

25
years
of certification
**Forest
Management**



2 0 2 3
PUBLIC
Summary

Forestry Management Plan | Paraná



Klabin

DEAR READER,

On the following pages, you will learn more about Klabin's efforts to ensure the good management of its forests and its social and sustainability policies. These efforts attest to Klabin's commitment to creating wealth while respecting nature, its employees and society and to ensuring its long-term compliance with the principles and criteria of the Forest Stewardship Council® (FSC®) and of the Programme for the Endorsement of Forest Certification (PEFC).

To facilitate reading, the changes in relation to the previous version of the Management Plan Public Summary are identified with the symbol "I".

Enjoy your reading!

FSC® C022516



Forest Mosaics: Nabin Collection

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About Klabin

Klabin is Brazil's largest paper producer and exporter, the only company in the country offering one-stop shop solutions in hardwood, softwood and fluff pulp, and the leader in the corrugated board and industrial bag packaging segments. Founded in 1899, Klabin has 22 industrial units in Brazil and one in Argentina. In Paraná alone, Klabin generates over 10,000 direct and indirect jobs in over 25 municipalities surrounding its operations, especially in the Campos Gerais region.



Klabin is divided into four business areas:


- Forestry – raw material to produce pulp and sell wood logs to sawmills and planer mills;
- Pulp – hardwood pulp, softwood pulp and fluff pulp;
- Papers – kraft paper, paperboard and recycled paper;
- Manufacturing – corrugated boxes and industrial bags.

Klabin's paper and paperboard for packaging and the packaging already converted into corrugated boards and industrial bags offer protection and safety to food, beverages, personal and home care products, electronic devices, cement, seeds, wheat flour, chemicals and others. Softwood pulp, hardwood pulp and fluff pulp, applied alone or combined with each other, provide essential characteristics to several types of papers, such as the ideal strength, softness and absorption for hygiene products, strength and opacity for printing and writing papers, and other specific characteristics required for special papers. Klabin's management practices are guided by sustainable development, and its management pursues integrated and responsible growth that combines profitability, social development and a firm commitment to environmental preservation.



Forestry Area

After acquiring the Monte Alegre Farm, the Forestry Area was created to supply the mill. In 1943, the first activities related to planted araucaria and eucalyptus forests started and, in 1951, the first pine species originating from the South of the United States were introduced. It is from the foundations of this project that the guiding principles of the entire Klabin group emerged: respect for nature and a permanent concern with sustainability.



Forest management practices, combined with environmental preservation and social responsibility actions, enabled Klabin to become the first pulp and paper company in the Americas to receive the international Forest Stewardship Council® (FSC®) certification, in 1998. In the following year, Klabin received certification for stewardship of medicinal plants and, in 2001, completed the cycle by receiving certification for non-wood forestry custody chain, which opened up opportunities for it to sell herbal medicine products with the FSC® seal.

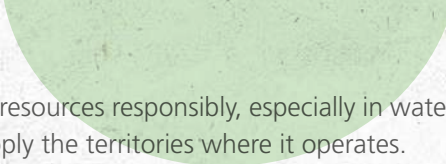

Motivated to attest to the origin of the raw materials used in its products, Klabin received, in 2005, FSC® certification for the custody chain of virgin-fiber paper and paperboard production at the Monte Alegre Unit. In 2007, the production processes of recycled papers, industrial bags and corrugated board packaging were certified. In 2017, Klabin also obtained certification from the Brazilian Forest Certification Program (Cerflor), internationally recognized by PEFC, for forest management and custody chain of hardwood pulp and softwood pulp production, as well as for fluff pulp production at the Puma Unit.

SUSTAINABILITY POLICY

Sustainability has had a profound significance in the history and life of Klabin and is the guiding principle of its business management and long-term commitment to shareholders, clients, employees, suppliers and local communities. From forests to packaging, all activities are guided by a model of self-sufficiency, respect for the environment and fostering the development of stakeholders throughout the entire production chain.

- 1.** Actively pursue the transition to a low-carbon economy by using and encouraging the allocation of investments and financial instruments that consider sustainability-related values and performance, ensuring the transparency and reliability of data that guides decisions that are aligned with science and recognized parameters and, whenever applicable, submitting such data to third-party verification.
- 2.** Innovate and adapt the business model to be increasingly responsible when revising and defining the product portfolio and strategic processes in order to bring positive solutions for nature.
- 3.** Map, measure and transparently disclose the environmental and social externalities generated by the company's business on territories and relationships with stakeholders.
- 4.** Ensure the execution of the Klabin Agenda in terms of timeframes and targets established based on priority issues, such that the company's operations and growth strategy are focused on economic development, environmental sustainability and social justice considering the company's impacts and externalities.
- 5.** Monitor the tone and statements in the sustainability marketing and communication approaches, making sure that the messages are correct, accurate and based solely on the company's performance and practices.
- 6.** Encourage a culture of dissemination of ethics and develop corporate governance best practices.

- 7.** Respect and promote human rights in accordance with the UN Guiding Principles on Business and Human Rights and other national and international commitments that establish the guidelines on the subject and which apply to Klabin's operations and territories.
- 8.** Employ the most efficient and modern engineering technologies and solutions in the implementation of new projects, ensuring the protection of public health, natural resources and the environment.
- 9.** Drive circularity by seeking partnerships for new business models and the eco-efficient design of products and processes that maximize reduction, reuse and recycling of products across the chain and the byproducts of the production process.
- 10.** Encourage collaboration with clients, suppliers, the academic community, organized civil society and other stakeholders in the pursuit of innovations for products and processes, as well as improvements for sustainability across the value chain.
- 11.** Pursue competitive quality for sustained improvement of its results, by continuously researching, developing and improving existing and new processes, products and services, to meet the expectations of clients, employees, shareholders, the community, suppliers and other stakeholders.
- 12.** Ensure that the forest base is valued by transforming it into sustainable and competitive products, and by guaranteeing the supply of planted wood for its industrial units in a sustainable manner, without harming the associated natural ecosystems, in its own operations and in those of supported producers.
- 13.** Ensure that company's operations constantly try to reduce Greenhouse Gas (GHG) emissions, considering the environmental impacts on its operations and investment projects so that these are compatible with the long-term goals of Klabin.
- 14.** Promote the conservation of biodiversity by implementing practices that ensure greater balance of the ecosystem, encouraging research and partnerships with the academic community and operating under the commitment to use recognized forest management techniques, which include preserving the attributes and avoiding operations in natural heritage preservation areas and/or regions that shelter important species for national and global biodiversity.

- 
- 15.** Manage water resources responsibly, especially in water stress areas, to ensure water availability in the necessary quality and quantity to supply the territories where it operates.
- 16.** Avoid and prevent pollution by reducing environmental impacts related to wastewater, solid waste and air emissions, always taking into consideration these two elements in the maintenance and improvement of production processes, development and improvement of products, forestry and logistics operations, monitoring of critical suppliers due to economic, social and environmental aspects.
- 17.** Identify in advance the negative social impacts of our forest, industrial and logistics operations to avoid, prevent and mitigate them. At the same time, boost the positive impacts of our operations through social programs and initiatives in partnership with public, private and civil society institutions, promoting proactive, transparent and frequent engagement and contact with stakeholders.
- 18.** Comply with Brazilian and (international, when applicable) laws and standards on product safety and quality, environment, health and occupational safety. Encourage the physical, mental and social well-being of direct and indirect employees through continuous improvement in the working, health and safety conditions, and with the commitment to consult and promote their active participation in the pursuit of preventing and mitigating risks and the personal and professional growth of each individual.
- 19.** Practice social responsibility with the focus on communities where it operates in accordance with the private social investment platform and its lines of action: grassroots development (driving the planning capabilities and participative public management towards the goal of sustainable development), education, environment and culture.
- 

Klabin Code of Conduct



Since its creation, Klabin's development has been guided by the goal of providing its employees, clients, suppliers and society in general with a relationship based on ethical conduct and socially recognized principles. The high standards followed by the company are fundamental to its growth. The principles of Klabin's Code of Conduct go beyond mere compliance with the law and policies to create uniform standards for the directors, officers and employees that encourage them to adopt conduct and attitudes guided by the basic principles and values established in the code. Klabin maintains the following communication channels for contact with the Ethics Committee - Ombudsman:

E-mail: ouvidoria@klabin.com.br
www.klabin.com.br/ouvidoria
Telephones: **0800 718 7814.**



Worker at MP27.
Credit: André Valentim



Nursery Employee, Klabin collection.

Social & Environmental Responsibility

Policy for Contracting Suppliers

At Klabin, all businesses are guided by ethics, transparency and respect for the principles of sustainability to ensure financial balance, social responsibility and environmental preservation. As such, the company seeks suppliers that follow the criteria established in its Social and Environmental Responsibility Policy for Contracting Suppliers. The contracting model was revised in accordance with sustainability standards, such as on-time delivery, credit rating, legal compliance, tax compliance, prohibition of child and forced labor, and adoption of environmental protection actions. If you are interested in becoming a Klabin supplier, please complete the form available on the company's website at <https://klabin.com.br/contact-us>



*Pulp shipment worker at Puma Unit.
Credit: André Valentim*



Wood logs: Kibin Collection



External commitments

Klabin strives to play an active role in social, environmental and economic issues by voluntarily undertaking commitments proposed by renowned organizations, as described on the following pages.



GLOBAL COMPACT

An initiative by the United Nations (UN) to engage companies and organizations in the adoption of ten universal principles in the areas of Human Rights, Labor, Environment and Anticorruption to support the development of actions that address society's challenges.



SUSTAINABLE DEVELOPMENT GOALS

The Sustainable Development Goals (SDGs) are a global development agenda comprising 17 goals and 169 targets established by the United Nations for governments, civil society and the private sector. The initiative brings together governments, civil society and the private sector in a global agenda for people, the planet, peace and prosperity that defines the priorities and global aspirations for 2030. Since then, the company prioritizes 15 of the 17 goals, which inspired the Klabin 2030 Agenda, comprising the Klabin Sustainable Development Goals, or KODS.

- 01.** End poverty;
- 03.** Health and well-being;
- 04.** Quality education;
- 05.** Gender equality;
- 06.** Clean water and sanitation;
- 07.** Affordable and clean energy;
- 08.** Decent work and economic growth;
- 09.** Industry, innovation and infrastructure;
- 10.** Reduced inequalities;
- 11.** Sustainable municipalities and communities;
- 12.** Responsible consumption and production;
- 14.** Climate action;
- 15.** Life on land;
- 16.** Peace, justice and strong institutions;
- 17.** Partnerships and implementation means.



BRAZILIAN PACT TO ERADICATE SLAVE LABOR

This pact brings together Brazilian and multinational companies that have undertaken a commitment not to do business with companies engaged in slave labor practices. In addition to economically restricting employers practicing this crime, the pact works to promote dignified labor and the social integration of workers in vulnerable situations and to combat enticement. Companies that are signatories to the initiative participate in the monitoring of the pact and undertake to disseminate the results of their efforts to eradicate slave labor.



BUSINESS PACT FOR INTEGRITY AND AGAINST CORRUPTION

According to the Ethos Institute, companies that are signatories to the pact undertake to disseminate Brazil's anticorruption legislation to their employees and stakeholders to support its enforcement. They also undertake to prohibit any form of bribery, ensure legal compliance and transparency in contributions to political parties and foster information transparency and collaboration in investigations whenever necessary.



WOMEN'S EMPOWERMENT PRINCIPLES

To reinforce its commitment to diversity and foster an inclusive workplace, in 2018, Klabin became a signatory to the seven Women's Empowerment Principles (WEPs). The United Nations Initiative for Gender Equality (UN Women) works to help companies empower women in their organization, value chain and local communities.

LGBTI+ COMPANIES AND RIGHTS FORUM

Klabin is a signatory to the LGBTI+ Companies and Rights Forum, which has drafted ten commitments to ensure respect for and the promotion of LGBTI+ human rights inside companies. The forum has working groups divided by topic (leadership, health, communication, etc.) that meet periodically to discuss how to advance in each of the commitments.

MOVEMENT FOR RACIAL EQUALITY (MOVER)

This initiative establishes ten guidelines for signatories to advance on their journey of racial equality with a commitment to offering an inclusive environment with initiatives that create opportunities for Black professionals through training, awareness and employability actions and by fostering social awareness.

BUSINESS PACT AGAINST SEXUAL EXPLOITATION OF CHILDREN AND ADOLESCENTS ON BRAZILIAN HIGHWAYS



Klabin became a signatory to this pact, which aims to end the sexual exploitation of children and adolescents on highways, by joining the Na Mão Certa Program of Childhood Brazil and the Ethos Institute, in 2016. The Pact comprises six commitments that address topics such as the working conditions of truck drivers, awareness campaigns, support for projects and monitoring of practices.

TASK FORCE ON CLIMATE RELATED FINANCIAL DISCLOSURES (TCFD)



An initiative that provides recommendations to empower markets and address the financial impact of climate change to increase transparency on the risks related to climate change and the opportunities for promoting more informed financial decision-making.

SCIENCE BASED TARGETS INITIATIVES (SBTI)

The SBTi is an initiative that establishes methodologies to help companies outline targets for reducing emissions that are aligned with climate science and sustainable economic development. Klabin was Latin America's first pulp and paper producer to have its targets approved by the SBTi.

BUSINESS AMBITION FOR 1.5° C – OUR ONLY FUTURE

In 2019, we joined the UN global campaign Business Ambition for 1.5° C – OUR ONLY FUTURE through which we undertake to reduce GHG emissions to help keep the increase in the average global temperature below 1.5°C.

RACE TO ZERO

For years, Klabin has been following a path to combat climate change. With sustainability as a key pillar of its management, the company is aware of the topic's urgency and the importance of mobilizing everyone to ensure the future of our planet. In partnership with the United Nations Global Compact Network Brazil, Klabin invites companies and society to support the cause of reducing greenhouse gas emissions based on science.

SUSTAINABILITY ACCOUNTING STANDARDS BOARD (SASB)

The SASB is a set of standards designed to help identify, manage and report sustainability-related issues of organizations, including environmental, social and governance issues that could impact their financial performance. Its main target public is large companies and investors. In 2020, Klabin started to report the SASB indicators recommended for the packaging, pulp and paper and forestry sectors.



GHG PROTOCOL



Klabin has been involved in this program since 2013, which works to encourage the corporate community to conduct and publish inventories of their greenhouse gas (GHG) emissions by giving them access to world-class instruments and standards. Originally developed in the United States in 1998 by the World Resources Institute (WRI), the GHG Protocol is a tool used to understand, quantify and manage GHG emissions.

RECOGNITIONS

DOW JONES SUSTAINABILITY INDEX

Klabin is a component of the Dow Jones Sustainability Index (DJSI), which recognizes companies with the capacity to create higher value in the long term through sustainable practices. Being included for the third straight year in the “World” categories recognizes and reinforces the company’s commitment to developing a solid sustainable business model that cares for the environment and society.

CORPORATE SUSTAINABILITY INDEX (ISE)

A pioneering initiative in Latin America and the world’s fourth sustainability index, the ISE B3 was created by the B3 exchange in 2005, with initial investment from the International Finance Corporation (IFC), the financial arm of the World Bank. Klabin was selected as a component of the index for the eighth straight year, among companies from 15 sectors, in a process that evaluates on an integrated basis various sustainability aspects to support investors in their decision-making and companies in improving their environment, social and governance (ESG) practices.





CARBON DISCLOSURE PROJECT (CDP)

Klabin one again figured on the “A List” of the CDP, the global information platform for investors, in its three programs (Climate, Water and Forests), underscoring the company’s responsible operations. Besides being the first company in Latin America to achieve the leadership level on the three questionnaires, Klabin had the best performance in the “CDP Brazil – Climate Resilience Index”, which measures performance in special climate management practices and establishes a relationship between environmental initiatives and the financial performance of organizations.

ECOVADIS



Klabin is the first Brazilian company to have adopted, since 2019, the methodology of EcoVadis, the global business sustainability ratings provider. Klabin has figured for three years in the Platinum category of the EcoVadis Corporate Responsibility Assessment, joining a select group of 1% of companies in the Pulp and Paper industry with the best performance worldwide. The assessment analyzes topics such as labor and human rights, environment, ethics and sustainable procurement.



ABRINQ FOUNDATION

The Abrinq Foundation for Children’s Rights uses the Friend of the Children Seal to recognize organizations that defend children’s rights. The seal attests that, among other actions, the company does not exploit child labor or permit such practices in their production chain and that it carries out social actions to foster education and learning for children and youth in local communities.





Project description

Klabín's forestry areas in the state of Paraná, as of December 2022, were as follows:

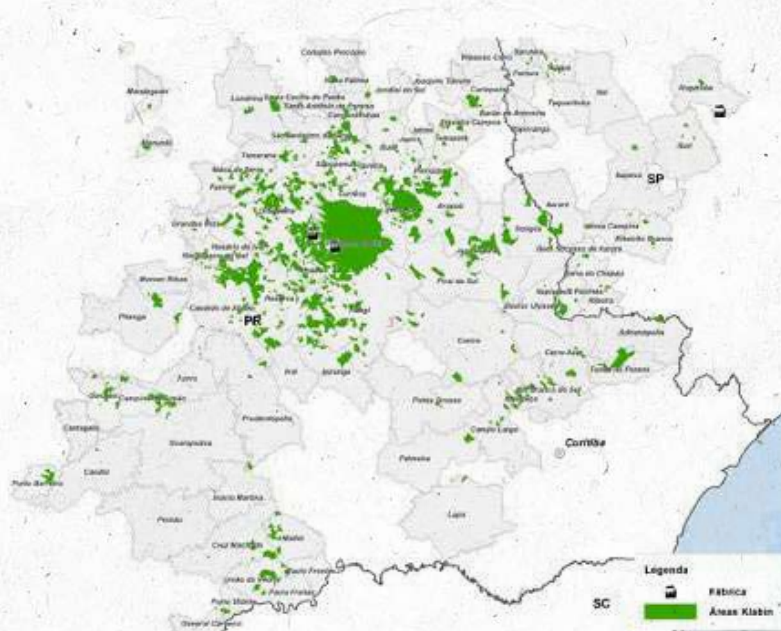
Forestry Areas	Total (ha)
Total Forestry Area of Klabin PR	487.443
Forestry Area certified	358.757,51
Total planted forest of Klabin PR	204.856
Certified planted forest	183.288,41
Native vegetation designated for total conservation of Klabin PR	203.357
Native vegetation designated for certified conservation	153.260,7
Other total areas of Klabin PR	47.677
Other certified areas	22.208,32

The management of the remaining areas owned by Klabin PR not included in the certification scope presented in this summary are monitored under other certification scopes FSC®.

1. REGION OF OPERATIONS

The Klabin unit in Paraná state is divided into three regions: Telêmaco Borba, Guarapuava and Jaguariaíva. The headquarters of the Paraná Forestry Unit is located on the Monte Alegre Farm, in the municipality of Telêmaco Borba, region of Campos Gerais. Its forestry activities cover 84 municipalities in the region:

Adrianópolis, Angatuba, Águas de Santa Bárbara, Arapoti, Barão de Antonina, Barra do Chapéu, Bernardino de Campos, Bom Sucesso de Itararé, Buri, Campo Largo, Cândido de Abreu, Cândói, Carlópolis, Castro, Cerro Azul, Congonhinhas, Cornélio Procópio, Cruz Machado, Curiúva, Doutor Ulysses, Fartura, Faxinal, Figueira, Goioxim, Grandes Rios, Guarapuava, Ibaiti, Imbaú, Inácio Martins, Ipiranga, Itai, Itaperuçu, Itapeva, Itapirapuã Paulista, Itaporanga, Itararé, Ivaí, Jaboti, Jaguariaíva, Japira, Joaquim Távora, Jundiá do Sul, Lapa, Londrina, Mallet, Mandaguari, Manoel Ribas, Marumbi, Mauá da Serra, Nova Campina, Nova Fátima, Ortigueira, Paranapanema, Palmeira, Pinhalão, Pirai do Sul, Pirajú, Pitanga, Ponta Grossa, Porto Barreiro, Prodentópolis, Reserva, Ribeira, Ribeirão Branco, Ribeirão Claro, Rio Branco do Ivaí, Rio Branco do Sul, Rosário do Ivaí, Santa Cecília do Pavão, Santo Antônio do Paraíso, São Jerônimo da Serra, Sapopema, Sarataiá, Sengés, Siqueira Campos, Tamarana, Taquarituba, Tejupá, Telêmaco Borba, Tibagi, Tomazina, Tunas do Paraná, União da Vitória, Ventania.

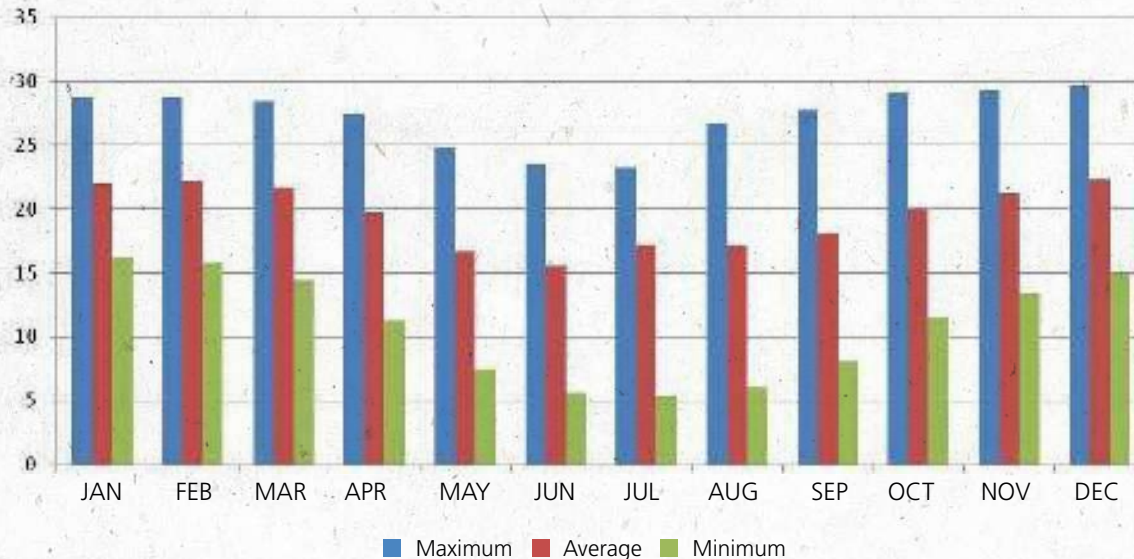


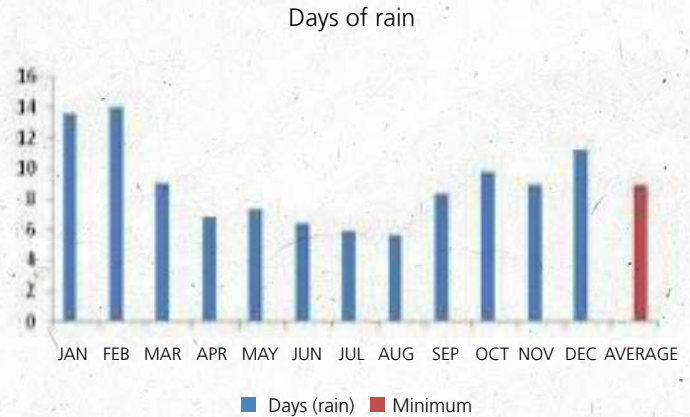
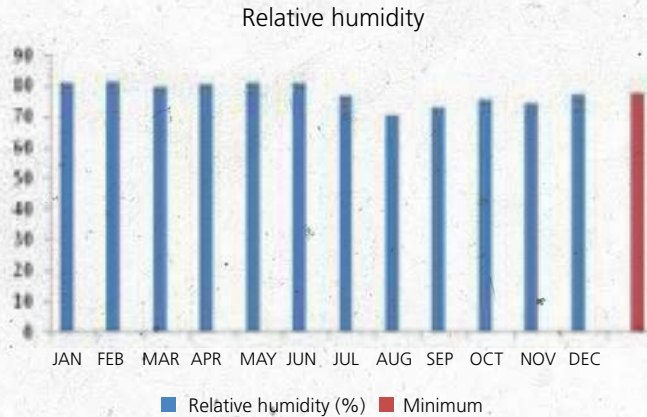
2. GEOCLIMATIC DATA (TELÊMACO BORBA REGION)

Climate: the predominant climate is subtropical transitional to temperate, humid, mesothermal, with no defined dry season (Cfa/Cfb). Summers are hot and tend to concentrate rainfall, while winters only infrequently experience frost.

Summary of average climate data of last 30 years in Telêmaco Borba region

Average temperature over last 30 years





Geology: the main geological formations are found in the regions of Itararé, Rio Bonito, Palermo, Irati, Serra Alta and Teresina.

Relief: the Monte Alegre Farm is located on the Second Paraná Planalto, which is an intermediate level in the succession of large plateaus in Paraná.

Hydrology: Klabin's areas have significant influence on water resources in its operation areas. The location encompasses the drainage basins of the Tibagi River, Ivaí River and Cinzas River.



Forest Management

Klabin is recognized for its sustainable forestry management, which focuses on wood and non-wood multi-purpose forest uses (pulp, sawmill, medicinal plants and medicinal products). The use of environmentally correct practices in the company's forest management activities, as well as proper management of the landscape, ensures excellent use of the forests' production potential and the protection of natural resources.

Klabin identifies and maps the environmental liabilities identified on new properties (whether acquired or leased) and adopts procedures to correct them, in addition to undertaking to carry out forest management in accordance with the principles and criteria of the FSC® and PEFC .

1. TIMBER FOREST MANAGEMENT

Pesquisa: studies and new technologies are used to ensure the maintenance and improvement of forestry productivity, considering the quality of the planted areas and of the fibers used in pulp production. The studies focus on the following specialties: Forest Improvement, Cloning and Biotechnology, Nutrition and Silviculture, Forestry Phytosanitary, and Wood Quality.

Forest planning and management: based on data from inventories (continuous and/or pre-cutting), studies, and simulations, the harvest rate and forest intervention strategies are formulated to ensure the supply of wood to Klabin's plants and of logs to the market.

Forestry development: aims to improve the productive potential of Klabin's forestry assets by improving techniques and processes to achieve better economic, environmental and social results.

Seedlings supply: Pine and Eucalyptus seedlings are obtained through asexual reproduction (vegetative propagation) and sexual reproduction (seeds) with the aim of meeting the partial demand for seedlings for the nursery. The process include the following phases: mini clone nursery, greenhouses, germination houses, plant nursery, spaces for plants to grow and adapt to sunlight, substrate preparation, automatic sowing and planting of mini-cuttings. Production capacity is around 12 million seedlings/year.

Silviculture: silviculture activities are divided into: land preparation, with operations to ensure soil and water conservation, planting of saplings, ant control, weed control, fertilization (in accordance with technical recommendations) and crop treatments.

Wood supply: an integrated mechanical harvesting system enables wood cutting activities in areas of difficult access due to soil characteristics (mud, slopes, etc.) and reduces raw material losses in the process. Forest mechanization also ensures better working conditions and increases worker safety. This activity is carried out with rigorous controls to protect the adjacent native forests. Klabin is a pioneer in energy generation using biomass boilers in the pulp and paper sector. All branches, leaves and wood logs of less than 8 cm in diameter left over on harvested areas are gathered and crushed to become biomass. The material is used in the boilers of the paper mills and, through their burning, generate power to run the paper machines. By adopting this system, the company avoids using fuel to generate power at its mill in Paraná and significantly decreases its emissions of pollutant gases.

Road maintenance: the opening and maintenance of the road network (roads, firebreaks, bridges, drainage grates, etc.) are carried out in accordance with the environmental planning that delineates the areas for planting, preservation, main roads, secondary firebreaks and water resources.

Expansion Process: the main purpose of the Expansion Process is to meet the wood supply proposed by the mill by prospecting areas under various modes, e.g., Acquisition, Lease, Planting with Klabin and Wood Procurement. The asset assessment and valuation cycle comprises eight phases: Prospecting, Prior Documentation, Macroplanning, Operating Assessment, Pricing – Final Adjustments, Documentation, Permitting and Startup. In every phase, technical assessments are conducted of the respective areas involving the property.

2. NON-WOOD FOREST MANAGEMENT

The Phytotherapy Program, a project to promote the use of Non-Wood Forest Products (PFNM), is an important example of the scientific use of the native forests preserved by Klabin. Launched in 1984 on an artisanal basis, the program began operating on a compounding scale in 1989. The program works to improve quality of life in the local community (employees and families) and to promote the preservation and conscientious multi-use of biodiversity in native forest areas and in the sub-forests of commercially planted areas.

Management systems: the management of flora for supplying raw materials for the Phytotherapy Program occurs in three distinct ways: management of medicinal plants in preservation areas, agroforestry system and cultivation. Raw material processing: to transform the byproducts obtained (raw material) into key active ingredients, good manufacturing practices are carried out, which involve the cleaning, selection, drying, storage and crushing of medicinal plants.

Production: the production of the Herbal Medicine Laboratory represents the industrial process of Non-Wood Forest Products (PFNM). The process has 100% traceability, compounding/production scale based on local demand and includes specific transformation techniques, while observing the parameters of the death rate in local communities and the sustainability calculations of the process.

Quality control: analysis unit to ensure the quality of the products manufactured, the correct use of operating procedures, environmental controls and worker training. Analyses are made of any and all activities conducted by the Herbal Medicine Laboratory (packaging materials, maintenance and cleaning, environments, finished goods and people training).



Klabir Collection



Klabn Collection.

Compounding Pharmacy: represents the distribution area of the PFNMs involving serving the market through results from the use of finished goods and social responsibility processes, with a focus on improving quality of life in local communities by providing them with easy access, service assistance and affordable payments deducted from payroll.

Raw material traceability: represents all traceability, information network and control functions. Includes the technical-administrative processes for planning, production, cleaning, storage, distribution, transportation and feedback.



Wood chips. Klabin Collection

3. PROPERTY PROTECTION

Klabin has a security structure for its forest properties to prevent and reduce losses. Through preventive and/or corrective measures, mobile patrols and surveillance, Klabin protects fauna and flora from illegal hunting and fishing. An important partner in this effort is the Paraná Environmental Police.

Forest Fire Prevention and Fighting

In the 1960's, Klabin, in partnership with the Federal University of Paraná (UFPR), designed a program to create, disseminate and supervise plans to prevent and fight fires on its properties. In 1980, Klabin created the Forest Firefighters Groups (GCIFs), whose main purpose was to train field teams in firefighting.

Structure for Fighting Forest Fires	
Property and Forest Protection Control Center (0800-728-0607), Mill, Yard. Wood and Mechanics Workshop.	11
Monitoring Towers	18
Vehicles	28
Fire trucks	6
Water supply stations	64
Forest rangers with vehicles	23
Forest firefighters	620
Extension of firebreaks, dividers, contours and roads	15.833 km
Average of fires/year	59,46

Social & Environmental Responsibility



Klabin influences directly and indirectly the social and economic dynamics of local communities by increasing household income through the distribution of tax credits in the municipalities where it operates, with these funds allocated to socio-educational and socio-environmental programs, which create direct and indirect jobs and, by changing local dynamics, foster community empowerment.

KLABIN AND ITS EMPLOYEES

People are the heart of Klabin's operations, which is why it hires and makes sure to retain the best professionals who are aligned with its values and committed to building a better company every day.

Better for everyone: clients, suppliers, employees, local residents, friends, families, neighbors and the millions of people who use the company's products on a daily basis.

Klabin believes that people are more than just a resource of the company, which is why it decided to no longer use the term Human Resources, replacing it with People & Management. The new nomenclature is more modern and accurate, emphasizing the company's respect for human capital, which is a fundamental part of its business. Each person brings different skills and potentials

that contribute to the creation of a culture of engagement, development and results among all employees.



Klabin Collection.

Occupational Health & Safety:

In April 2005, the company launched the Klabin Excellence in Occupational Health & Safety, a corporate program that works to implement and disseminate techniques and tools for managing workplace health and safety that includes a system for identifying risks and treatments and effectively controlling them in order to ensure the quality of life, health and safety of employees. Klabin offers a series of benefits that are presented during the job interview.

MORE SAFETY IN FORESTRY:

Klabin's Forestry Area has a challenging goal: to reach, within three years, less than one accident per every one million hours worked; in other words, achieving a world-class level of occupational safety.

Meeting this challenge requires fostering a culture of safe production to help encourage the practice of active care in which employees perform their activities while caring for themselves, for their co-workers and, most importantly, allowing themselves to be cared for by their colleagues. Klabin focuses primarily on creating the conditions for instilling this culture to ensure the safety and well-being of all workers, whether direct or indirect. This goal involves administering training programs and awareness-raising actions as well as monitoring and supervision to prevent accidents in all operational areas. These actions, combined with the Internal Accident Prevention

Commissions (Cipas) established at all units, provide data for our Occupational Health and Safety Program (SSO). At the corporate level, Klabin has a Health and Safety Committee formed by 30 members from all hierarchical levels, whose main role is to coordinate with leaders from all units the implementation of preventive actions, campaigns or programs for driving change and commitment. All Klabin employees are represented in these committees, since leaders from all levels are involved in their activities and decisions.

The safety practices established by labor law and collective bargaining agreements are rigorously complied with by our employees.

These practices also include the participation of service providers via the Outsourced Company Safety Committees (Comsecons), which exist at every unit.

Occupational Health and Safety clauses are also included in all formal agreements with trade unions to ensure worker safety.

FORESTRY AREA SAFETY PROGRAMS

Right Way Program

Truck drivers transporting wood, who are professionals of the Forestry Area, also participate in lectures on traffic safety on a quarterly basis. These events also offer them an opportunity to share stories and experiences, which later are published in Boleia, a comic magazine published by Klabin that helps drivers to disseminate this safety information to their families.

Forestry in Family

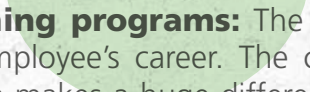
Since spouses or partners of employees also can help promote awareness of safe attitudes to help prevent accidents, they also receive guidance on safe behaviors so that they can help spread this knowledge to others.

Safety Matrix Management (GMS)

GMS is a new methodology used to reinforce a culture of safe production based on safety and incident reports. The project has three pillars: cross-control of information, developments and systematic monitoring of information.

Career of the future: Spouses or partners of employees also can help promote awareness of safe attitudes to help prevent accidents.

Solidity – Klabin has been operating in Brazil for over a century. It is a leader in its industry, with countless industry certifications and acknowledgments. Even those who have never heard of Klabin certainly have come across its products, which are used to package the country's major brands.




Training programs: The company offers training programs for different functions and stages of an employee's career. The company's professionals are continually prepared to grow and develop, which makes a huge difference. The company and its employees mutually contribute to each other's development. One of the many examples of this practice is Klabin's Business School, which supports professional and leadership development within the company.

Workplace management: Klabin not only takes care of its forests, but also protects its work environment. The company continually strives to guarantee safe processes and manage organizational climate so that all employees feel safe and motivated in their day-to-day activities.

High performance: Our leaders constantly monitor the performance of employees so that the company can maintain a relationship of reciprocity with each person. Klabin conducts employee performance evaluations and encourages the setting of indicators and targets to determine variable compensation in eligible positions.

Quality of life: Klabin believes that a sense of well-being is vital for employee productivity and quality of life. With that in mind, it implemented the Klabin Quality of Life Program (KQLP), which is coordinated by health and people professionals from the Preventive Medicine and Quality of Life Committee. Based on five pillars (preventive medicine, nutritional orientation, physical activity/integration, alternative therapies and educational actions), the program's actions promote a healthy balance between employees' professional and personal life.



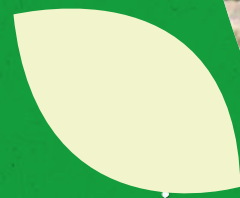
Klabin and the Community



In the communities where it operates, Klabin seeks to engage with stakeholders by learning about the area, establishing guidelines and goals for responding in the event of any impacts caused by its forestry and production operations. And by developing projects, programs and initiatives focusing on education and local development, the company creates its social and environmental investment platform.



Klabin Collection



KLABIN AND THE COMMUNITY

Project	Description	Results		
		2020	2021	2022
Klabin Caiubi Environmental Education Program.	Environmental education program for disseminating the concepts of ecological awareness among teachers and students in municipal schools.	160 teachers 11,777 students Telêmaco Borba, Imbaú, Ortigueira and Tamarana.	148 teachers, 3,000 students Telêmaco Borba, Imbaú, Ortigueira, Tamarana, Reserva Ventania, Curiúva, Sapopema.	154 teachers, 3,295 students in Telêmaco Borba, Imbaú, Ortigueira, Tamarana, Ventania, Reserva, Curiúva, Sapopema and Paranaguá.
Legal Forest Program.	Developed in partnership with the Association for Preservation of the Environment and Life (Apremavi), the program's actions include rural property planning, conservation and environmental education in the states of Paraná and Santa Catarina. It orients small and mid-sized farm owners on how to work more efficiently and to obtain higher profitability, while at the same time preserving ecosystems. These producers take courses, conduct community support actions, participate in lectures and visits to share knowledge and receive free native saplings. The program also encourages silviculture using forests planted with pine and eucalyptus, organic agriculture and ecotourism.	28 new owners 20,510 seedlings donated 514 ha of APP delineated.	57 new owners 53,913 seedlings donated 2,087 hectares of APP delineated.	47 new owners 65.894 seedlings donated 2,648.3 hectares of APP delineated.
Social Forests Program.	Developed in partnership with Apremavi, Sebrae and Municipal Governments. The Social Forests Program encourages family farming and helps small rural producers in all stages of production – from environmental adaptation, conducting conservation and restoration projects, to the sale of produce in local markets, including training, diversification of property and support to form associations and cooperatives. The program has been conducted since 2015, in the municipalities of Telêmaco Borba, Ortigueira, Imbaú and Reserva, in the state of Paraná. Since July 2019, it has been expanded to another five municipalities in Paraná, given the good results obtained: Sapopema, Curiúva, São Jerônimo da Serra, Tibagi and Cândido de Abreu.	98 properties, 28,206 seedlings donated 639,11 ha of APP and RL delineated Sample analysis with producers in the municipalities of Telêmaco Borba, Ortigueira and Imbaú: 72% of farmers recognize an income increase of up to 60%; 57% increased food production; 52% expanded their marketing network; 80% recognize benefits in environmental aspects.	89 new properties 2,682 hectares of APP and legal reserves delineated 938 watersheds protected 268,000 seedlings planted 636 monitoring visits made.	Social Forests Program, which encourages family farming, is present in 11 municipalities in Paraná and, in 2022, reached over 1,100 properties, with over 4,000 people involved. The program also worked with municipal governments in the Campos Gerais region to implement the Municipal Inspection System (SIM), which supervises and permits the sale of animal products in municipal establishments, including restaurants and hotels. It also supported the implementation of the Law and Regulation for Municipal Inspection Services (SIM) of Animal Products in the municipalities of Ventania, Imbaú and Telêmaco Borba. It organized the Social Forests Program Fair at the gates of Klabin's Units in the state of Paraná (Telêmaco Borba and Ortigueira) and the 1st Green Fair in the Telêmaco Borba Bus Terminal, an initiative of the municipal government in partnership with the Association of Family Farming Cooperatives in the Central North region of Paraná and Social Forests Program.

KLABIN AND THE COMMUNITY

Project	Description	Results		
		2020	2021	2022
Plant with Klabin.	Plant with Klabin is a reformulation of the Forest Development Program designed for small, mid-sized and large rural producers. In the initiative, they are invited to participate in the company's forest expansion process by cultivating pine and eucalyptus on their properties and encouraged to integrate forests with other activities conducted on their own properties. Plant with Klabin is an excellent option for owners to generate income, complement their production portfolio and bring new jobs and development to the region.	2,175 contracts.	1,953 contracts.	1,953 contracts.
Klabin Right Step Program.	Launched in 2008 in partnership with the dance company Studio 3 Cia. de Dança, Klabin's Right Step Program includes contemporary dance and capoeira activities for the children aged 6 to 17 of employees. The main goal is to promote artistic expression and an appreciation for culture and art.	Telêmaco Borba: 84 Ortigueira: 70.	Telêmaco Borba: 35 Ortigueira: 46.	Telêmaco Borba: 68 Ortigueira: 43.
Beekeeping Program.	Klabin uses its forests to drive the development of production chains that benefit local communities, especially in generating complementary income and in the environment. Currently, the initiative is being developed in partnership with the Associations of Beekeepers of Telêmaco Borba, Ortigueira and Arapoti, in the state of Paraná.	46 beekeepers.	46 beekeepers.	47 beekeepers.
Klabin Singing Girls Program.	Formed by girls between the ages of 7 and 17 who are daughters of employees at the Monte Alegre (Paraná) unit as well as young residents of the local community. The project offers classes on music theory, rhythm and vocal techniques, while developing teamwork. Participants already have had the opportunity to give performances in several municipalities in the states of Paraná, São Paulo and Santa Catarina, to over 12,000 people.	Telêmaco Borba: 66 students Ortigueira: 62 students	Telêmaco Borba: 34 students Ortigueira: 42 students.	Telêmaco Borba: 72 students Ortigueira: 46 students.
Klabin Right Step Program for Employees.	The program fosters art and culture socialization through Contemporary Dance, refreshing the body and mind of women through movements that portray people's daily lives and feelings, using different concepts, group activities and composers.	12 students.	Not realized.	10 students.

KLABIN AND THE COMMUNITY

Project	Description	Results		
		2020	2021	2022
Volunteer work: Klabin Terra Viva Volunteer Association.	The Klabin Terra Viva Volunteer Association is a non-profit organization that, since its creation in 2003, has organized citizenship and solidarity actions with the support of our employees and their families. The projects are one-off, such as organizing drives for warm clothing, food or blood donations, and/or related to commemorative dates. The association also organizes educational programs, such as providing support for those seeking their first job, as well as technical and creative classes, such as guitar, foreign languages and computer classes. The beneficiaries are various: children and youth in situations of social risk or with disabilities, and the elderly.	77 volunteers.	106 volunteers.	65 volunteers.
Klabin Sowing Education.	The Klabin Sowing Education Program aims to improve the management of public resources for education, with the emphasis on results, seeking a balance between school administration, infrastructure, resources and academic practices. The main purpose is to improve the results of official indices, such as the Basic Education Development Index). The program was conducted in the municipalities of Telêmaco Borba, Ortigueira and Imbaú, in the state of Paraná.	65 schools 2,000 teachers 11,000 students.	146 municipal schools participating in the project.	The Sowing Education Program supported municipalities in improving their Basic Education Development Index (Ideb), which is based on students' knowledge of Portuguese and Mathematics, according to the pass rate. Telêmaco Borba, Ortigueira and Imbaú, the three municipalities in the state of Paraná that have been participating in the program since its creation, increased, in 2015, their Ideb scores by 41%, 13% and 16%, respectively. Telêmaco Borba and Ortigueira remain above the average projected by Ideb. In 2022, the Klabin Sowing Education Program was expanded to two more municipalities in Paraná: Congonhinhas and Rio Negro. It also carried out the First Training for Teachers – Wolf Klabin School Digital Education – Robotic Lab – FazGames Partnership.
Volleyball Network	The main objective of the Volleyball Network Project – Paraná Centers is to provide lighthearted volleyball training to children and adolescents between the ages of 9 and 15 from public schools, while teaching essential values for their development. The project is currently carried out in the municipalities of Telêmaco Borba and Ortigueira.	Project not carried out in 2020.	Online training once a month for teachers.	1,032 girls and 556 boys benefiting from the program.

KLABIN AND THE COMMUNITY

Project	Description	Results		
		2020	2021	2022
Support for Public Administration.	The Support for Public Administration program works to arm local governments with modern management processes and tools and give them the capacity to support planned and participatory development. For this, local governments receive specialized technical support from Interação Urbana, a public administration consulting firm, for the technical preparation of programs, initiatives, goals, indicators and budgets, as well preparation of their Multi-Year Plan, establishing clear projects and indicators of results. The program was carried out in the municipalities of Telêmaco Borba, Ortigueira, Imbaú, Tibagi, Reserva, Curiúva, Sapopema, Ventania, Rio Negro and Paranaguá, in the state of Paraná; Otacílio Costa, Correia Pinto and Lages, in the state of Santa Catarina; Angatuba, in the state of São Paulo; and Goiana, in the state of Pernambuco.	In 2020, Klabin mobilized to assist the municipalities in combating the pandemic. Initiatives included public health mentoring for the Health Departments of 12 municipalities.	In 2021, Government Strategic Planning was expanded from previous years, increasing from 7 to 10 municipalities in Paraná.	Through the Support for Public Administration Program, the company provided specialized consulting services in planning and supported the preparation of Multi-Year Plans (PPAs) of new municipal administrations of 10 municipalities in the state of Paraná (Telêmaco Borba, Ortigueira, Imbaú, Sapopema, Tibagi, Reserva, Curiúva, Paranaguá, Rio Negro and Ventania). Meeting with all mayors of municipalities participating in the Support for the Public Administration Program (AGP) to select the priority initiatives of the their planning.
Entrepreneurial Region.	Targeting businesspersons and new entrepreneurs of Telêmaco Borba, Imbaú and Ortigueira, in Paraná state, the program, in partnership with SEBRAE, is part of the initiatives of the Puma II Project. Its objective is to strengthen entrepreneurship to seize new and ongoing opportunities emerging in the region, including those resulting from Klabin's initiatives.	Four events: presentation of project to the community; Digital Retail, to help companies to expand their operations on digital channels; InovaTur, to encourage tourism, focusing on hotels, restaurants and bars; and the Entrepreneurial Circuit, targeting those who want to run their own business.	The launch of "Women's Business," with the purpose of strengthening and supporting women's entrepreneurship, through training programs and consulting services, encouraging the adoption of SDGs in businesses managed by women. 130 people registered for the program.	The program was ended in 2021.
Solid Waste Program	The Klabin Solid Waste Program, conducted jointly with the Intermunicipal Caminhos do Tibagi Consortium since 2012, has been conducting various initiatives to support recycling in seven municipalities of the Campos Gerais region, in Paraná: Imbaú, Ortigueira, Reserva, Tamarana, Tibagi, Telêmaco Borba and Rio Branco do Ivaí. Actions include providing structures and equipment, helping to formalize associations and cooperatives and monitoring activities, training programs and institutional strengthening for recyclable material collectors.	165 collectors, 150 of whom in Paraná. In 2020, we engaged a social and environmental consulting firm to support us in managing, executing and monitoring the Program.	2,053 tons of recyclable materials were recovered in the area covered by the Klabin Solid Waste Program in Paraná, which is equivalent to 205 tons recovered per month on average.	The Program was expanded in 2022, and we carried out the First Workshop of Public Environmental Managers with 7 municipalities composing the Caminhos do Tibagi Consortium (Telêmaco Borba, Imbaú, Ortigueira, Tibagi, Reserva, Sapopema and Rio Branco do Ivaí), with 38 participants, as well as the development of Action Plans and definition of goals for the next two years. In the year, the Program helped recover around 2,887 tons of materials, a 19.8% increase in relation to the previous year, and around 1,342 tons of paper. Other results: -Income increase of 63% -Increase of 26% in mass volume recovered in year 1 -Intermunicipal Solid Waste Management Plan (Caminhos do Tibagi Consortium – 6 municipalities) New waste sorting facility in Imbaú, Rio Branco do Ivaí and renovation of the facility of the cooperatives in Ortigueira and Reserva.

KLABIN AND THE COMMUNITY

Project	Description	Results		
		2020	2021	2022
<p>Telêmaco Borba Artistic Gymnastics.</p>	<p>The dedication and talent of the athletes of the Artistic Gymnastics Training Center (CTGA), located in Telêmaco Borba, were recognized in competitions across Brazil. Training is offered through a partnership between Klabin and the Municipal Government of Telêmaco Borba and ensures the development of sports, supporting the physical and cultural formation of youth in the region.</p>	<p>100 girls between the age of 5 and 14 years.</p>	<p>In 2021, given the pandemic, classes were held in virtual format.</p>	<p>Over 100 children participate in the Center. An athlete from Telêmaco Borba, Ariely Miranda, won a gold medal in the XLI Brazilian Artistic Gymnastics Tournament, 41st edition, youth category (up to 15 years), held in Goiânia, from November 15 to 20. 98 athletes competed in the category, representing sports teams from the entire country. Since when she was 9 years old, Ariely has been one of the star athletes of the program conducted in partnership with the Municipal Government through its Education Department with the Artistic Gymnastics Training Center (CTGA).</p>
<p>Encantos do Imbaú Program</p>	<p>This social and educational project is carried out in partnership with the Community Services and Strengthening of Bonds Service (afterschool activity) in the municipality of Imbaú. The program offers guitar, keyboard, recorder, singing and musical theory classes.</p>	<p>Classes provided online.</p>	<p>Classes provided online to 80 children and adolescents.</p>	<p>In 2022, the project resumed its activities in person. One of the initiatives was taking the group to the movies. Eighty students of the project watched the movie Toy Story 4. Many of them, who are in a situation of social vulnerability, watched a movie in a theatre for the first time. These initiatives strengthen our commitment to encouraging access to culture, while narrowing bonds with local communities.</p>
<p>Two Steps Toward Change Ortigueira</p>	<p>Since 2015, Klabin has supported the Change Project in the Father Livio Donati Youth House in Ortigueira, which has been using dance to foster individual development, helping children and teens to learn how to face difficulties in life, as well as to develop motor coordination, reasoning, rhythm, balance, resistance, persistence, alignment, discipline, self-confidence and self-care.</p>	<p>Project not carried out in 2020.</p>	<p>In 2021, with the authorization of the state government, in October, the project resumed its activities and classes.</p>	<p>Around 80 children are benefited and participate in the Two Steps for the Change Project in Ortigueira. In 2022, with the end of the pandemic, classes were resumed in person, with the purpose of reestablishing and repositioning children and adolescents in contact with the public again. The institution also participated in festivals and championships.</p>
<p>Superação Project for Athletics in Reserva</p>	<p>Klabin formed a partnership with the Superação Project for athletics in the municipality of Reserva, state of Paraná. Youth from rural areas are encouraged to practice sports and have been obtaining good results in competitions.</p>			<p>In 2022, the project participated in 10 competitions in four Brazilian states, with a record number of medals: 101, 67 of which at the regional level, 18 at the macroregional level, 14 at the state level and two at the national level, the latter including one gold medal in the Brazilian School Games won by athlete João Emanuel Domingues, who became the first athlete of the Telêmaco Borba Regional Center to win the competition.</p>





Social & Environmental Responsibility

The practice of social and environmental responsibility is a fundamental principle at Klabin, which organizes and supports social, cultural and environmental projects in local communities.

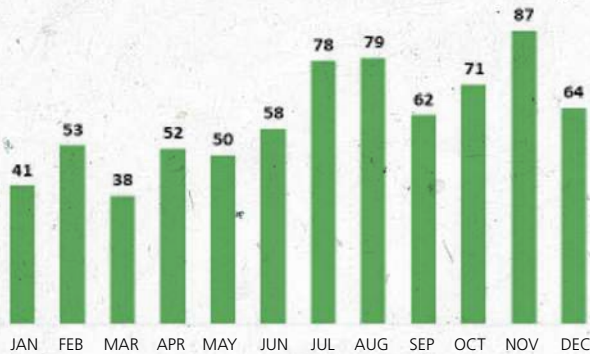
DIALOGUE CHANNELS:

To strengthen transparent relations and expand communication with communities and stakeholders, Klabin maintains Talk to Klabin, a set of communication channels, some available 24/7, as shown in the table below.

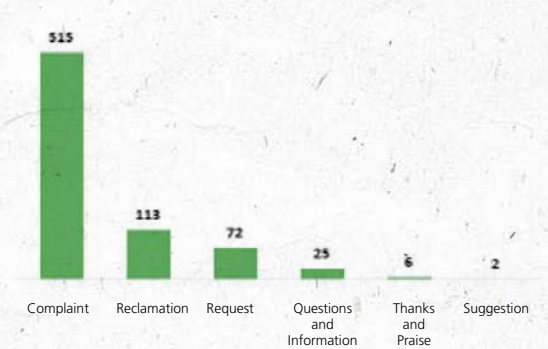
Communication channels	Description
Website	Virtual space where the public can access information about the company, including its history, products, social and environmental programs, environmental practices, business, financial and sustainability reports and news, human resources and much more.
Lectures	Participation in various events in the community and at organizations on topics such as: environment, technology, research and development, human resources, etc. The events offer an opportunity for stakeholders to learn about the company's practices and ask questions about the topics discussed.
Meetings	Meetings with local communities to foster a collective and transparent dialogue on topics involving the company's operations.
Media	Proactive and reactive effort to make available information, releases and interviews to journalists on a wide range of topics related to the company.
Advertisements	Publications in newspapers and radios on corporate topics, relations and awareness raising. In general, advertisements are made on commemorative dates.
Campaigns	Use of brochures, banners, leaflets, meetings, lectures, bulletin boards, posters, etc. to address topics of interest. Campaigns may be conducted for informative, corporate, motivational, awareness-raising or integrative purposes.
E-mail	Through Klabin's electronic addresses, stakeholders have an opportunity to establish relations with the company, send complaints, make requests and pose questions: faleklabinpr@klabin.com.br.
Contact Klabin (0800)	The toll-free number 0800 728 0607 is a communication channel that the community can use to submit opinions, complaints, suggestions or requests. Available 24 hours a day, it is widely disclosed to the community through leaflets and banners and is displayed on all vehicles of the own and outsourced fleets of the forestry operations.

Every year, the company has been increasingly disseminating these channels, mainly to anticipate preventive actions related to impacts and changes in the everyday lives of communities. In 2022, as shown in the chart below, we received acknowledgments, requests (donations), complaints, reports and questions related to operational processes.

Total monthly demands 2022



Classification of demands 2022



RELATIONS WITH TRADITIONAL COMMUNITIES:

Klabin identifies and establishes measures to safeguard the customs and rights of traditional communities (quilombola, indigenous and faxinalense communities) located near its forest management areas. We also require service providers to participate on the Outsourced Company Safety Commissions, known as Comsecon, which exist at every unit.

3. KLABIN AND THE ENVIRONMENT

Since its creation, Klabin's actions have been guided by its concern with environmental preservation, both in its industrial and forestry management activities. The latter adopts a mosaic-planting concept, with pine and eucalyptus stands intermixed with stands of native forests, which helps to protect fauna and flora.

Forestry Areas: In Paraná, Klabin's area represents the largest green area in Brazil's South region, which is easily identifiable in satellite photos. Planted forests have made important contributions to environmental preservation by helping to protect biodiversity and conserve headwaters.

High Conservation Value Areas (HCVAs)

Areas that have one or more of the following characteristics:

- HCA* 1: areas containing globally, regionally or nationally significant concentrations of biodiversity values.
- HCA 2: globally, regionally or nationally significant large landscapes where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance;
- HCA 3: areas that are in or contain rare, threatened or endangered ecosystems;
- HCA 4: areas that provide basic ecosystem services in critical situations;
- HCA 5: areas that are fundamental to meeting the basic needs of local communities;
- HCA 6: critical areas for the traditional cultural identity of communities;

*HCV – High Conservation Value.

After studies conducted by the company and consulting firms, Klabin identified at specific locations, on its properties in Paraná, characteristics that meet some of the items of this definition, as shown below:



Klabin Collection

HCVa	HCV identified	Justification	Year of Creation
Varanal	1, 2, 3, 4	Primary forest with thousands of hectares, whose fundamental role is to genetically connect various forest fragments.	2008
Taboal do Mauá	1, 3, 4	Registration of <i>Dendropsophus anceps</i> ("estrella treefrog").	2008
Invernadinha	1, 3, 4	Registration of endangered species in significant remnants.	2010
Socimbra	1, 3, 4	Registration of endangered species.	2010
Ribeirão Três Bocas	4	Water production in adequate quantity and quality to supply the municipality of Jaguaíva.	2018

HCVA	HCV identified	Justification	Year of Creation
Settlement Augusta Vitória (Ortigueira)	6	Cemetery of cultural value to the community	2014
Cachoeirão (Tibagi)	6	Cemetery of cultural value to the community	2014
Conceição (Tibagi)	6	Cemetery of cultural value to the community	2014
Faxinal de São Pedro (Imbaú)	6	Cemetery of cultural value to the community	2014

All High Conservation Value Areas identified in environmental attributes conduct periodic surveys for fauna (birds, mammals and reptiles – the latter specific for the HCV Taboal do Mauá) and flora, as well as measures to protect and monitor all HCVAs (environmental and social characteristics), such as property security, control of exotic invasive species and prevention and fighting of forest fires.

The four HCVAs already consolidated, for which measures are adopted to protect and mitigate impacts to maintain their characteristics, are presented on the following pages.

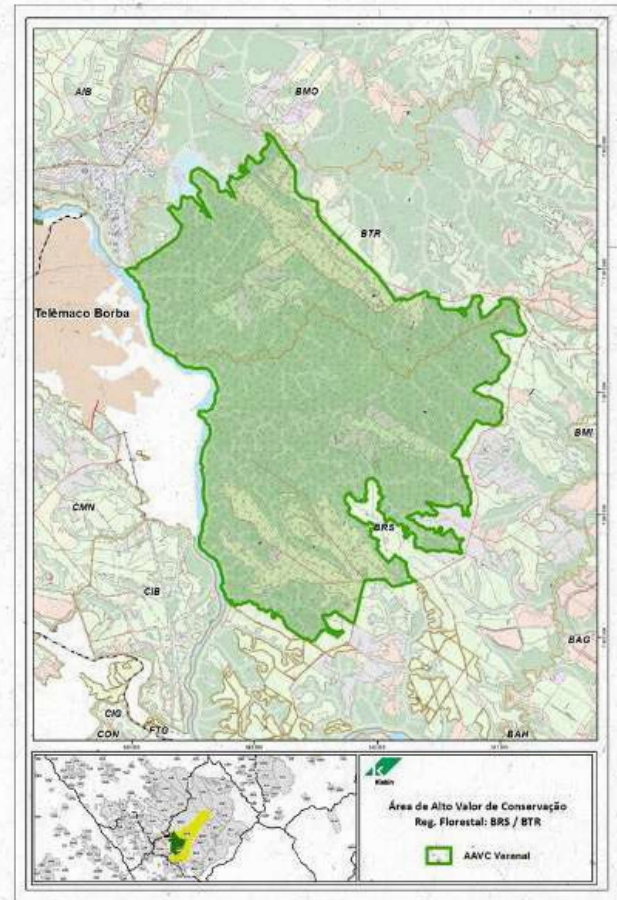


Kalbin Collection

Varanal: consolidated in 2008, the Varanal area, with 4,263.38 hectares, is located within the Klabin Ecological Park. The area was selected because it is formed of primary forest with thousands of hectares and because its fundamental role is to genetically connect various forest fragments.



Klabin Collection.



Taboal do Mauá: consolidated in 2008, Taboal do Mauá is an area of around 7.26 hectares located on the right bank of the internal road of Mauá. It was selected because it is home to the estrella treefrog (*Dendropsophus anceps*), an amphibious species that was classified in 2008 as critically endangered. To conserve this species, the population is monitored in the HCVA Taboal, keeping the area protected and isolated and avoiding impacts on the species.



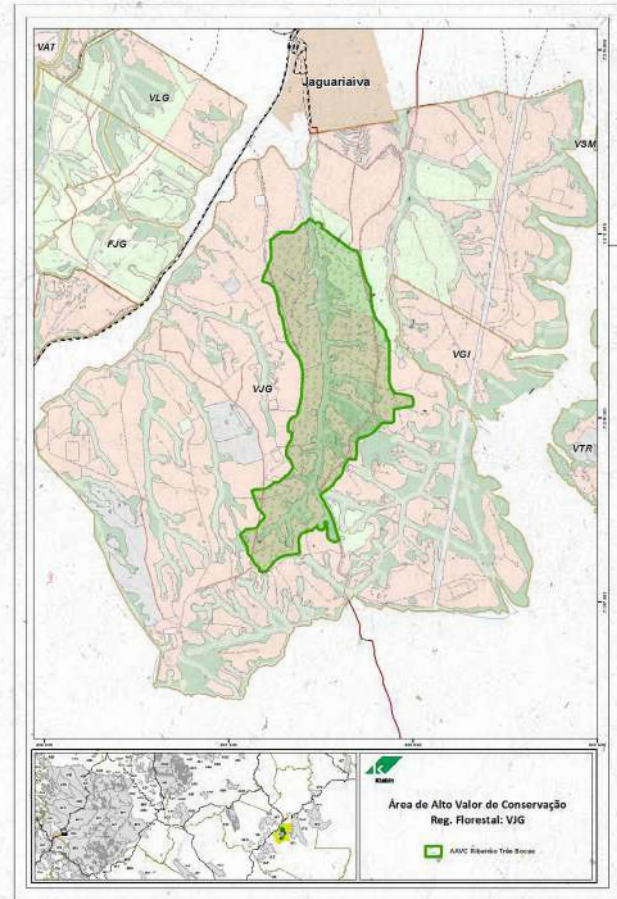
Dendropsophus Anceps (estrella treefrog)
Klabin Collection.



Ribeirão Três Bocas: Consolidated in the first half of 2018, this 499.55-hectare area is located in the municipality of Jaguariáiva. The area is of great importance for water production in adequate quantity and quality to supply the municipality in which it is located. In addition, the combination of plant physiognomies results in rich biodiversity, including endangered species.



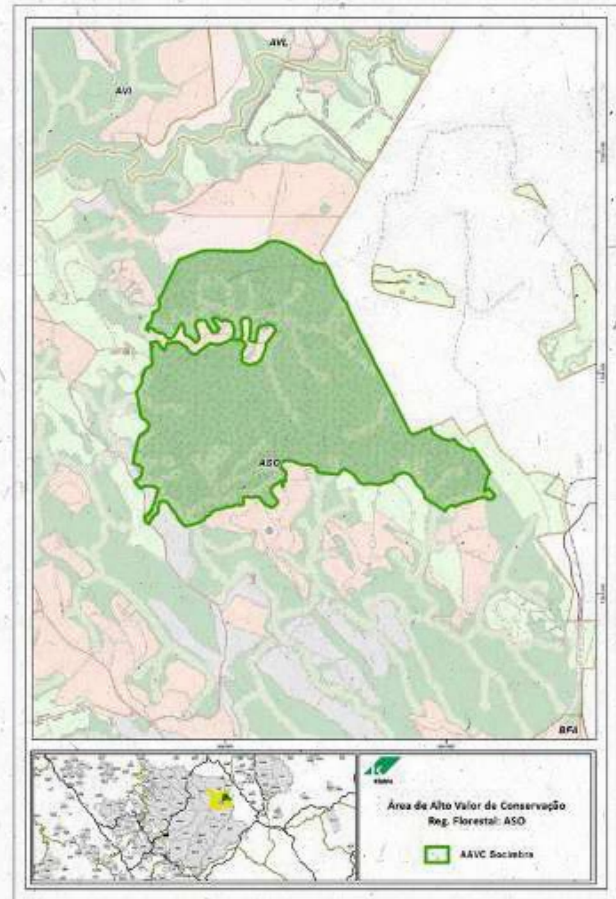
Klabin Collection.



Socimbra: consolidated in the first half of 2010, this 462.81-hectare area is located within the RPPN Monte Alegre, in the forest region Socimbra. It was selected because it harbors endangered species.



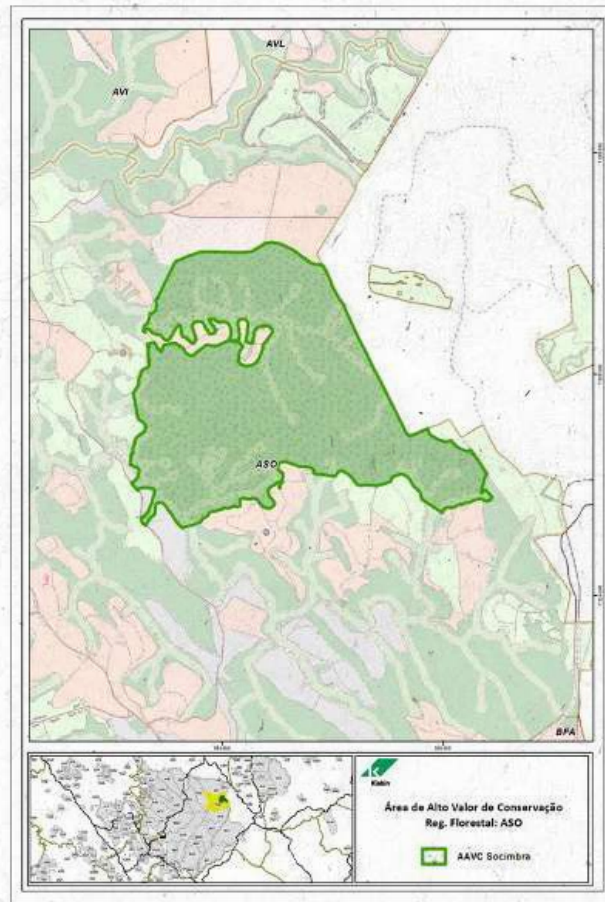
Klabin Collection.



Invernadinha: consolidated in the first half of 2010, this 627.52-hectare area is located within the forest region Invernadinha. The area is home to remaining populations of endangered species.



Klabin Collection.



KLABIN HERBARIUM

The Herbarium was created in October 17, 2002 to care for the diversity of botanical species on the Monte Alegre Farm and to study the morphoanatomical characteristics of some species of interest, as well as to make it a regional botanic hub and trustee of Brazilian genetic heritage.

The work developed in the herbarium is carried out in partnership with the State University of Maringá and has enabled the exchange of information between herbariums, which expands the dissemination of the activity in scientific environments, lending greater credibility to the Klabin Herbarium.

PHYTOTHERAPY

Created in 1984, the Klabin Phytotherapy Program seeks the sustainable use of biodiversity by aligning environmental preservation with social responsibility. The project uses species from native forests to produce herbal products mainly directed to employees. The program was the first

of its kind in the world in terms of the management of non-wood forest products, certified by the Forest Stewardship Council® (FSC®) in 1999. Currently, the local flora is composed of 2,249 taxonomically verified species, of which 1,078 correspond to material collected in the Monte Alegre Farm, encompassing 150 botanical families, 11 of which present higher numbers of specimens. Classification includes 628 arboreal, 939 shrub and 682 herbaceous species, with the remaining species under a revision process. Exsiccatae originate from various regions of the Monte Alegre Farm in the municipality of Telêmaco Borba and other municipalities in the state of Paraná, as well as other states in Brazil, the latter with few contributions. In terms of percentage, 96% come from the state of Paraná, of which 76% correspond to the municipality of Telêmaco Borba, 19% to Maringá and 5% to other municipalities. Of the exsiccatae collected in Telêmaco Borba, 93% came from Monte Alegre Farm and 7% from other locations of the municipality.

KLABIN ECOLOGICAL PARK

Created and maintained by Klabin in 1979, the Klabin Ecological Park (PEK) spans a 9,852-hectare area, 91% of which is composed of native forests. Initially, the purpose of the space was to “safeguard exceptional characteristics of the nature, combining the integral protection of flora, fauna, natural wonders and watersheds, with scientific and educational activities supported in the area” and, as time goes by, it has been improving and expanding its activities. Currently, the PEK aims to promote of biodiversity conservation, wildlife protection and rehabilitation and the preservation of endangered species, while also conducting scientific research and supporting environmental education projects.

ACTIVITIES OF KLABIN ECOLOGICAL PARK

The park features a Biodiversity Circuit, where 180 animals and 50 different species (13 endangered species at the state level) are maintained in spaces

ensuring a better quality of life for each individual. The park also features an Ecological Trail in the middle of native forest stands where visitors enjoy direct contact with nature, as well as a Nature Interpretation Center for environmental education activities with interactive and educational stations focusing on the region's environment, sustainability and biodiversity. The park also has a Wildlife Rehabilitation Center, hospitalization areas, veterinarian clinic, kitchen for preparing animal feed, administrative office and accommodations for researchers.



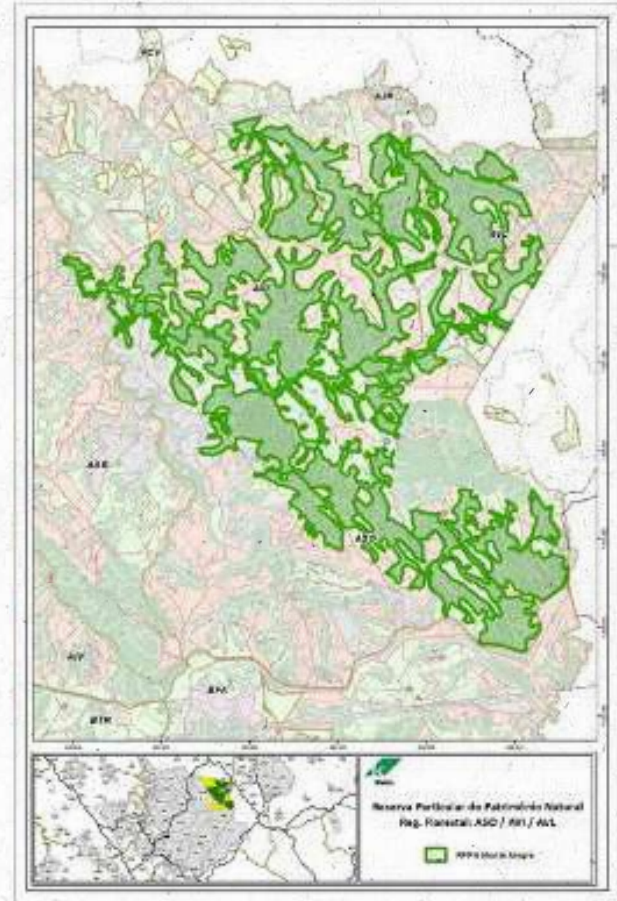
Klabin Collection.



 **PARQUE ECOLÓGICO**
KLABIN

RPPN

A Natural Heritage Private Reserve (RPPN) is a permanent conservation unit established by law and created on private areas to ensure the sustainable management of native forests and biodiversity. Currently, Klabin has two RPPNs. One of the RPPNs is located within the Monte Alegre Farm, on a 3,852-hectare area. Information on the characteristics of the area, as well as the strategy to conserve RPPN's features, are described in the Management Plan. The area was created in 1998 by Ordinance 182 of the Paraná Environmental Institute (IAP) and registered in perpetuity.



MONITORING OF FLORA

The Monte Alegre Farm is located in a region of the state of Paraná where the vegetation is predominantly Mixed Upper Montane Rainforest, complemented by semi-deciduous forest and natural grasslands. Through studies carried out by various researchers, 2,021 species of flora were identified on the Monte Alegre Farm.

Type of vegetation	Number of species	Endangered species IUCN (CR, EN, VU)	Species with recognized conservation status IUCN (CR, EN, VU, NT, LC)
Arboreal / Shrub	749	6	326
Epiphytes/Lianas/Vines	180	1	12
Herbaceous	314	0	19
Pteridophyte	3	0	0
TOTAL	1,246 SPECIES	7 ENDANGERED SPECIES	357 ENDANGERED SPECIES

CR: critically endangered; EN: endangered; VU: vulnerable; NT: near threat; LC: least concern.

MONITORING OF FAUNA

Studies are regularly conducted to update the database of animals already found on the company's areas. In terms of vertebrates, birds and mammal classes are widely known (the latter include large mammals). Data on amphibians was obtained from studies carried out since 1999.

The next table shows our findings to date:

Groups	Number of species	Endangered species IUCN (CR, EN, VU)	Species with recognized conservation status IUCN (CR, EN, VU, NT, LC)
Amphibians	42	0	40
Birds	435	11	435
Invertebrates	26	0	0
Mammals	126	8	113
Fish	56	1	33
Reptiles	39	0	36
TOTAL	724 SPECIES	20 ENDANGERED SPECIES	657 ENDANGERED SPECIES

Of the endangered species, several are included on the Official List of Brazilian Endangered Species, disclosed by the Ministry of Environment (MMA) in 2014, in the Endangered Fauna List of the State of Paraná, disclosed by the Paraná Environmental Institute (IAP) in 2004, as well as the International Union for Conservation of Nature (IUCN) lists disclosed in 2022. The variety of species is possible due to the presence of three types of vegetation, which is a unique feature of the state. Other important factors that help maintain biodiversity are the ecological corridors and the mosaic planting system adopted by

Klabin that intersperses planted forests with preserved native forests.

The number of species registered makes the Monte Alegre Farm and Klabin's areas one of the most important regions in Paraná in terms of biodiversity.







Social and Environmental Indicators

Social and Environmental Indicators are established in accordance with Klabin's sustainability policy and the social and environmental strategy designed by the Environment and Community Relations area. They are monitored in accordance with the company's economic, environmental and social performance, as shown on the next page.


1. TECHNICAL AND ECONOMIC MONITORING

ECONOMIC INDICATORS					
Monitoring	Indicator	Findings			
		2020	2021	Results	
				2022	Goal monitoring
Monitoring of Forest Assets (in hectares)	Area burned in forest fires.	859,6	1836,46	105,1	😊
Products harvested (in tons)	Production of araucaria wood for sawmill	-	-	-	😊
	Production of pine wood for pulp	3.658.259,65	4.015.400	4097115,47	😊
	Production of pine wood for sawmill	807.086,03	375.290	226474,16	😊
	Production of eucalyptus wood for pulp	5.768.385,30	6.325.500	7145058,12	😊
	Production of eucalyptus wood for sawmill	257.160,67	259.000	125652,08	😊
	Production of wood for energy (pine and eucalyptus)	328.380,00	310.400	477640	😊
Forest growth rates	Annual Average Increment (AAI)	As a result of the company's Forest Management and Genetic Enhancement Program, the AAI of its forests has been growing by 2% and 2.5% per year on average for pine and eucalyptus, respectively since 1970			
Monitoring of chemical products *	Herbicide consumption on silviculture area – kg/ha	0,17	1,2	1,69	😊
	Herbicide consumption on silviculture area – L/ha	1,97	1,47	1,12	😊
	Ant killer consumption – kg/ha	2,91	2,71	3,1	😊











2. ENVIRONMENTAL MONITORING

ENVIRONMENTAL INDICATORS					
Monitoring	Indicator	Findings			
		2020	2021	Results	
				2022	Goal monitoring
Biodiversity	Number of fauna species	746	742	742	
	Number of flora species	1.213	1182	1.246	

3. NON-WOOD FOREST PRODUCTS

ECONOMIC INDICATORS					
Monitoring	Indicator	Findings			
		2020	2021	Results	
				2022	Goal monitoring
Products harvested (in tons)	Production of pure raw material certified	168	0	0	

4. SOCIAL MONITORING

SOCIAL MONITORING				
Indicator	Findings			
	2020	2021	Results	
			2022	Goal monitoring
Number of employees (Klabin SA)	1.831	1.827	1.821	
Number of employees (Klabin SA Florestal)	1.304	1.089	1.258	
Number of outsourced workers	3.058	4.240	5.023	
Number of occupational accidents (Klabin S A + Klabin Florestal)	80	45	29	
Training hours	64.279,91	58.029,00	131.674	
Number of visitors - Ecological Park	Closed	Closed	Closed	
Number of forestry development contracts	2.175	1.953	1.984	
Number of visitors served	16	27	597	
Number of meetings to discuss social and economic indicators of AID2	8	10	5	
Percentage of acceptance in communities	84%	80,3%	84,5%	

1. AID – Direct Influence Area – Telêmaco Borba, Imbaú and Ortigueira

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PUBLIC **Summary**

Forestry Management Plan | Paraná

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Klabin Collection

