BIODIVERSITY:
MANAGEMENT AND
INDICATORS

DEXCO | 2024

**INTRODUCTION**

For Dexco, environments exist to be lived. That is why we recognize how important forests and other natural ecosystems are. As the main source of raw materials for our wooden flooring and panels factories, biodiversity is a material issue for our Wood business division. Therefore, we are committed to ensuring responsible forest management in our areas.

**OBJECTIVE**

This document compiles tour main actions and results for biodiversity management and aims to consolidate our indicators and present the results of our impact on biodiversity.

# SUMMARY

# 1    Biodiversity Impact Index

The wood used as raw material for our forest-based products is a renewable natural resource, sourced from forest plantations. The process of obtaining it, from seedling cultivation to wood transportation, may have potential impacts on natural ecosystems and, consequently, on biodiversity.

With the aim of balancing the environmental, social and economic aspects of our business, we are committed to seeking ways to prevent or minimize negative impacts and enhance those that are beneficial. In this regard, we manage our forest areas with a policy for zero-deforestation or conversion of natural ecosystem to other uses, and we do not use wood from unacceptable[1] sources to manufacture our products.

We strive to conserve biodiversity, environmental values, and ecosystem services. To that end, we assess the socio-environmental aspects and impacts of our forestry operations, employ the most suitable techniques in our activities, and we monitoring illegal activities in our management units.

Consequently, we aim to operate in a way that does not cause net loss of biodiversity (no net loss) in our areas. In 2023, we carried out the second cycle of monitoring the impact on biodiversity, which is measured through the Biodiversity Impact Index (IIB), an indicator that demonstrates the results of our actions in relation to this topic and supports us in managing our impacts.

In this document, we present the set of parameters that make up the Biodiversity Impact Index (IIB) and its results for the year 2023 (**table 1**). For comparison purposes, we also make the 2022 IIB result available.

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1 Wood from unacceptable sources: wood that has been illegally harvested or obtained in violation of traditional and/or civil rights, sourced from areas of high conservation value threatened by management activities or from deforestation of natural forests.

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**Table 1.** 2023 Biodiversity Impact Index (BII) result

| Metric[1] | Unit of measure | 2022 result | 2023 result | 2023 target | 2023 target met | Weight | Weighted average |
|---|---|---|---|---|---|---|---|
| Conversion of natural ecosystems for other uses | % | 0.0% | 0.0% | 0.0% | 100.0% | 30.0% | 30.0% |
| Assessment of areas for the risk of significant impacts on biodiversity | % | 94.7% | 97.1% | 98.0% | 99.0% | 20.0% | 19.8% |
| Areas subject to risk of significant impacts on biodiversity and management and monitoring plans | % | 100.0% | 100.0% | 100% | 100.0% | 10.0% | 10.0% |
| Areas with certified forest management | % | 94.7% | 97.1% | 98.0% | 99.0% | 8.0% | 7.9% |
| Areas promoted with certified forest management | % | 52.4% | 59.2% | 60.0% | 98.7% | 8.0% | 7.9% |
| Conservation areas affected by wildfires | % | 0.1% | 0.2% | < 2% | 100.0% | 8.0% | 8.0% |
| Conservation areas in intermediate to advanced stages of regeneration | % | 89.0% | 94.0% | 91.0% | 100.0% | 8.0% | 8.0% |
| Impact of forest management operations on water quality (WQI) | WQI variation | 9.1% | 13% | <20% | 100.0% | 8.0% | 8.0% |
| | | | | | **Biodiversity Impact Index** | | **99.6%** |

[1] Metrics referring to areas managed by Dexco (owned and leased), except for data from promoted areas.

## 2   2023 result: discussion

Seeking to continuously improve our performance, we have raised the 2023 targets for the metrics *"Assessment of areas for the risk of significant impacts on biodiversity," "Managed areas with certified management," "Conservation areas in intermediate to advanced stages of regeneration,"* and *"Areas promoted with certified management."* We lifted the targets by 1% for the first three metrics and by 10% for the last one. The goals for the upcoming years, until 2025, are listed in **Table 2**.

The BII result in 2023 was 99.6%, an increase of 0.4% versus the previous year. This result is within the target, which is to reach 99.8% by 2025, increasing by at least 0.2 percentage points each year.

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**Table 2.** Summary of targets met in %.

| Metric[1] | 2022 | | 2023 | | 2024 target | 2025 target |
|---|---|---|---|---|---|---|
| | Target | Target met[2] | Target | Target met[2] | | |
| **Conversion of natural ecosystems for other uses** | 0.0% | 100.0% | 0.0% | 100.0% | 0.0% | 0.0% |
| **Assessment of areas for the risk of significant impacts on biodiversity** | 97.0% | 97.6% | 98.0% | 99.0% | 99.0% | 100.0% |
| **Areas subject to risk of significant impacts on biodiversity and management and monitoring plans** | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| **Areas with certified forest management** | 97.0% | 97.6% | 98.0% | 99.0% | 99.0% | 100.0% |
| **Areas promoted with certified forest management** | 50.0% | 100.0% | 60.0% | 98.7% | 70.0% | 80.00% |
| **Conservation areas affected by wildfires** | < 2% | 100.0% | < 2% | 100.0% | < 2% | < 2% |
| **Conservation areas in intermediate to advanced stages of regeneration** | 90.0% | 98.9% | 91.0% | 100.0% | 92.0% | 93.0% |
| **Impact of forest management operations on water quality (WQI)** | < 20% variation | 100.0% | < 20% variation | 100.00% | < 20% variation | < 20% variation |
| **Biodiversity Impact Index** | - | - | 99.4% | 100.00% | 99.6% | 99.8% |

[1] Metrics referring to areas managed by Dexco (owned and leased), except for data from promoted areas.
[2] When the result is equal or above the target set for the year, 100% of the target is considered met.

## 2.1   Conversion of Natural Ecosystems for Other Uses

We have made a public commitment, through our corporate forest management standard, to manage forest plantations without deforestation or conversion of natural ecosystems in our forest management units or wood supply areas.

To ensure this commitment is fulfilled, annual monitoring of conversions after the year 2020 is conducted in the areas managed by the company. The results show that no conversions of natural ecosystems have been identified in the forest management units. The goal is to maintain 0% conversion after 2020 for areas already owned by Dexco and for new areas that may be acquired or leased.

Conversions are verified using concepts of photo-interpretation and digital processing of satellite images, which are acquired through orbital remote sensors and processed using Geographic Information Systems software. The comparison is made annually (since 2020) in all management units, evaluating the existence of land use changes between the periods of analysis that could characterize conversion.

## 2.2   Assessment of areas for the risk of significant impacts on biodiversity

We have made a public commitment to biodiversity conservation, as we understand that this is crucial to ensure our sustainable growth and to continue providing solutions for a better living.

The risk assessment of impacts on biodiversity is conducted in all areas under the scope of our responsible forestry certificate. Therefore, the assessment follows the guidelines of these standards,

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using the concept of High Conservation Value Areas. Our goal is to carry out a risk assessment of significant impacts on biodiversity in 100% of the areas managed by Dexco (owned and leased) by the year 2025, and to date we have reached the milestone of 97.1%, corresponding to 194 farms and around of 137 thousand hectares (**Table 3**, after the table below).

The criteria to be used for the evaluation were defined by Dexco taking into consideration the following references:

- ProForest Guide, parts 1 and 2 (JENNINGS et al., 2003[2]);
- Good Practice Guidelines for High Conservation Value Assessments (STERWART et al.,2008[3]);
- Common Guidance for the Identification of High Conservation Values (BROWN, 2013[4]);
- Public conservation strategies of national and state government agencies.

The definitions of each category are indicated in the table below.

| CATEGORIES OF HIGH CONSERVATION VALUE AREAS | ACTIONS |
|---|---|
| **HCV 1 –** Diversity of species. Concentrations of biological diversity, including endemic, rare, threatened, or endangered species that are significant at a global, regional, or national level. | Analysis of fauna and flora studies conducted in the areas (where available) through data collection from observations during on-site inspections, consultation of wildlife and plant life data from scientific studies conducted in the region, interviews with the local community, and government publications on biodiversity conservation in Brazil. |
| **HCV 2 -** Ecosystems and extensive ecosystem mosaics at the landscape level, significant at the global, regional, or national level, containing viable populations of the vast majority of species occurring naturally in natural patterns of distribution and abundance. | Evaluation through land use maps of the farms, personal observations during on-site inspections, and state-level maps of Biomes and Conservation Units from official websites. |
| **HCV 3 -** Ecosystems and habitats. Rare, threatened, or endangered ecosystems, habitats, or biodiversity refuges. | Land use maps of the farms and the map of priority areas for conservation published by the Ministry of Environment. |
| **HCV 4 -** Critical environmental services. Basic environmental services in critical situation, including protection of water sources and erosion control in vulnerable soils and slopes. | Data from public water supply intake points sourced from official websites of government institutions and mapping of the farm in terms of slope and land cover. |
| **HCV 5 –** Communities' needs. Areas and resources essential to meet the basic needs of local communities, indigenous populations, or traditional populations (subsistence, food, water, health, etc.), identified in collaboration with these communities or populations. | Consultation with members of the local community and review of received demands history. |
| **HCV 6 -** Cultural values. Areas, resources, habitats, and landscapes of special cultural, archaeological, or historical significance at the global or national level, and/or of critical | Consultation with members of the local community, review of received demands history, and consultation of the databases of the National Institute of Historic |

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2 JENNINGS, S.; NUSSBAUM, R; JUDD, N.; EVANS, T. The High Conservation Value Forest Toolkit – parts 1 and 2. Oxford: ProForest, 2003. 104p.

3 STEWART, C.; GEORGE, P.; RAYDEN, T.; NUSSBAUM, R. •    Good Practice Guidelines for High Conservation Value Assessments. Oxford: ProForest, 2008. 71p.

4 BROWN, E., DUDLEY, E., LINDHE, A., MUHTAMAN, D. R., STEWART, C., SYNNOTT, T. 2013 •    Common Guidance for the Identification of High Conservation Values. HCV Resource network.

| CATEGORIES OF HIGH CONSERVATION VALUE AREAS | ACTIONS |
|---|---|
| cultural, ecological, economic, or religious importance to the traditional culture of local communities, indigenous populations, or traditional populations, identified in collaboration with these communities or populations. | and Artistic Heritage (IPHAN, for its acronym in Portuguese). |

To determine whether there are any areas at risk of significant impacts on biodiversity on a particular farm, the criteria for the six categories of High Conservation Value (HCV) are assessed. The responses are based on primary or secondary data surveys, consultations of official websites, and interviews, while keeping evidence for each category.

Remote and in-person public consultations can be used as part of the assessment and for validation of the evaluation criteria, as well as the subsequent results. In-person consultations are conducted with communities established around the farm in question.

After analyzing and consolidating their inputs, the stakeholders who participated in the consultation may be contacted again to demonstrate how their comments have been incorporated (or not) into the assessment results. At this stage, the final report may also be disclosed to the stakeholders.

**Table 3.** List of farms

| Farm | State |
|---|---|
| Árvore Grande | São Paulo |
| Árvore Grande 2 | São Paulo |
| B & Danklin | Minas Gerais |
| São João da Vitoca | São Paulo |
| Barra | Minas Gerais |
| Bela Vista 3 | São Paulo |
| Bela Vista da Porterinha 1 | Rio Grande do Sul |
| Bela Vista da Porterinha 2 | Rio Grande do Sul |
| Santo Antônio do Rio do Peixe | Minas Gerais |
| Buraco | Minas Gerais |
| Santa Tereza das Palhas | Minas Gerais |
| Canhambola | Minas Gerais |
| Santa Maria 3 | São Paulo |
| Carolina | São Paulo |
| Santa Izabel | São Paulo |
| Santa Bárbara | São Paulo |
| Cottage | Rio Grande do Sul |
| Rio Borá | Minas Gerais |
| Regina | São Paulo |
| Rafabella | Minas Gerais |
| Quatro Meninas | São Paulo |
| Primavera 2 | São Paulo |

| Farm | State |
|---|---|
| Estância Lívia 2 | São Paulo |
| Estância Mariana | Minas Gerais |
| Primas | Minas Gerais |
| Estância Três Irmãos | São Paulo |
| Estrela do Sul | Minas Gerais |
| Forquilha | Minas Gerais |
| Furna Rica | Minas Gerais |
| Nossa Senhora Aparecida 5 | São Paulo |
| Nossa Senhora Aparecida 2 | São Paulo |
| Horizonte | São Paulo |
| Humaitá | Minas Gerais |
| Morro Bonito | Minas Gerais |
| Monte Alegre Plasutil | São Paulo |
| Miracema | São Paulo |
| Lar dos Desamparados | SÃO PAULO |
| Mata Fresca | Minas Gerais |
| Linda China | São Paulo |
| Três Irmãos | São Paulo |
| América | São Paulo |
| Talhados | Minas Gerais |
| São Miguel 2 | Minas Gerais |
| Baronesa | São Paulo |
| São João 2 | São Paulo |
| São João | São Paulo |

| Farm | State |
|---|---|
| Boa Vista | São Paulo |
| Santana | Minas Gerais |
| Buqueirão | Minas Gerais |
| Santa Terezinha 2 | São Paulo |
| Caraça | Minas Gerais |
| Santa Luiza | São Paulo |
| Caxuana | Minas Gerais |
| Chapadão da Babilônia 1 | Minas Gerais |
| Chapadão da Babilônia 2 | Minas Gerais |
| Chapadão da Babilônia 3 | Minas Gerais |
| Córrego do Ouro | Minas Gerais |
| Salitre | Minas Gerais |
| Sacramento | Minas Gerais |
| Duas Pontes | Minas Gerais |
| Posses | Minas Gerais |
| Pentágono | São Paulo |
| Palmital 2 | São Paulo |
| Palmital | São Paulo |
| Nova Ponte | Minas Gerais |
| Matinha 2 | Minas Gerais |
| Lagoa e Boqueirão 1 | Minas Gerais |
| Lagoa e Boqueirão 2 | Minas Gerais |
| Manoelita | São Paulo |
| Água Emendada | Minas Gerais |

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| Farm | State |
|---|---|
| Sede | Rio Grande do Sul |
| Campo do Estado 1 | Rio Grande do Sul |
| Campo do Estado 2 | Rio Grande do Sul |
| Campo do Estado 3 | Rio Grande do Sul |
| Campo do Estado 4 | Rio Grande do Sul |
| Campo do Estado 5 | Rio Grande do Sul |
| Carapuça | Rio Grande do Sul |
| Costa do Santa Cruz | Rio Grande do Sul |
| Rio Pardo 3 | Rio Grande do Sul |
| Mundo Novo 2 | Rio Grande do Sul |
| Mundo Novo 1 | Rio Grande do Sul |
| Morro do Leão | Rio Grande do Sul |
| Jung | Rio Grande do Sul |
| Cascata | São Paulo |
| Córrego Fundo | São Paulo |
| Ventania | São Paulo |
| Tribo de Judá | São Paulo |
| Triângulo | São Paulo |
| Aliança | Minas Gerais |
| Alvorada | São Paulo |
| Texana 2 | Minas Gerais |
| Texana | Minas Gerais |
| Tabocas | Minas Gerais |
| Segredo 2 | São Paulo |
| Segredo | São Paulo |
| São Vicente de Paula | Minas Gerais |
| São Sebastião 2 | São Paulo |
| São Sebastião | Minas Gerais |
| São Pedro 2 | São Paulo |
| São José 4 | São Paulo |
| São José 3 | São Paulo |
| São João 3 | São Paulo |
| Bela Vista 2 | São Paulo |
| Santo Antonio da Nova Floresta | São Paulo |
| Santo Antônio 3 | Minas Gerais |
| Cabreúva | São Paulo |
| Santa Maria do Araquá | São Paulo |
| Cerradão Carolina | Minas Gerais |
| Santa Iza | Minas Gerais |
| Santa Helena 2 | São Paulo |
| Santa Cândida 2 | Minas Gerais |
| Saltinho 2 | São Paulo |

| Farm | State |
|---|---|
| Cristina | São Paulo |
| Rancho Nova Esperança | São Paulo |
| Estância Carolina | São Paulo |
| Estância Lívia | São Paulo |
| Nascentes | São Paulo |
| Piracanjuba | Minas Gerais |
| Pilar | São Paulo |
| Paraíso do Rio do Peixe | Minas Gerais |
| Palmeiras | São Paulo |
| Palmas Novas | São Paulo |
| Nova Esperança 2 | São Paulo |
| Nossa Senhora Aparecida 4 | São Paulo |
| Estrelas | São Paulo |
| Moquem 2 | São Paulo |
| Laranja Azeda | São Paulo |
| Matinha | Minas Gerais |
| Maria Preta | Minas Gerais |
| Acapulco | São Paulo |
| Vitória | São Paulo |
| Três Corações | São Paulo |
| Angatuba 1 | São Paulo |
| Angatuba 2 | São Paulo |
| Angatuba 4 A/F | São Paulo |
| Sizetel | São Paulo |
| Araçagi | São Paulo |
| São Pedro | São Paulo |
| São Miguel | Rio Grande do Sul |
| São Judas | São Paulo |
| Barro Preto | São Paulo |
| Bela Vista | São Paulo |
| São Geraldo | São Paulo |
| São Francisco | São Paulo |
| Bofete | São Paulo |
| São Bento | São Paulo |
| Santo Inácio | São Paulo |
| Santo Antonio da Água Santa | São Paulo |
| Borba | Rio Grande do Sul |
| Borba 2 | Rio Grande do Sul |
| Santo Antônio 2 | São Paulo |
| Santo Antonio | São Paulo |
| Campo do Meio | Rio Grande do Sul |
| Campo do Meio 2 | Rio Grande do Sul |

| Farm | State |
|---|---|
| Santa Rita 2 | São Paulo |
| Campo dos Maios | Rio Grande do Sul |
| Santa Rita | Rio Grande do Sul |
| Santa Olívia | Rio Grande do Sul |
| Santa Maria 2 | São Paulo |
| Capão Rico | São Paulo |
| Santa Maria | São Paulo |
| Capororoca | Rio Grande do Sul |
| Santa Luzia do Campo Largo | São Paulo |
| Santa Luzia 2 | São Paulo |
| Santa Luzia | São Paulo |
| Santa Helena | São Paulo |
| Coqueiral | São Paulo |
| Santa Cândida | São Paulo |
| Santa Albertina | São Paulo |
| Rio das Pedras | São Paulo |
| Dinamérica | São Paulo |
| Rio Claro | São Paulo |
| Rezende | São Paulo |
| Eloy | Rio Grande do Sul |
| Ramos | Rio Grande do Sul |
| Estância Harmonia | São Paulo |
| Estância Velha Mãezinha | São Paulo |
| Paniguel | São Paulo |
| Novo Paraíso | São Paulo |
| Nova Era | Rio Grande do Sul |
| Nova Conquista | São Paulo |
| Guarei 1 | São Paulo |
| Nossa Senhora de Lourdes | São Paulo |
| Nossa Senhora Aparecida 3 | Rio Grande do Sul |
| Moquem | São Paulo |
| João XXIII | São Paulo |
| Monte Alegre 2 | Rio Grande do Sul |
| Monte Alegre | São Paulo |
| Monjolo Velho | Rio Grande do Sul |
| Missioneira | São Paulo |
| Juvu | São Paulo |
| Menezes | Rio Grande do Sul |
| Mamedina | São Paulo |
| Locatelli | Rio Grande do Sul |

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### *2.3 Areas subject to risk of significant impacts on biodiversity and management and monitoring plans*

Given their attributes of great importance to biodiversity, we consider areas characterized as High Conservation Value Areas to be those subject to the risk of significant impacts on biodiversity.

In these places, protection measures are implemented for the identified values, such as forest patrols, preservation actions and firefighting, guidance for drivers and reduced speed limit signage, control of invasive plant species, and monitoring related to the identified attribute in the area.

Our main protection measures are directed towards fire prevention and firefighting, compliance with operational procedures, and asset surveillance. To monitor the maintenance and improvement of high conservation value attributes, documents are prepared to facilitate information management, such as fire reports, verifications of area protection measures, water quality analyses, and population monitoring research reports.

### 2.3.1  Risk area 01

According to the methodology described in the previous item, the company investigated 100% of the areas with certified management to assess the biodiversity risk (194 farms, **Table 3**). In 2019, the presence of an endemic amphibian species (*Bokermannohyla sazimai*) was identified on the Nova Ponte farm in the state of Minas Gerais, which characterized the location of its sighting as an HCVA category 1, spanning 32.50 hectares. According to our criteria, we consider that the area has a risk of significant impacts on biodiversity due to the existence of a population of a species with a restricted distribution. Our management plan for this area is based on two pillars: monitoring and protection.

Management plan for risk area 1.

| MONITORING: HIGH CONSERVATION VALUE AREA, CATEGORY 1, 32.50-HECTARE AREA | | | |
|---|---|---|---|
| **ATTRIBUTE** | **THREAT** | **PROTECTION** | **MONITORING** |
| Presence of an endemic herpetofauna species:  *Bokermannohyla sazimai.* | Fires in conservation areas that directly or indirectly influence the attribute.  Water contamination in the places the attribute is found.  Loss of the attribute's habitat. | Fire prevention and firefighting plan.  Operational procedures with guidelines to protect the attribute.  Asset surveillance to monitor possible deviations in and around the place where the attribute is found. | Fire occurrences and efficacy of the attribute's protection measures.  Six-monthly analysis of the surface water quality (WQI) for the high conservation value area.  Attribute's populational monitoring. |

For the population monitoring of the endemic species, we use the methodology of recording vocalizations and taking photographic records in two campaigns during the species' breeding period (November to May). Each campaign consists of three nights of sampling.

The monitoring of the species, including two campaigns, is conducted every three years; however, depending on the results found in previous campaigns, this frequency may be redefined.

For water monitoring, we conduct periodic sampling at a spot close to the species' sighting locations and within the limits of the HCV area to analyze water quality according to the Water Quality Index (WQI).

## 2.3.2   Risk area 02

In 2023, the presence of an HCVA with the attribute of an extensive fragment of native vegetation in the buffer zone of a legally protected area (according to IUCN classification) for the category HCV 2 was identified on the Vitória Farm in the state of São Paulo, spanning 704 hectares.

According to our criteria, we consider that the area has a risk of significant impacts on biodiversity due to the presence of natural vegetation fragments in an advanced stage of succession, with a size exceeding the established threshold (15 fiscal modules), and its location in the buffer zone of a fully protected conservation unit (Carlos Botelho State Park).

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Management plan for risk area 2

| MONITORING: HIGH CONSERVATION VALUE AREA, CATEGORY 2, 704-HECTARE AREA | | | |
|---|---|---|---|
| **ATTRIBUTE** | **THREAT** | **PROTECTION** | **MONITORING** |
| Presence of natural vegetation fragments, with a size exceeding 15 fiscal modules in a Buffer Zone of the Carlos Botelho State Park. | Fires in areas where the attribute is found.<br><br>Attribute's deforestation.<br><br>Illegal hunting and fishing in areas where the attribute is found. | Fire prevention and firefighting plan.<br><br>Operational procedures that protect the attribute.<br><br>Asset surveillance to monitor possible deviations in and around the place where the attribute is found. | Fire occurrences and efficacy of the attribute's protection measures.<br><br>Annual monitoring of the attribute's area in hectares and analysis of the connectivity with other fragments of native vegetation.<br><br>Verification of the efficacy of the area's protection measures.<br><br>Wildlife and plant life monitoring to set the attribute's maintenance and improvement bioindicators. |

The attribute is already protected and being monitored. In 2024, new wildlife and plant life studies will begin, with new surveys being conducted every three years for wildlife and every five years for plant life. These studies will cover the conservation areas of the Vitória Farm and will use sampling methodologies specified by experts conducting the monitoring of each group, according to the local characteristics of the study area.

## 2.4 Managed and promoted areas with certified management

As part of our commitment to forest management certification and recognizing the robustness and comprehensiveness of its principles and criteria, we monitor the implementation of these practices and commitments in our operations through the percentage of certified areas.

### 2.4.1 Areas managed by Dexco

By the end of 2022, 97.1% of our over 141,000 hectares of managed areas in Brazil had forest management certification. We have held forest management certification since 1995, being the first company in the Southern Hemisphere and the fifth in the world to achieve this recognition. Maintaining this certification requires employing the best forest management techniques to prevent, minimize, and mitigate the adverse impacts of operations.

Certified enterprises must identify the environmental aspects and impacts of their activities. We have an internal procedure that establishes the premises for such assessment, taking into account the situation (normal, abnormal, or emergency), type of impact (real or potential), temporality (current, past, or planned), classification (beneficial or adverse), and degree of influence (under control or influenceable). The significance of impacts is determined based on the criteria of scale, severity, and frequency. All our forestry operations are covered by this assessment.

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The operations that have the potential to cause significant adverse social impacts on traditional communities in Brazil are those related to forest management activities. To avoid such impacts, we do not conduct forest management activities in locations recognized as World Heritage sites or in protected areas classified by the International Union for Conservation of Nature (IUCN) as categories I-IV. Additionally, we respect the legal rights and customs of local and traditional communities, as well as their land tenure rights.

To achieve this, we constantly monitor the managed area and conduct field visits, keeping direct contact with the community. We have programs focused on communication and integration with local communities, and we conduct studies to map and characterize the surrounding communities. In these efforts, special emphasis is given to identifying traditional communities, such as indigenous and quilombola communities.

There is currently no evidence of impacts on traditional communities, their territories, or livelihoods. Today, the nearest indigenous territory is approximately three kilometers away from a forest farm operation in Brazil, and there is no indication of any impacts from the management activities on the territory and the livelihoods of the population living there.

The information related to this assessment is part of our [Forest Management Plan](). Maintaining a history of respect and good relationships with the communities surrounding our operations, there were no violations of indigenous peoples' rights at Dexco in 2022. Our guidelines for forest management and fostered areas are contained in the [Environmental Policy](), the [Responsible Corporate Forest Management Standard](), the [Commitment to the Biodiversity](), Dexco Brasil's Forest Management Plan, and the [Forest Management Plan – Fostered Areas]().

Our forests also contribute to the maintenance of ecosystem services, which are the benefits that forests provide for human well-being, such as water supply, natural pest control, recreational environments, and climate regulation. In this context, in 2022 and 2023, our forests in Brazil were recognized according to international standards for their positive impact on the maintenance of ecosystem services, including:

- **Conservation of biodiversity,** contributing to the preservation of species diversity, including the maintenance of focal species and the preservation of their habitats (2022);

- **Carbon sequestration and storage,** contributing to the maintenance of forest carbon stocks through forest plantations and conservation of native vegetation areas (2022);

- **Recreational services,** contributing to the maintenance of recreational activities and tourism through the conservation and improvement of local conditions (e.g., Arvorar Space, 2022);

- **Services in rivers basins**, contributing to the maintenance of water quality (2023).

2.4.2   Forestered areas

To supply our Taquari unit, in Rio Grande do Sul, we use wood sourced from our managed forests and also maintain a forest fostering program, where local farmers can have our support for forest planting. In this program, we provide our partners with seedlings and technical guidance for proper forest establishment, and at the end of the cycle, we have the priority to purchase the wood. As of the end of 2023, we had partnered up with 242 producers through 697 fostering contracts.

Since 2019, we have encouraged and promoted responsible forestry certification for our fostered producers. We provide technical support to ensure compliance with certification standards and offer higher prices for certified wood. In 2020, the first group achieved certification recommendation, and by the end of 2023, 59.2% of our supported areas were already certified. With this incentive, we have increased engagement with suppliers to minimize the risks of deforestation and adverse impacts on people and biodiversity within our value chain.

## *2.5   Conservation areas affected by forest fires*

At Dexco, we set procedures for the prevention and control of forest fires, which are emergencies characterized by the potential for significant environmental, social, and economic impacts.

At the entrances of our forest farms, we display information identifying Dexco, the farm's name, and the forestry unit's phone number for contact. The forest fire prevention and control plan is reviewed and shared with internal stakeholders (our own employees, third parties, and clients) and external stakeholders (environmental agencies, environmental police, fire departments, partner companies, neighboring properties, and others) upon request.

The plan encompasses the responsibilities and the structure used for fire prevention and firefighting. The Uberaba, Agudos, and Itapetininga units have 24-hour automatic fire detection systems consisting of towers with high-definition digital cameras, providing 360-degree visibility and high precision within a 15-kilometer radius. The cameras send information to monitoring centers, distinguishing between fire, smoke, and heat, triggering an alarm accordingly.

This resource has provided us with quick and accurate detection of fires in our planted forests and conservation areas, enabling our trained teams and ground resources, such as rapid response pickups and firefighting trucks, to respond timely.

Furthermore, in the months leading up to the most critical periods for forest fires, we conduct communication campaigns with neighboring communities at each unit. The primary goal is to disseminate communication channels through brochures and small gifts with our contact information, so that they can reach us as soon as they identify any fire incidents near Dexco's areas.

Whenever fires occur, our technical team prepares reports and action plans to identify the root cause and propose solutions. At this stage, the impacts on biodiversity are also

evaluated by quantifying the affected conservation area. The company's goal by 2025 is not to exceed 2% of the total area designated for conservation, and the result in 2023 was 0.2%.



**Figure 1**. Forest operations monitoring room.

## 2.6    Conservation areas in intermediate to advanced stages of regeneration

To identify the regeneration stage of native vegetation areas in our managed areas, we conduct analyses using photointerpretation and digital processing of satellite images. We consider image texture characteristics, tree density, color tones, and other factors, taking into account the typical characteristics of the biomes where the areas are located (Cerrado, Atlantic Forest, and Pampa).

The process classifies the areas into three categories: initial, and intermediate and advanced regeneration stages. Currently, the company has approximately 45,000 hectares of conservation areas in its managed areas, with 94% classified as being in intermediate to advanced stages. Our goal is to reach 91% in 2023, and 93% by 2025.

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*2.7    Impact of forest management operations on water quality (WQI)*

The river basin or micro-river basin functions as an integrating element, indicating the changes happening in the ecosystem, whether they result from management practices or the region's environmental context. Based on this information, farms were selected where the contributing micro-river basin is entirely located within the same area for determining the fixed collection point, ensuring that the environmental indicators represent forest management with minimal interference from adjacent areas.

Measurements are performed using environmental indicators, set by Prabhu (1998) as a variable or component of the forest ecosystem that can be used to assess the quality and sustainability of a resource. For evaluation, the Water Quality Index (WQI) created in 1970 by the National Sanitation Foundation in the United States is used to assess nine parameters: dissolved oxygen, thermotolerant coliforms, hydrogen potential - pH, Biochemical Oxygen Demand (BOD5,20), water temperature, total nitrogen, total phosphorus, turbidity, and total residue.

Our goal is to keep the annual variation of the WQI indicator (positive or negative) below 20%, maintaining this objective until the year 2025.

## 3    Actions to mitigate the impacts on biodiversity

The risks to biodiversity in our operations have three main drivers that guide the actions to mitigate impacts on biodiversity: deforestation, water pollution, and greenhouse gas emissions.

Deforestation is an important factor as it causes significant biodiversity loss by impacting natural habitats, potentially leading to the extinction of wildlife and plant life species. Additionally, it affects crucial ecosystem services that forests provide, such as climate regulation through biogenic cycles, carbon sequestration, biodiversity conservation, water quality maintenance, and soil protection and conservation.

Water pollution compromises water quality, which is essential for life as it serves as home for biodiversity species and is an essential resource for the needs of humans, animals, and plants. Water quality is crucial not only for human health but also for environmental sustainability.

Greenhouse gas emissions contribute to global warming and, in turn, to climate change, which has broad and complex effects on biodiversity and natural resources. Reducing these emissions is paramount to mitigating environmental impacts and ensuring the health of ecosystems and the communities that rely on them. Even though the impacts on biodiversity resulting from climate change and the increased concentration of greenhouse gases in the atmosphere are indirect consequences of our operations, we understand that we need to act to continuously reduce our emissions.

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Based on the principles of the impact mitigation hierarchy and the drivers of impacts related to our management activities, we aim to define strategies to prevent reduce, regenerate, and restore adverse impacts, ensuring no net loss in biodiversity. Below are examples of actions taken in our areas for each of these objectives.

## 3.1 Prevent

To prevent adverse impacts on biodiversity, we manage our forests in areas that are already anthropized, without deforestation or conversion of natural ecosystems for other uses. Additionally, to achieve greater efficiency in the use of land we already occupy and to minimize the need to expand areas for new crops, we have maintained a robust genetic improvement program for decades that helps reduce pressure on natural resources by striving for higher productivity in planted forests.

| Drivers of impact | Actions to prevent it |
|---|---|
| Deforestation. | We conduct annual monitoring of all our areas to assess the percentage of deforestation (with a goal of zero deforestation); no deforestation, ensuring that all new plantations do not result in the destruction of natural ecosystems (target achieved under the BII "**Conversion of Natural Ecosystems for Other Uses.**")<br><br>Production of planted forests only in areas that are already anthropized.<br><br>Ban on operational activities in conservation or native vegetation areas.<br><br>All employees involved in activities that could impact the environment are trained to operate in a manner that avoids damage to the soil, wildlife and plant life, native vegetation, and water resources.<br><br>All our operations have pre-operational micro-planning to identify sensitive areas and define specific measures to prevent impacts on the soil, wildlife and plant life, native vegetation, and water resources. |
| Greenhouse gas emissions. | Development and use of techniques and equipment aimed at greater efficiency in fossil fuel consumption and the use of nitrogen fertilizers.<br><br>No use of fire in forest management operations.<br><br>No deforestation and maintenance of areas with native vegetation. |
| Water pollution. | Operational procedures restricting forest management operations from being carried out near water resources and conservation areas.<br><br>Conducting operations only in production areas, minimizing impacts on conservation areas and water resources.<br><br>Strict protection of permanent preservation areas that protect riverbanks and springs, ensuring the integrity of water |

| Drivers of impact | Actions to prevent it |
|---|---|
|  | resources. |
|  | Protection of approximately 45,000 hectares of conservation areas that, in turn, protect riverbanks and springs, ensuring the integrity of water resources. |

## 3.2  *Reduce*

To reduce the impact of forest management, we evaluate the environmental and social conditions of the areas where we operate. The relationship between local factors (such as soil, climate, and topography) and our activities is taken into account to define strategies and operational procedures aimed at reducing impacts on biodiversity.

Our employees are continuously trained to operate in a way that does not harm the conservation of native vegetation areas, springs, and watercourses. The roads on our farms have speed limits, which reduce the risk of wildlife being run over. We also maintain a surveillance structure to prevent unauthorized activities.

For environmental emergencies, such as fires or chemical spills, we have procedures in place for the prevention and reduction of their impacts.

| Drivers of impact | Reduce |
|---|---|
| Deforestation. | All employees involved in activities with potential impacts are trained to operate in a way that prevents and reduces damage to the soil, wildlife and plant life, native vegetation, and water resources.<br><br>All our operations have pre-operational micro-planning to identify sensitive areas and define specific measures to mitigate impacts on the soil, wildlife and plant life, native vegetation, and water resources.<br><br>All operational activities have procedures and technical operational instructions indicating actions to prevent and, if not possible, reduce impacts on the soil, wildlife and plant life, native vegetation, and water resources. These procedures are designed first to prevent impacts and, if that is not possible, to minimize impacts. |
| Greenhouse gas emissions. | Use of precision agriculture techniques in operations to improve operational efficiency and input usage.<br><br>Resources for fighting forest fires.<br><br>Reduction of the average distance for transporting wood from the forest to the factories. |

| Drivers of impact | Reduce |
|---|---|
| Water pollution. | Soil conservation management practices (minimum tillage, road maintenance).<br><br>Operational procedures and training to prevent, and if not possible, reduce impacts on water resources. |

## 3.3  Regenerate

Dexco evaluates the best way to operate and produce according to the dynamics of the landscape where it is active, and when necessary, actions are taken to facilitate the regeneration of conservation areas as well as indirectly contribute to areas adjacent to our operations. To assess the connectivity of natural areas, two main factors are considered: the size of natural fragments and how far apart they are.

Forest plantations contribute to improving connectivity, as their longer cycle and forest structure provide greater permeability than annual crops. This means there is a higher intensity of the flow of organisms, seeds, and pollen between fragments, mainly for species typical of more conserved environments that are more sensitive to forest fragmentation. The longer cycle of plantations not only provides shelter for wildlife, but also favors the establishment of herbaceous and shrub plants in their understory, which serve as an important food source for various animal groups.

In addition to connectivity, biodiversity corridors play a crucial role in preventing local species from becoming extinct, maintaining and ensuring the natural dynamics of species movement and dispersal, and helping to protect conservation areas. Permanent Preservation Areas that conserve sensitive areas are present within our managed areas and form long and important ecological corridors among the forest plantations. In turn, these plantations are arranged in mosaics, meaning blocks of different ages and harvest periods. Mosaic areas maintain forest structure in the landscape and biological flows even during periods of more intensive management.

| Drivers of impact | Regenerate |
|---|---|
| Deforestation. | Forest plantation management contributes to improving habitat connectivity at the landscape scale, minimizing the effects of historical land use changes in the region. |
| Greenhouse gas emissions. | Removal and storage of $CO_2$ from the atmosphere by forest plantations and native vegetation in conservation areas. |

| Drivers of impact | Regenerate |
|---|---|
| Water pollution. | Forest management practices are carried out in a way that maintains water quality and can contribute to improving the conditions of watercourses cutting through the management units. |

## *3.4 Restore*

At Dexco, our restoration efforts aim to recover biological diversity and the natural processes involved in environmental balance. The areas involved in this restoration process are usually located in places with more fragile soils or surrounding watercourses and springs.

We monitor the natural regeneration processes of our conservation areas using satellite images, which allows us to evaluate their effectiveness. In cases where we need more detailed information, we conduct field assessments, checking parameters such as the presence of wildlife or their traces and the level of conservation and soil coverage with native vegetation.

Based on the evaluation results, we can continue monitoring the area or adopt measures to accelerate this process, depending on the factors preventing natural regeneration. In 2023, about 2,800 hectares are being monitored and in the process of restoration.

| Drivers of impact | Restore |
|---|---|
| Deforestation. | We maintain more than 45,000 hectares of areas set aside for the conservation of native vegetation, where no forest production operations are conducted, allowing these areas to restore naturally. |
| Greenhouse gas emissions. | Considering the global dynamics and scale of greenhouse gas emissions by society, Dexco's actions focus on environmental regeneration through the removal of $CO_2$ from the atmosphere via forest management. |
| Water pollution. | We also have projects for the recovery of degraded areas by planting native species in sensitive areas, especially around springs and rivers. |

## 4  Closing remarks

Dexco upholds its commitment to responsible forest management through its Environmental Policy, Corporate Standard for Responsible Forest Management, Forest Management Plan and Commitment to Biodiversity.

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To ensure the implementation of our commitment to operate in a way that causes no net loss of biodiversity in our areas, we monitor the effectiveness of our actions through the Biodiversity Impact Index. The index results were 99.2% in 2022 and 99.6% in 2023. **Our goal is to reach 99.8% by 2025, with minimum increments of 0.2 percentage points each year**.

We understand that these results show the effectiveness of our practices aimed at conserving not only biodiversity but also environmental and social values, as well as ecosystem services, contributing to appropriate management of the issue and serving as a guide for our actions.