the regional, national and/or global level, and 70 are endemic. In 2022, the monitoring of fauna in the HCVAs in Bahia was not scheduled to take place (every three years for fauna).

Mammals of medium and large size sum up 66 species, of which 15 are threatened and 12 endemic.

#### SPECIES REGISTERED IN THE LOST MONITORING - 2022



**BIRDS** 



**MAMMALS** 





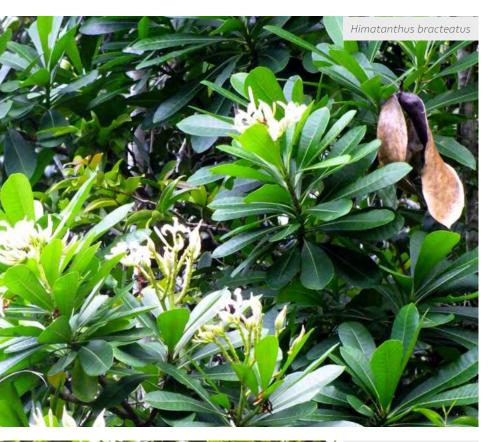
Reptiles



**AMPHIBIANS** 









#### Flora

In the monitoring of flora, 1,150 species were logged historically, of which 106 are considered threatened. In 2022, the monitoring of fauna in the HCVAs in Bahia was not scheduled to take place (every four years for fauna).

With the vegetation and fauna inventory in the company's area, it's possible to develop recommendations to keep and/ or improve the conservation of species, such as environmental restoration of priority areas and protection against fire. Continuous monitoring generate knowledge that base the improvement of environment management techniques, contributing to the local biodiversity preservation.

The chart below shows the species according to the level of endangerment as per the IUCN's Red List of Threatened Species and the National List (IBAMA).

#### NUMBER OF THREATENED SPECIES IDENTIFIED IN THE LAST MONITORING

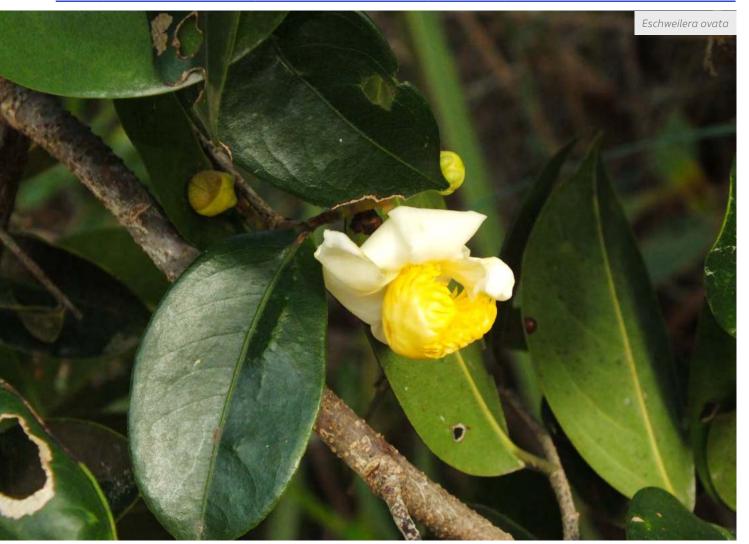
- 8 SPECIES OF FLORA
- 4 SPECIES OF BIRDS
- **2** SPECIES OF MAMMALS





#### ENDANGERED SPECIES IDENTIFIED IN THE MONITORING OF FAUNA AND FLORA AT FBU BA

Group	Species	Popular name	IUCN Red List	National list MMA	State list BA	State list MG
	Amazona rhodocorytha	Red-browed amazon	VU	VU	EN	EN
Birds	Amazona vinacea	Vinaceous breasted amazon	EN	VU	CR	VU
i <u>.</u>	Amazona farinosa	Southern mealy amazon	-	-	VU	CR
	Myrmoderus ruficauda	Scalloped antbird	EN	EN	EN	CR
lals	Puma concolor	Cougar	LC	VU	VU	VU
Mammals	Dicotyles tajacu	Collared peccari	LC	LC	-	VU
-	Paratecoma peroba	-	-	EN	-	-
	Colicodendron bahianum	-	VU	-	-	-
_	Joannesia princeps Mamão-jacarátia-mirim		VU	-	-	-
ation	Machaerium villosum	Caviúna	VU	-	-	-
Vegetation	Dalbergia nigra	Jacarandá-da-bahia	VU	VU	-	-
	Trichilia silvatica Peito-de-pombo		VU	-	-	-
	Zeyheria tuberculosa	Mamica-de-cadela	VU	VU	-	-
	Sorocea guilleminiana	Folha-de-prata	VU	-	-	-





Group	Species	Popular name	IUCN Red List	National list MMA	State list BA	State list MG
	Campomanesia macrobracteolata		-	VU	-	-
	Chrysophyllum splendens	Bapeba-pedrim	VU	-	-	-
	Euterpe edulis	Palmito-jussara	-	VU	-	-
	Faramea bahiensis		-	VU	-	-
	Hirtella insignis		-	EN	-	-
	Hornschuchia polyantha		-	-	VU	-
	Inga hispida	Ingá-de-linhares	VU	-	-	-
	Inga única		VU	VU	-	-
	Joannesia princeps	Boleira	VU	-	-	-
	Manilkara longifolia	Massaranduba	EN	-	-	-
Flora	Melanoxylon brauna	Braúna	-	VU	-	-
Ξ.	Mezilaurus navalium	Tapinhoã	VU	EN	-	-
	Myrcia neoestrellensis		CR	-	-	-
	Myrcia sucrei		VU	-	-	-
	Naucleopsis oblongifolia		VU	-	-	-
	Ocotea odorifera	Sassafrás	-	EN	-	-
	Ocotea pluridomatiata	Canela-pimenta	EN	-	-	-
•	Pouteria pachycalyx		CR	VU	-	-
	Sloanea obtusifolia		-	EN	-	-
	Sorocea guilleminiana	Folha-de-serra	VU	-	-	-
	Tabebuia cassinoides		-	EN	-	-
	Trichilia silvatica		VU	-	-	-





#### **Monitoring of water resources**

Suzano assesses the effects of its crops on the quality and quantity of water resources through a representative monitoring network according to the scale and intensity of plantings.

One of the mechanisms applied for the maintenance of water resources is based on natural control developed across evolutionary processes of the landscape. One example is the well-known relationship between forest coverage and water resources, mainly on Permanent Preservation Areas, aiming to comply with the legislation and the conditionals of forest operation licenses.

From the lab results it is possible to build an assessment of the monitored areas, in order to set a possible relation between the eucalyptus crops and surface and underground water conditions located in its area of influence.

This program's execution consists of two monitoring campaigns. These campaigns gather quali-quantitative data from surface and underground water in areas near eucalyptus crops using in situ measurements of some parameters and collecting samples for lab analysis.

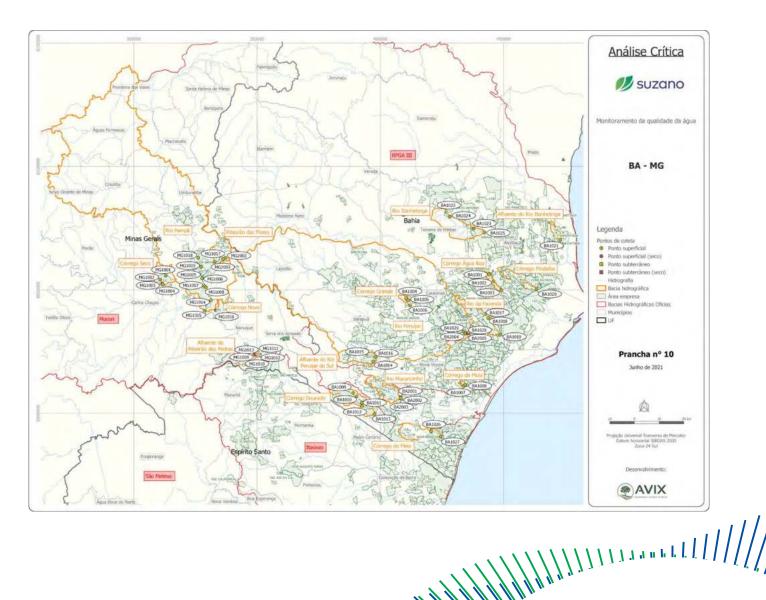
Studies on water quality and flow show no negative impact to the environment associated with the eucalyptus crops.

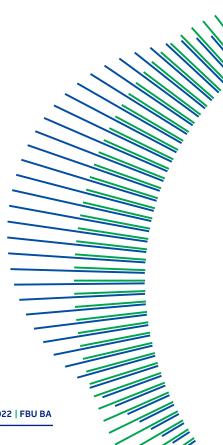
Below there's a map of the official water basins, subbasins and monitored sampling spots in the states of Bahia and Minas Gerais.





#### LOCATION OF MICROBASINS (BA AND MG) AND WATER QUALITY MONITORING SPOTS







### Environmental aspects and impacts of the Forest Management

Suzano is committed to adopting the best environmental practices to promote, in an innovative way, sustainable development.

Focusing on the sustainability of its processes, the company uses managerial instruments and tools that provide better environmental quality for its forestry activities. Managing environmental aspects and impacts, the FBU defines methodologies for the identification, assessment and control of environmental aspects and impacts (of its services, activities and products), seeking to minimize all possible adverse impacts and strengthen the beneficial ones.

Environmental aspects and impacts of forestry processes are identified and assessed considering the following social and environmental safeguards, among others:

- The new laws that apply to the business;
- · Compliance with the current law;
- · Identified regulatory marks;
- Obligations resulting from agreements and voluntary certifications;
- Change management for new products, services, activities and equipment.

Once identified the environmental aspects and impacts, mitigation, control and monitoring actions are established.

#### **EXAMPLES OF ENVIRONMENTAL ASPECTS AND IMPACTS OF THE FOREST MANAGEMENT**

Type of impact	Adverse	Adverse	Benefic	Benefic
Environmental aspect	WATER CONSUMPTION	RISK OF FIRE OUTBREAK	CORBON OBSORPTION	IMPROVEMENT OF eCOLOGICAL PROCESSES
Environmental impact	Scarcity of water resources.	Alteration in the physical quality of soil.	Reduction of greenhouse effect.	Biodiversity recovery.
Mitigation or enhancement measure	<ul> <li>Physical control: Water meter and irrigation controller.</li> <li>Limits of water use rights.</li> </ul>	Fire control systems and fire brigade teams.	CO <sub>2</sub> sequestration by forestry production and conservation areas.	<ul> <li>Restoration of degraded areas.</li> <li>Conservation of PPA and LR.</li> </ul>



#### **Ecological Restoration**

As part of its commitment with the environment, Suzano promotes restoration actions on its Permanent Preservation Areas, Legal Reserves and in all states where it operates. It is one of the largest Brazilian restoration programs, encompassing two biomes considered as hotspots of biodiversity - the Atlantic forest and Cerrado - and the transition area Cerrado - Amazon forest.

To emphasize this commitment, the company is a signatory of the Pact for the Restoration of the Atlantic forest, an initiative that aims to restore 15 million hectares in the country until 2050.

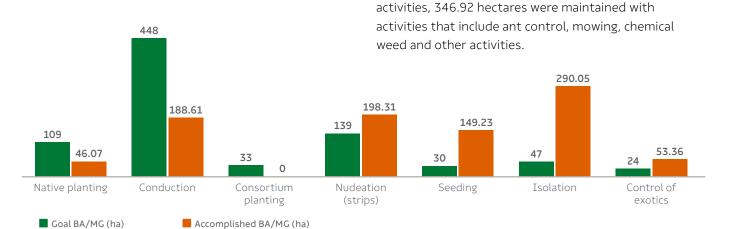
In 2022, 925.64 hectares were implanted. In addition to the activities related to implantation, maintenance activities related to ant control, mowing, chemical weeding, among others, were conducted in 6,414.19 hectares in Bahia and Minas Gerais. Regarding the activities related to the suppression of exotic and invasive species, 274.35 hectares were covered, including areas of forest and pasture to be recovered, to open way to the implantation and maintenance transfers. All implanted areas are monitored to evaluate the techniques adopted and indicate whether management is necessary, focusing on the ecological succession and resulting recovery.

All implanted areas are monitored to evaluate the techniques adopted and indicate whether management is necessary focusing on the ecological succession and

resulting recovery. In Espírito Santo, 903.12 hectares

were implanted in 2022. In addition to the implantation

GOAL AND AREA AFFECTED BY THE ECOLOGICAL RESTORATION PROGRAM AT FBU BA IN 2022 USING THE RESTORATION METHODOLOGY





#### Solid waste management

Suzano's Solid Waste Management adopts practices to classify, separate, store, collect, transport, and dispose of the waste produced in forestry operations and activities, aiming to:

- Reduce waste production;
- Reuse residues, optimizing its use before disposal;
- Recycle residues;
- Adequately process waste;
- Ensure the proper disposal.

Waste management in the forest areas is performed according to the effective legislation. Waste is forwarded according to its classification to recipients that undergo a rigid process of evaluation and approval. Class I waste (Hazardous) might be sent for co-processing, recycling and licensed Class I landfills. Class II waste (non-Hazardous) are sent for recycling or licensed landfills, depending on its physical characteristics.

Packages of pesticides used in forestry operations are sent to licensed Empty Crop Protection Packages Receiving Units for reverse logistics.

#### **WASTE MANAGEMENT STEPS**



Sorting





storage





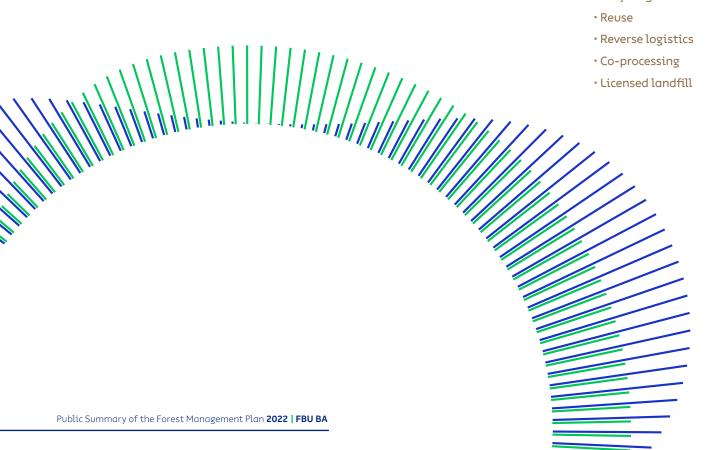
**Transportation** 





#### Final disposal

Recycling





#### **Ecological training**

The Environmental Training Program disseminates environmental information and practices to raise awareness among its participants about sustainable attitudes and behaviors capable of transforming the socioenvironmental reality.

To reach both the internal and external audiences, this Program was divided in different activities and projects in line with the reality of each target audience.

#### **Environmental education program**

The ongoing Program for Environmental Education (*Programa de Educação Ambiental - PEA*) is an educational and preventative initiative, conceived with the aim of meeting the conditions of the environmental license. It focuses on students of the public school system of Bahia and Minas Gerais and on Suzano's own and third party's collaborators.

mary of the Forest Management Plan 2022 | FBU BA

Relevant results have been obtained with PEA, involving 1,100 students and 79 teachers in 10 municipalities in the state of Bahia and 2 in the state of Minas Gerais. These numbers reflect the engagement with and the comprehensiveness of the program that seeks to promote environmental awareness, sustainability and socioenvironmental practices in every involved region.

These actions are key to meet environmental requirements and for the development of a responsible and harmonious relationship with the community impacted by the operational activities. 1,100 STUDENTS AND **79 Teachers** Have taken part of THE ENVIRONMENTAL **EDUCATION PROGRAM** 



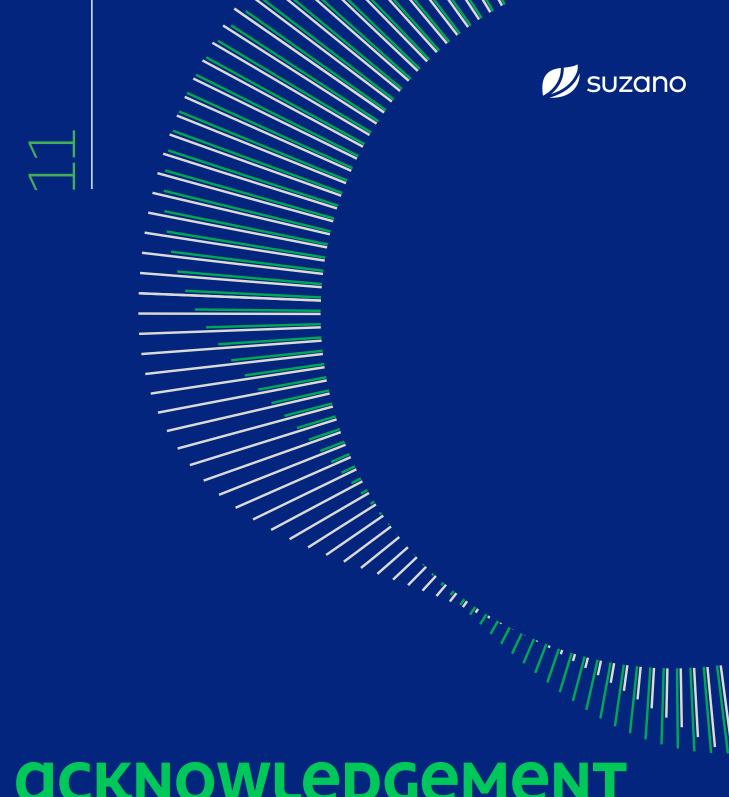
Regarding the internal environmental education program, a comprehensive series of trainings was offered along 2022, encompassing online and on-site meetings. In addition to that, we offered the training Transforming Agents of Sustainability, with the aim of preparing them to replicate knowledge on operational areas.

In total, 35 trainings were offered throughout the year. These initiatives aim to strengthen engagement and awareness to sustainable practices in the scope of Suzano.

#### **PEA Extractivist**

Program focused on the traditional extractive communities of Caravelas and Nova Viçosa. In 2022, we developed activities in several areas, involving fishermen and shellfish collectors.





# acknowledgement of and respect For our Professionals



# 11 acknowledgement of and respect for our professionals



#### Safety, Health and Quality of Life

The valuation of, and the respect for, our professionals are Suzano's commitment. Safety and health management is one of Suzano's priorities. The company encourages all individuals to take responsibility for safety and spares no resources to further reduce the rate of accidents.

The Occupational Health and Safety Management program provides guidance on the registration of events in and outside the company, providing the Safety Department with the elements required for the development of awareness campaigns that extrapolate the management boundaries and contributes significantly to the quality of life of employees, their families and the communities surrounding Suzano's areas of operation.

Assessing and ensuring work safety and health conditions, as well as the use of safety devices, are also covered by the collective agreement signed with the employees' representative entities. All events related to the employees health and safety are registered and monitored based on a corporative standard for the communication of accidents, incidents and occupational illnesses.



The main programs developed by Suzano to ensure safety at work involve the preparation of documents that seek to identify the risks of accidents such as the Preliminary Risk Analysis (APR), Work Risk Observation (OPA), Safety in the Area, and work permits

All activities are checked and monitored for below standard conditions and practices (*Fique Alerta* / DNA - *De Olho na Área*) and approached by programs as the Program for Medical Control of Occupational Health. The system is composed of different groups and committees that help monitoring and provide guidance on safety and health conditions. The initiatives aim to establish and maintain a responsible and transparent relationship with all employees in order to adopt the best existing practices in the industrial, forest and administrative units. This process helps to build Suzano's reputation among its key relationship public and seeks to explore synergies and to better employ our professional talents.

#### SAFETY PERFORMANCE OF FBU BA FOREST OPERATIONS

Safety indicators	2022
Rate of accidents (Own employees and third parties)	0.74
Severity rate (Own employees and third parties)	23
Perception on the degree of knowledge on the Safety Management Integrated System	96%



#### Workforce Qualification

The company contributes to the generation of local jobs by improving the economic activities in the region of operation.

Our own and outsourced employees receive personalized service and professional development opportunities. All collaborators take part in training activities that address not only technical aspects of the operation, but also subjects such as ethics and human rights. The welfare of every employee and level of satisfaction with the company are also closely monitored through organizational surveys.

The company conducts a structured process of integration of new employees and permanent vendors that aims to facilitate their adaptation into the work environment, the organizational culture, concepts and drivers, environmental conservation, code of conduct, the management system and relationship with stakeholders

Suzano has a benefits policy aligned to the good practices of the market and to its employees' expectancies. The benefits granted represent a significant value for the company and its employees, and are managed in order to ensure the best quality level and provide comfort and satisfaction.

#### JOBS CREATION AT THE MUCURI FORESTRY UNIT

Total	3.134
Outsourced employees*	1.481
Own employees*	1.653

<sup>\*</sup> Data relative to Dec/2022









#### Management of relationship with stakeholders

Suzano's relationship strategy is to ensure social and business legitimacy through the long-term strengthening of its interaction with neighboring communities and the integration of their interests into forestry business management.

Suzano's relationship with the communities surrounding its operations follows the following approach:



#### 1. Priorization matrix

Process of characterization of the area where Suzano is present to guide the activities with social impact to be adopted in each case. This study provides an assertive guidance for social investment and other actions for local engagement.



#### 2. Engagement

Structured, inclusive and continued relationship, where the company plays the role of a partner to foster the local development. It takes place on the communities most impacted by Suzano's operation.

In rural communities, engagement is promoted by programs for income generation such as the Rural and Territorial Development Program (PDRT), Invitation letters, craftsmanship production chain, fishery and circular economy, as well as sustainable extractivism.



#### 3. Operational dialog

It is a channel for direct communication through which the company informs the residents of neighboring communities about the forestry operations scheduled in that region according to an annual planning of activities, and discusses impacts and mitigation actions.

This process also integrates annual visits to ensure a continuous relationship with the neighboring communities.



#### Management of social impacts

Suzano understands "social impacts in the communities" as any changes (harmful or beneficial) caused entirely or partially by its forestry operations within a radius of three kilometers of its properties or areas leased for eucalyptus production.

The model of social impacts management seeks to eliminate, reduce or compensate the negative impacts through management practices, socioenvironmental investment, and continuous control and mitigation actions.

Despite all measures taken to prevent and mitigate adverse impacts, unpredictable losses and damages can still occur, directly affecting the communities resources or livelihood. In this case, these losses and damages are compensated and mitigated, in common agreement and according to the particularities of each case, in a fair and balanced way.

In the following, examples of adverse social impacts from forestry management and the corresponding mitigation and prevention measures are presented. For conflict resolution, disputes and compensations involving rights of use, possession and control of the land, the company has defined directives that prioritize a friendly and fair solution for the parts.

#### **EXAMPLES OF ADVERSE SOCIAL IMPACTS AND CONTROLS**

Activities	Social impacts	Preventative and mitigating measures			
		Use of products authorized by the environmental bodies Signaling of the areas Training of employees that apply the products Maintenance of equipment used for the application Operational dialog and management of incidents  Use of up-to-date equipment and trained and qualified teams Signaling and guidance offered to the community to prevent people from approaching machinery during operation Operational dialog and management of incidents  Placement of warning signs  Negotiation of time slots for the operations Reduced and controlled velocity Compulsory stops to check and tighten the load Safe driving voluntary campaigns Reduction of dust with moistening of the roads (tank trucks) Road maintenance during operations			
Application of					
crop protection	Inconvenience caused by drift* to neighboring areas				
products		Maintenance of equipment used for the application			
		Operational dialog and management of incidents			
		• Use of up-to-date equipment and trained and qualified teams			
	Increase in the risk of accidents				
Forest harvest		· Operational dialog and management of incidents			
	Change of landscape (visual) and loss of reference	• Placement of warning signs			
	Noise	Negotiation of time slots for the operations			
		Reduced and controlled velocity			
	Increase in the risk of accidents	Compulsory stops to check and tighten the load			
		Safe driving voluntary campaigns			
Timber transportation	Dust	Reduction of dust with moistening of the roads (tank trucks)			
		Road maintenance during operations			
	Damage of the road network	<ul> <li>Monitoring and control of load weight of the timber trucks</li> </ul>			
	Noise	Negotiation of time slots for the operations			

<sup>\*</sup>Drift: phenomenon of spray drops carry-over with the wind (EMBRAPA)



### Analysis and monitoring of processes of relationship with stakeholders

All the demands concerning forestry operations, identified in the engagement processes, and operational dialogs are critically assessed and validated by the operational areas to review the social impact matrix and improve Suzano's forest management.

#### EFFECTIVENESS OF THE SOCIOENVIRONMENTAL IMPACTS MITIGATION ACTIONS

Area	Category	Name of Monitoring	Indicator	Results 2022	
		Investment in the	Investment in the Amount of money invested in social projects/programs		
Social		community (GRI EC1)	Communities/localities benefited by the projects	87	
	6	On avatianal dialog	Rate of fulfillment of the annual dialog program	nual dialog program 100%	
	Social impacts on the	Operational dialog - and participative	Rate of satisfaction with the solutions for the incidents	90%	
	communities	agenda -	Rate of effectiveness of mitigation actions	92%	
		Complaints about	Number of incidents reported	154	
		damage caused by management	Average time to respond to complaints	173.43 days	





#### Socioenvironmental investment

Socioenvironmental investment is the voluntary transference of private resources in a planned, monitored and systematic way to social, environmental and cultural projects of public interest that contribute to the development of the communities where the company operates. Such investments are segmented into four types of interventions:

#### Cooperation

One-off support that require a counterpart from the applicant and is applied to community assets. Are necessarily related to the needs of forest and industry operations, expertise and products from Suzano's business.

#### **Donation**

Financial contribution or one-off spendings that meet the demands of institutions, bodies or individuals representing the community that are non-profit and do not require a counterpart.

#### **Sponsorship**

Granting of resources, whether financial, material and/or services provided by Suzano to enable certain activity or event. It is considered a communication tool.

#### Programs and projects

Social investments planned and developed within the scope of a certain program, with well-defined purpose and duration (objectives, goals, deadlines, process indicators, results and impacts and responsibilities).





#### Socioenvironmental programs and projects

The Social Programs and Projects take place mainly after the identification of the level of influence of the enterprise on the community, the socioeconomic aspects of each one (level of organization, vulnerability degree, etc.) and the partnership level (company and community). They arise also from the communication processes, in line with the social pillars of Suzano.

The extension in which such programs and projects are carried out, in the community, derive from the following factors:

- The communities and municipalities social and economic vulnerability;
- The influence of Suzano's forest management on the municipality and community areas;
- Relationship and social investment history in the communities and municipalities;
- Number of communities directly affected by Suzano's forest planting in the municipality;
- Communities interest and availability in taking part in the programs and projects;
- Public authority's interest and availability to coparticipate or support such programs and projects;
- Budget availability.







#### Social programs and projects

Project/program	# of participants	# of municipalities	# of institutions	Results 2022	
Rural and Territorial Development Program (PDRT)	5,547	8	58	In 2022, 5,547 people were impacted directly and indirectly, in 58 organizations/cooperatives of rural communities in the southermost region of Bahia, in the municipalities of Alcobaça, Caravelas, Mucuri, Nova Viçosa, Prado and Teixeira de Freitas, and Nanuque and Carlos Chagas in Minas Gerais. Those were supported by the model of socioenvironmental investment in technical assistance, seeking the strengthening of the organizations' management, production and commercialization.	
Colmeias program	468	5	7	In 2022, 468 people were impacted, directly and indirectly, by the model of socioenvironmental investment in technical assistance, management, commercialization and in supplies, services and inputs for the development of the planned activities, in 7 organizations of rural communities in the southernmost region of Bahia, in the municipalities of Alcobaça, Caravelas, Mucuri, Nova Viçosa and Teixeira de Freitas.	
Agente do Bem	135	1	-	In 2022, FBU BA continued with its internal qualification strategy, as well as its support actions with the interface public to reach the program's objectives.	
Pesqueiras Community engagement	7,792	3	7	In 2022, the program encompassed 7,792 direct and indirect beneficiaries in the municipalities of Caravelas and Nova Viçosa, in Bahia.	
					The PSE's objective is to provide students with integral education throughout their different life stages, considering the intellectual, physical, emotional, cultural and social aspects. To this end, it promotes the professional qualification of managers and educators of public schools, the articulations between education, health and social services and stimulates families and communities to participate in the school life.
Suzano's Program for Education (Programa Suzano	34,214	5		The methodology is based on an educational diagnostic and on the prioritization of challenges that are shared by groups of municipalities that are part of the Arrangements of Education Development. Together, they draw solutions for the improvement of education on their territories.	
de Educação, PSE)				<ul> <li>Strengthening of collaboration and intersectoral partnerships in the public school system.</li> </ul>	
				<ul> <li>Expansion of the communication channels and engagement of students and families.</li> </ul>	
				<ul> <li>Acknowledgment of the importance of the collaboration between municipalities in the implementation of actions with higher quality and broader reach.</li> </ul>	
				• Promotion of continuous training for all actors of education.	
				<ul> <li>In 2022, over 34 thousand people were impacted by the actions developed in the program</li> </ul>	
Sustainable Settlements	2,304	3	5	The project acts in 5 settlements, that represent an area of 10,661.41 hectares, with 576 families and approximately 2,300 people.	



Project/program	Description	Results 2022
Program	Formare	• 14 classes graduated
Voluntariar	Project developed in 2005 by the program Voluntariar in partnership with Fundação Iochpe. Its aim is to foster	<ul> <li>280 young people graduated (104 as apprentices and 176 as social model)</li> </ul>
	social vulnerability for the job market.	th Fundação Tochpe. Its aim is to foster tal training of young adults in situation of sility for the job market.  If a social model)  Is a ministration of young adults in situation of sility for the job market.  If as social model)  Is a misser the training for operator of scess at the 5 units of the company; tururi (BA), Imperatriz (MA), Três Lagoas ruz (ES). In 2023, we will expand to the fem (PA), the first one in the area of issumption.  Is a mong the hired staff: 58% females and 45% males (85% of black people)  In 717 inserted into the job market (63%)  200 are still studying (71%)  More than 800 volunteers since the beginning of the program  30 volunteers from the region of Bahia  To the Future  To gram Contribuindo para o Futuro the volunteers work of the trainees to so of LGBTQIAP+ people; they are college regions close to our areas of operation Espírito Santo, Maranhão, Mato Grosso Paulo). The project is an initiative of the trainar, conducted in partnership with the and Management and Squad Diversidade, elenstitute methodology.  The more Fund  It is a close to social mast to to social institutions that apopulations and were impacted by the indemic.  The sacoil model)  280 young people graduated (104 as apprentices and 176 as social model)  281 inserted with Suzano (34%): 81 own collaborators, 5 vendors and 3 apprentices  Among the hired staff: 58% females and 45% males (85% of black people)  177 inserted into the job market (63%)  200 are still studying (71%)  More than 800 volunteers since the beginning of the program  30 volunteers from the region of Bahia  **a deucational training, thus widening ive of the Itahana and Squad Diversidade, so a still studying (71%)  **a subscribers  *
	Formare  Project developed in 2005 by the program Voluntariar in partnership with Fundação Tochpe. Its aim is to foster the professional training of young adults in situation of social vulnerability for the job market.  The program offers the training for operator of production process at the 5 units of the company: Suzano (SP), Mucuri (BA), Imperatriz (MA), Três Lagoas (MS) and Aracruz (ES). In 2023, we will expand to the new unit in Belém (PA), the first one in the area of assets and consumption.  Suzano at school  Developed in partnership with Junior Achievement since 2009, Suzano at the school aims to foster the entrepreneurship mindset share knowledge and experiences for an educational training, thus widening their perspective of the labor market and the business world.  Contributing to the Future  The memory program Contribuindo para o Futuro aims to boost the volunteers work of the trainees to act as mentors of LCBTQIAP+ people; they are college students from regions close to our areas of operation (Bahia, Cearl, Espirito Santo, Maranhiso) Mato Grosso do Sul and São Paulo). The project is an initiative of the program Voluntariar conducted in partnership with the area of People and Management and Squad Diversidade, using the Joule Institute methodology.  Together we are more Fund  Charitable fund to raise resources to be used to buy staple products baskets with food and hygiene items. Those items are then destined to social institutions that assist several populations and were impacted by the coronavirus pandemic.  Walks and tours Suzano Faz Bem  The initiative sets the resumption of Suzano's in-person sports actions, with the donation of non-perishable food.  Voluntariar em Agão  This is a collaborative and supportive movement that had its first edition in 2019. Our purpose is to strengthen the volunteer culture within Suzano and acknowledge the dedication of people who work for the stitutions assisted (Apac de 2 institutions assisted (Apac de 2 institutions assisted (Apac de 2 institutions assisted (Apa	•
	(MS) and Aracruz (ES). In 2023, we will expand to the	• 1177 inserted into the job market (63%)
	` ''	· 200 are still studying (71%)
	Suzano at school	• 30 volunteers from the region of Bahia
	since 2009, Suzano at the school aims to foster the entrepreneurship mindset share knowledge and experiences for an educational training, thus widening their perspective of the labor market and the business	
	Contributing to the Future	· 2 trainees
	aims to boost the volunteers work of the trainees to act as mentors of LGBTQIAP+ people; they are college students from regions close to our areas of operation (Bahia, Ceará, Espírito Santo, Maranhão, Mato Grosso do Sul and São Paulo). The project is an initiative of the program Voluntariar, conducted in partnership with the area of People and Management and Squad Diversidade,	• 4 subscribers
	Together we are more Fund	• 328 families impacted in 5 institutions
	staple products baskets with food and hygiene items. Those items are then destined to social institutions that assist several populations and were impacted by the	
	Walks and tours Suzano Faz Bem	• 100 families impacted
	sports actions, with the donation of non-perishable	
	Voluntariar em Ação	• 88 volunteers
		• 352 hours of volunteer work
		• 408 benefited
	acknowledge the dedication of people who work for the common good.	<ul> <li>2 institutions assisted (Apae de Itabatã and Abrigo Institucional Mucuri)</li> </ul>
	We want to reinforce the company's social work through the drivers of our culture and to promote the integration with the communities in the surroundings of our units.	



#### Performance and main indicators of forest management

Aspect	Process Resp.	Monitoring	Indicators of monitoring	Goal 2022	Actual 2022	Critical analysis	Actions	Systems / databank	Frequency	Intensity
		Productivity of transportation	Productivity of FWs	58.57 m³/h	59.47 m³/h	_	A classical designation of the control of the contr			Monthly assessment of percent
Economic	Harvest	Harvest Productivity	Productivity of harvesters	19.02 m³/h	19.83 m³/h	Productivity above the estimated at the Base Plan	Assignment of projects to increase productivity and insertion of development technicians into the harvest modules.	SAP, OneDrive and Power BI	Daily	of operators below the curve and referral for training (100% of operators below the curve are trained)
Social	Social Dev.	Operational dialog and participative agenda	Participants from the communities involved	Not applicable	1,048	In 2022, with the stabilization of the pandemic process and the lift on the safety restrictions, there was an increase in the number of participants in the operational dialogs, individual and/or meetings.	The indicator does not anticipate goals due to the variability that follows the execution and planning of the operations along the year. The measure adopted by Social Development Management is fulfillment of the plan in its entirety, considering communication and dialogs with stakeholders.	SISPART Portal of socio- environmental management	Monthly (SISPART) Biannual/ Annual	Concluded in 100% of the areas where some kind of forestry operation has occurred.
ntal						The state of Minas Gerais has 853 municipalities; the region where the company operates is not necessarily consolidated in the forestry segment (metallurgy, mining), which creates the need for professionals from close regions or other states.	To publicize the job openings, in addition to the Kenoby system (career platform), other means			
Environmental	People and Management	Workforce	Hiring of local workforce	Not applicable	BA - 93% MG - 69%	In 2022, there were 45 hirings in MG, of which, 31 lived in the region and 14 in other states (PA) where locals represent		th as partnership with System On d Sine in the region and base website (digital ocused on agrobusiness		100% non- sampled
						In BA there were 164 hirings, of which, 153 lived in the region and 11 in other regions (MG, ES, PE, and SP), where locals represent 93% of the workforce.				areas where some kind of forestry operation has occurred.



Aspect	Process Resp.	Monitoring	Indicators of monitoring	Goal 2022	Actual 2022	Critical analysis	Actions	Systems / databank	Frequency	Intensity
mental	Asset intelligence	Fire -	Fire - crop	Goal not stipulated	Burning of 4.32 hectares per event	There was a reduction in the burnt area, showing the efficacy in the detection and control of fires. The detections were more precise and the control was more effective.  Up to 2021, wood fire data were reported as burnt area per fire spot. From 2022 on, the reporting is given as burnt area per event, keeping the standard of forestry operation.	<ul> <li>Investments in technology and innovation for the fire fighting structures and systems of the monitoring centrals, targeting modernization and replacement of vehicles and equipment.</li> <li>Development of projects with educational purpose to act in a preventative way on incidents with environmental impact.</li> <li>Conducting trainings and improvement of fire fighting techniques.</li> <li>Implantation of extra teams for surveillance and firefighting in critical periods.</li> </ul>	Data base IP	Updating Daily	100% of company's areas - as per PROFLOR monitoring
Environmental			Fire - preservation		Burning of 6.4 hectares per event					
Social			Donation of tips and branches	Not applicable	R\$ 9,117,745.00	The donation of tips and branches has been deemed an excellent proposal for income generation within local communities and commerce and add value to the families that depend on this resource as the sole source of income and subsistence.	Maintenance of donations of tips and branches to the communities.	Data base IP	Monthly updates	100% of communities close to harvest operations
Economic	Logistics	Distance	Average radius	89 km	86 km	Strategic changes in the supply plan	Frequent follow up of the indicator and monthly updates in planning.	SAP	Real time	100% non- sampled



Aspect	Process Resp.	Monitoring	Indicators of monitoring	Goal 2022	Actual 2022	Critical analysis	Actions	Systems / databank	Frequency	Intensity
	Environment	Homcomy	Number of people impacted by the Environmental Education Program (external)	Ciência Escola Em Ação Channel Students impacted: 90 59 Schools participating: 2 2 Videos produced: 7 6  Mural of the extractive worker Shared materials: 10 per month 96 People impacted: 60%		External programs concluded in the municipalities of Nova Viçosa and Caravelas: <i>Ciência Escola Em Ação</i> Channel, Mural of the extractive worker, Young Leaderships Course, Environmental Education Course as a Tool for Digital Inclusion.	Murals, workshops, courses and school interventions.	Excel / Socio- environmental management portal	Monthly	100% - non sampling
Environmental		Environmental education Program	Number of people impacted by the Environmental Education Program (external)	Not applicable to this indicator	519 people	In 2022, the program Education for Sustainability was restructured along with the Institute Ecofuturo and Bioveritas consulting; the program Floresta Viva, then, became the main tool for Suzano's external Environmental education. With the creation of a corporate committee, a series of debates was organized, resulting in an action plan for the following years.  We also had the program Floresta Viva being conducted in municipal schools in 7 municipalities: Alcobaça, Ibirapuā, Nova Viçosa, Prado, Teixeira de Freitas, Caravelas and Nanuque.	We presented talks to students of middle school with language adapted to the participants' school level and dynamics that create a relaxed environment and increase information retention.  The topics addressed were: Environment, Biodiversity, Importance of Preservation, Suzano's Protected Areas, Environmental Monitoring, Notification About the Beginning of Activities and introduction to the program Floresta Viva.	Excel / Socio- environmental management portal	Floresta Viva - Annual program at schools- Monthly	100% - non sampling
			Number of hours logged in to the Environmental education program (internal)	N/A	51.033 hours	In 2022, the topics for training were ranked according to the corporate matrix and an annual planning for its execution.	Implementation of the annual planning of trainings for 2022, trainings with specialized consulting and awards for participants, increasing engagement.	Excel / Socio- environmental management portal	Monthly	100% - non sampling



Aspect	Process Resp.	Monitoring	Indicators of monitoring	Goal 2022	Actual 2022	Critical analysis	Actions	Systems / databank	Frequency	Intensity
Environmental	Forestry	Forestry control	Ant bait consumption	3.5 kg/ha	4.7 kg/ha	Larger ant infestation.	Maintain monitoring and control according to recommendation.	- - ZFL98	Monthly	100% of planned and concluded areas
			Consumption of weed killer (glyphosate)	1.93 kg/ha	2.3 kg/ha	Larger doses of weed killer in the maintenance areas due to increased resistance of invasive plants.	Review management plan to seek new products and/or better assess the necessity of each UP.			
Environ				0.17 L/ha	0.27 L/ha	Product used mainly on the seedling after planting to avoid sprouting of weeds. During the rainy periods the need for weed killer was larger.	Maintain management while assessing the real need of each UP.			
	SSQV	SSOMAR	Score obtained with SSOMAR	90%	96%	Maintain co-management of established goals for vendor companies.	Maintain SSOMAR audits of vendor companies.	Presentation PPT– safety Committee; SSQV Portal	Biannually	100% of companies with fixed contract
Social		DNA	Conclusion of DNA deviations	80%	97%	Deployment of the application, internal campaigns to promote the logging of incidents, deviations and positive observations into the DNA (De olho na área) system to bring more practicality, agility and access.	Maintain the task force along with operation and vendors for the checking of registrations and actions into the system; finally, monitoring and presenting status during meetings with the Safety Committees, Executive Management and Director Board.	DNA SDWEB System; Power BI	Monthly	100% - non- sampled
		ОРА	Score obtained with OPA - Positive observation of the activity	85%	90%	Application of the tools by the safety team, leadership and vendors, collaborating to anticipate the identification and treatment of deviations and avoiding incidents. Deployment of the application to facilitate the tool usage. Presentation of OPA results to the management.	Maintain the application of safety tools performed by the vendor company and by the leadership and SSQV in the application.	Presentation, safety Committee; SSQV Portal, Moki system		
Economic	Nursery	Production of	Shipped seedlings	19,683.024	21,081.06	Larger planting physical, demanding the production of more seedlings.	Review forestry tactical plan, targeting more assertiveness of the plan.	Excel/SAP		100% of
		Nursery	ery seedlings	Yield	72.1%	69.3%	Increased production of BA1175 material, which presents low rooting.	Definition of strategies to improve performance of difficult rooting material.	Excel	- Monthly



# COMMUNICATION WITH STAKEHOLDERS



# 13 communication with stakeholders

Suzano is constantly in contact with its employees and with the several segments of society, keeping them up to date on its activities, and always keeping things clear, transparent and straightforward.

Among the most commonly used communication media are:

#### **Internal Audience**

Corporate social media, Intranet, Printed and Digital newsletters, walls, Forest Podcast, Corporate TV, Manuals and Educational guides.

#### **External Audience**

Press Relations, Website, Social media, Visitation programs, Annual reports, Management plan summary. In addition to those, the company maintains other communication channels, as described below.

#### Communication with specific audiences

#### Suzano answers

0800 022 1727, (11) 3956-3959 or suzanoresponde@suzano.com.br

If you have any questions, suggestions for improvement, or complaints, please contact us. It is toll-free!

#### Social media

Facebook www.facebook.com/suzanoempresa

▶ Instagram www.instagram.com/suzano\_oficial

(i) Youtube www.youtube.com/user/Suzanovideos

LinkedIn www.linkedin.com/company/suzano



#### **Ombudsman Suzano**

Brazil

0800 771 40 60 (ligação gratuita)

Abroac

Check specific numbers on the Suzano Ombudsman website.

Emai

ouvidoriaexterna@austernet.com.br

Website

https://ouvidoriaexterna-suzano.com.br

FBU BA/ES: Corporate contact 0800 283 83 83 0800 022 17 27

Have you seen forest fires? Contact us:

Toll free:
0800 771 1418





