Implementing the IUCN RHINO approach in forest areas across several biomes in Brazil

About the IUCN RHINO approach

The IUCN RHINO approach provides a science-based, actionable track for companies, governments, and civil society to deliver Rapid, High-Integrity Nature-positive Outcomes and contribute to the KMGBF and the UN Sustainable Development Goals (SDGs). Focusing on reducing species extinction risk and ecosystem collapse, it provides a means for companies to embark on no-regrets actions that are robust and scientifically supported.

RHINO's core metric is STAR (Species Threat Abatement and Restoration), derived from the IUCN Red List. It quantifies global extinction risk reduction through $STAR_T$ (Threat abatement) and $STAR_R$ (Restoration of historical impacts), which are spatially explicit, scalable, and support aggregation across sites, portfolios, and jurisdictions. IUCN RHINO pilots are based on the use of $STAR_T$, as the mitigation of threats in places where biodiversity still occurs is the most effective mechanism to reduce the loss of biodiversity.

The calculation of $STAR_T$ scores involves summing the proportion of a threatened species' Area of Habitat (AOH) within the considered area, weighted by its IUCN Red List extinction risk category (100 for Near Threatened, up to 400 for Critically Endangered). The scores are disaggregated by threat, to show the relative contribution of different threat types to the overall STAR score and identify priority actions to reduce the species extinction risk.

Background, objectives and implementation of the pilot

Suzano, the Brazilian leader in biomaterials and largest pulp manufacturer in the world, is committed to produce and consume natural resources in a sustainable manner. The company has a zero-deforestation policy and manages a significant forestry base in Brazil, with around 1.7 million hectares of eucalyptus mosaic plantations and 1.1 million hectares of protected native forests. As conversion from native forests into eucalyptus plantations is prohibited, new planting takes place on degraded pastureland. The company is committed to connect, through ecological corridors, 500,000 hectares of fragments of Cerrado, Atlantic Forest, and Amazon.

In this context, Suzano has been monitoring fauna and flora for three decades. Their Biodiversity Monitoring Plan organises and guides the collection, analysis, and interpretation of biodiversity data in a systemic way. Fundamental for assessing the conservation status of species and their ecosystems, this plan is also key to identify alterations that may indicate risks of biodiversity loss and provide scientific information for biodiversity management and conservation projects.

As the company celebrated their 100 years of existence in 2024, Suzano started to develop a new integrated nature strategy overarching its existing commitments for the Planet and the People. A major objective was to show Suzano's ambition for nature and the alignment of the new strategy with the Kunming-Montreal Global Biodiversity Framework (KM-GBF). To inform the development of their strategy, Suzano followed, among others, best practices recommended by the Taskforce on Nature-Related Financial Disclosures (TNFD) and their LEAP approach. In this context, Suzano was interested in pioneering the RHINO approach with IUCN to explore how using $STAR_T$ could further inform their biodiversity management programme and the setting of science-based targets to deliver contributions to a Nature Positive future, while strengthening disclosures related to the species extinction risk.

The pioneering of the IUCN RHINO approach began in October 2024 and is still ongoing. This inspiring study describes Suzano's journey in applying the approach, the challenges they faced and how they addressed them considering their context and constraints. Given the scale and nature of their operations, Suzano implements the IUCN RHINO approach in an iterative manner and, at times, has tailored certain steps for operational reasons. These case-specific adaptations are identified in this study to illustrate how the approach can be operationalised in a large forestry company in megadiverse countries, like Brazil. They are illustrative rather than prescriptive of the IUCN RHINO approach and reflect Suzano's operational context.

All along the process, Suzano could count on important internal resources in terms of expertise and existing data. Guided by IUCN at each step, Suzano team members from different departments worked to develop these results by bringing strong data or spatial analysis skills, conservation science with detailed knowledge of species ecology, ecological monitoring as well as field knowledge about socioeconomics. They all contributed largely to the quality of the lessons learned.

Note: In this study, unless otherwise stated, the Locate, Evaluate, Assess and Prepare phases refer to IUCN RHINO phases. These are aligned with TNFD LEAP steps but focus on its biodiversity component and on species in particular.

Implementing IUCN RHINO's Direct Impact Track

A1. Locate

The Locate phase aims to provide a thorough understanding of an organisation's interface with areas important for biodiversity. In the context of Suzano's large landholdings in a megadiverse country such as Brazil, the Locate phase was particularly critical to identify ecologically sensitive areas and areas important for the species survival. The Locate phase was implemented between October and December 2024.

Gathering location information and data

From its plantations to mills, factories and transportation, Suzano operates in different parts of Brazil. Forestry operations are grouped into four business units: the ARAMUC unit spanning the State of Espirito Santo (ES) and the south of Bahia (BA), the São Paulo (SP) and Mato Grosso do Sul (MS) units, and the MAPATO unit spanning the states of Maranhão (MA), Pará (PA) and Tocantins (TO).

Suzano's business units are therefore present across several iconic biomes: the Amazon, the Atlantic Forest and the Cerrado.

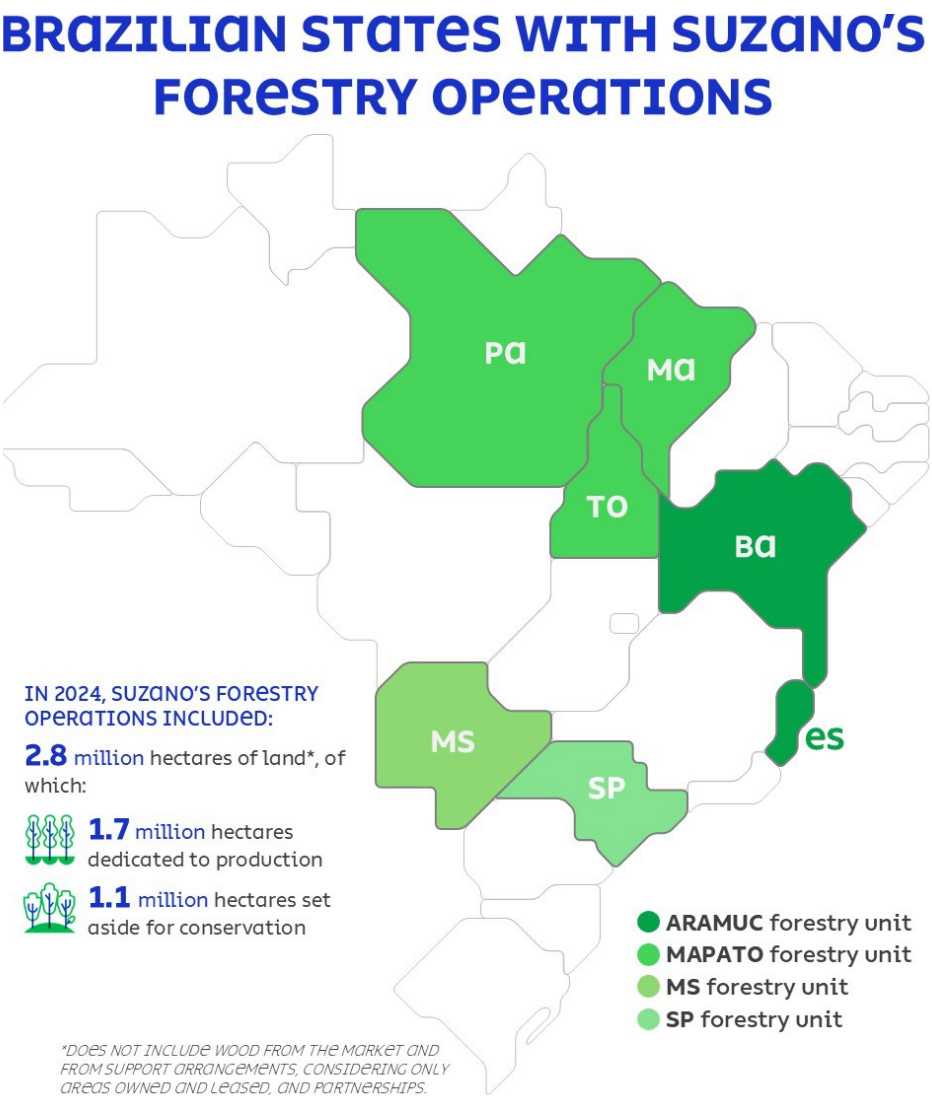


Figure 1: Location of Suzano's forestry business units in Brazil (source Suzano)

Suzano dedicates about 40% of their land (i.e. 1 million hectares) to conservation, which include areas of native forests and ecological corridors restored in the Amazon, Atlantic Forest and Cerrado biomes:

- The **Amazon** biome is known for being the world's largest tropical rainforest, characterized by dense moist forests, but also including other vegetation like savannas, grasslands, and flooded forests, home to millions of species.
- The **Cerrado** biome is a vast, tropical region of Brazilian savanna, home to unique flora and fauna, including the maned wolf and giant anteater and is also known as the 'cradle of waters'.
- The **Atlantic Forest** remains, with only 12% of its original area conserved in small patches of protected areas, a major tropical and subtropical moist broadleaf forest biome, encompassing diverse forest types including rainforests, dry forests, mangroves, and coastal forests. It is recognized as a global biodiversity hotspot due to its exceptional species richness and high rate of endemism.

In such context, the comprehensive database gathering information on biodiversity, developed by Suzano since the 1990s in the company's different biomes was an important and rich source of information for implementing the IUCN RHINO approach.

Screen and prioritise

The spatial analysis of estimated $STAR_T$ scores across Suzano's landholdings in Brazil was performed by Suzano's GIS and data experts with the help of IUCN using data sourced from IBAT.

The resulting map enabled the identification of sensitive watersheds presenting the highest scores for species survival, specifically those overlapping Suzano's forestry operations. These sensitive areas are distributed across the Atlantic Forest, Cerrado and Amazon biomes and correspond to Suzano's forestry business unit (ARAMUC, MAPATO, MS, SP).

Map stakeholders at the landscape level

Suzano regularly engages with their stakeholders both at the corporate and the landscape level. Independent interviews led by IUCN at Suzano's request to collect feedback and inputs for their strategy confirmed the strong presence and engagement of Suzano's team with stakeholders on the ground. Suzano's existing mapping of stakeholders was used at later stages for the consultation of stakeholders.

Define the Areas of Influence[1]

With eucalyptus mosaic plantations and ecological corridors present in all forestry units, it was important for Suzano, from a business management perspective, to define Areas of Influence (AoI) corresponding to watersheds. This approach enables the definition of conservation actions and objectives aligned with Suzano's landscape approach.

First, Suzano delineated its operational area of influence as a 3-km buffer around the footprint of each forestry business unit (ARAMUC, MAPATO, MS, SP). Next, using the HydroBASINS hierarchy (level 12), the landscape was segmented into local catchments, and only those catchments intersecting the 3-km operational area of influence were retained as AoI sub-polygons within each business unit. This approach keeps the delineation aligned with where Suzano can act and monitor in practice.

Given the size of each AoI, it was important for Suzano to locate sub-areas critical for biodiversity in a more specific manner. With the help of IUCN, the Suzano team produced maps of the estimated $STAR_T$ score at the watershed level within the AoI, estimating their exposure to the species extinction risk in each watershed. The maps of the four business units with the AoI sub-polygons and their respective estimated $STAR_T$ scores are presented in Figure 2.

[1] In this case study, "operational area of influence" refers specifically to the 3-km buffer around Suzano's forestry operational areas, whereas "Areas of Influence (AoIs)" denote the set of retained HydroBASINS level-12 catchments grouped by business unit.

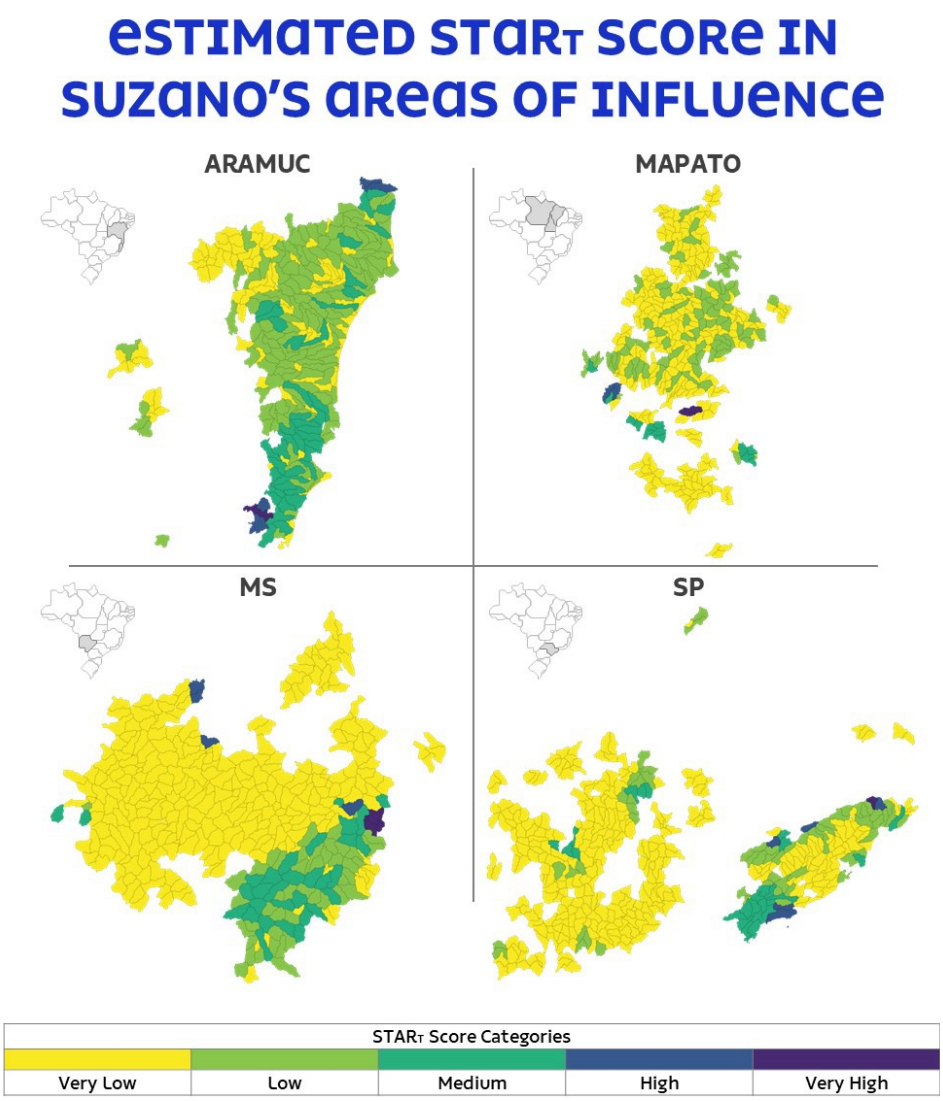


Figure 2: Maps of the four Areas of Influence and the sub-polygons at watershed level with the estimated $STAR_T$ scores (source Suzano)

Compile preliminary threatened species and associated threat data

In the IUCN RHINO approach, this step is based on the assumption that there is a difference between the polygon of direct operations (for instance for a mining site) and the polygon of the AoI. In such case, it is helpful to generate a new *IBAT Species report* once the AoI is defined.

Suzano's GIS and data expertise and their delineation of the Areas of Influence and their sub-polygons made this step redundant. Instead, the team decided to work directly on the deeper analysis of species and threats of the Evaluate phase.

A2. Evaluate

During this phase of the IUCN RHINO approach, the project team confirmed and revised species occurrence and threat presence on the ground within the AoIs. A calibrated $STAR_T$ score was calculated for each AoI sub-polygons to serve as a baseline for the species extinction risk.

To implement the Evaluate phase of the RHINO approach, Suzano worked in an iterative manner. After confirming the presence of 125 threatened species on the ground, they determined that conducting qualitative threat assessments across all species was not feasible and therefore focused on a subset of species within each forestry business unit (ARAMUC, MAPATO, MS, SP), striving to obtain representative subsets.

Suzano relied on their internal GIS and data expertise to quantify the representativeness of their sample in terms of $STAR_T$ score and on their conservation expert to assess the consistency of results for species and threats. Though the steps presented here follow the IUCN RHINO approach in a linear mode, most of the work was actually performed iteratively over a three-month period between January and March 2025, revisiting the species confirmation and threat assessment steps.

Confirm species

In 2024, Suzano's monitoring was covering more than 4,000 species but excluded Amphibians, which monitoring started in 2025. Using their data, Suzano could confirm the presence of a total of 125 threatened species of mammals, birds and reptiles: 38 in ARAMUC, 28 in SP, 37 in MAPATO and 22 in MS. The list of 125 species is in Annex 2.

Suzano's team calculated the corresponding calibrated $STAR_T$ score for each AoI and sub-polygon. Figure 3 presents the resulting maps and the scores for each AoI.

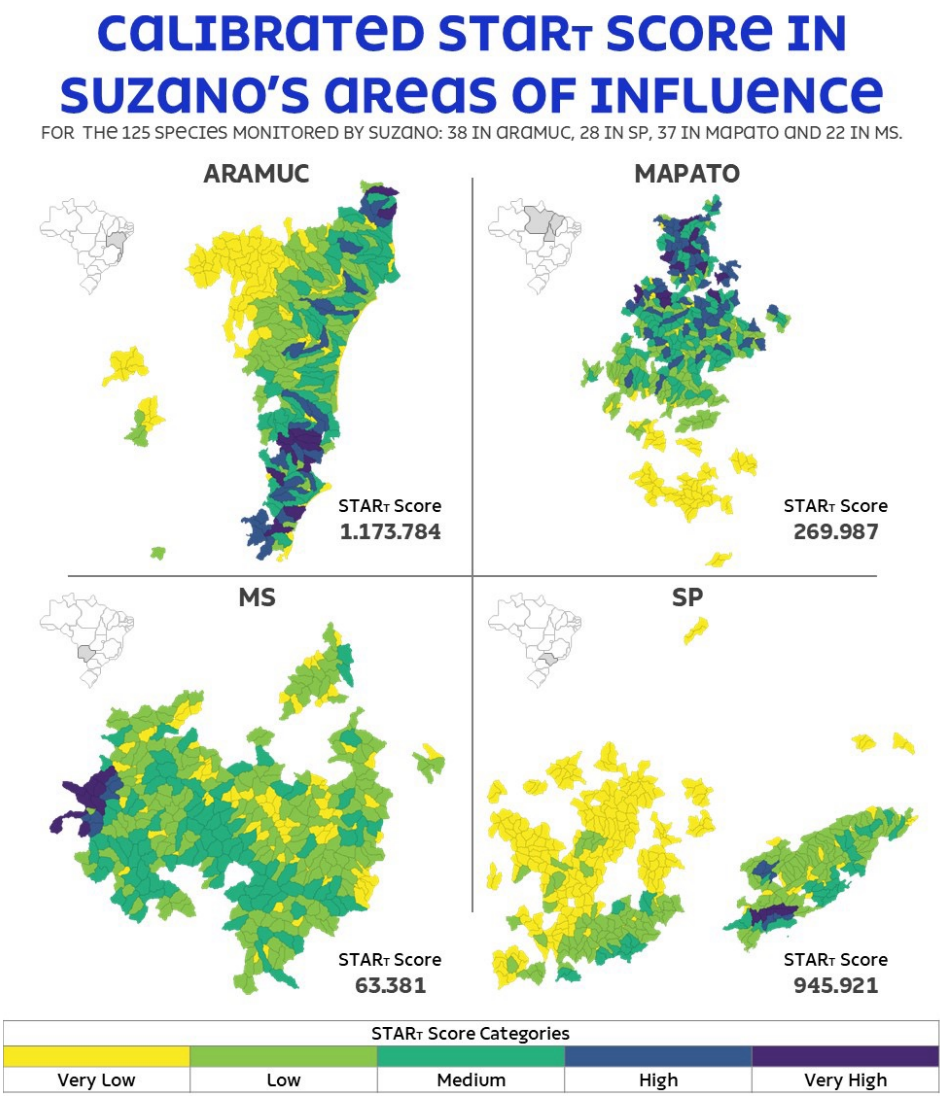


Figure 3: Maps of the four Areas of Influence and the sub-polygons at watershed level with the calibrated $STAR_T$ scores (source Suzano)

Confirm threats

The process of threat assessment of the IUCN Red List does not map threats and instead assumes that threats apply uniformly across the species' AoH. However, not all threats are necessarily present in particular places. This means that for Suzano's Areas of Influence, additional steps are required to determine which threats are present at each site, at levels likely to be affecting the extinction risk of the species.

The scale of Suzano's AoI, the number of species (125) for which the work had to be made, and the limited availability of comprehensive threat data made the task particularly challenging for the team. While multiple sources were investigated to support the analysis at such scale, Suzano finally made the decision not to perform the evaluation for all species but to select a sub-set of the 125 species for each AoI, on which a full analysis and calibration of threats would be performed[2].

[2] This approach was adopted by Suzano for operational reasons and is presented here as a case-specific application within the RHINO framework

For each AoI, Suzano mobilised a group of internal conservation and species expert and used existing surveys to identify samples of species for each of the four AoI. To build samples as representative as possible, they analysed the 125 threatened species through the following criteria:

1. **Taxonomic representativeness:** The sample included at least one representative from each major group — mammals, birds, and reptiles — as well as diversity of subgroups. For instance, where five mammals analysed in an AoI included three primates, at least one primate was selected to ensure representation of the subgroup.

2. **Threat level:** Priority was given to species classified under higher threat categories, based on official conservation lists – IUCN Red List and national sources.

3. **Habitat association with native vegetation:** Species primarily inhabiting native vegetation areas were selected, reinforcing the ecological relevance of the sample.

4. **Availability of Area of Habitat (AoH) data:** Only species with mapped AoH could be included, as the calculation of STAR score and spatial threat calibration require knowledge of each species' distribution within the landscape.

To check the quality of their species samples, the Suzano team calculated the calibrated $STAR_T$ score of the sample and compared the scores and the corresponding map with the results obtained with the full list of species to check the coverage. This confirmed that results of the samples for SP, MS, ARAMUC and MAPATO were consistent with the results with all species in these AoIs. The final STAR score of the AoIs reached at least 50% of the total STAR score considering all species, ensuring representativeness.

Table 1 shows the number of species observed in each AoI and the final number of species used for the calibration of threats:

Business Unit	Number of Species observed	Number of Species sampled
ARAMUC	38	9
SP	28	5
MAPATO	37	5
MS	22	5
TOTAL	125	24

Table 1: Number of species observed in each AoI and the final number of species used for the calibration of threats

The 24 species include 12 mammals (7 endemic), 10 birds (7 endemic) and 2 reptiles (both endemic) and their $STAR_T$ scores represent 58% of the $STAR_T$ scores calculated with 125 species. Once the species for the evaluation of threats was selected, the confirmation of threats could really start. To confirm threats and assess their severity and scope, Suzano mobilised their internal conservation and species experts, partners and existing litterature. They evauated the threats applying to each AoI sample and estimated their scope and severity, following the classification of the IUCN Red List. This step, a key one to provide meaningful insights for action-taking in the RHINO approach, was by far the most delicate and labour-intensive for Suzano. The team worked in iterative sessions, going through each species individually to assess the scope and severity, then reviewing the results in team to check consistency of the assessment across the species.

Calculate first version of baseline

Calibrated $STAR_T$ scores were calculated by Suzano during the process of checking and refining the species sample in an iterative mode.

The calibrated $STAR_T$ scores of the 24 species selected in each AoI are presented in Table 2. Annex 1 presents the resulting maps for the $STAR_T$ scores of the 24 selected species and the calibrated $STAR_T$ score of the subset of species:

Business Unit (AoI)	Group	Sub Group	Species scientific name	Calibrated $STAR_T$ score	Status
ARAMUC	Bird	Caprimulgiformes	Glaucis dohrnii	61,089	VU
	Bird	Galliformes	Crax blumenbachii	62, 659	EN
	Mammal	Primate	Alouatta guariba	7, 826	VU
	Mammal	Primate	Sapajus robustus	81, 235	EN
	Bird	Psittaciformes	Pyrrhura cruentata	30, 549	VU
	Bird	Psittaciformes	Pyrrhura leucotis	37, 756	VU
	Bird	Psittaciformes	Pionus reichenowi	43, 553	VU
	Mammal	Rodentia	Chaetomys subspinosus	42, 961	VU
	Reptile	Squamata	Ameivula nativo	143, 568	EN
MAPATO	Bird	Accipitriformes	Harpia harpyja	998	VU
	Mammal	Felidae	Leopardus tigrinus	1, 654	VU
	Bird	Gruiformes	Psophia obscura	66, 119	CR
	Mammal	Primate	Chiropotes satanas	44, 210	EN
	Mammal	Primate	Cebus kaapori	60, 434	CR
MS	Bird	Accipitriformes	Urubitinga coronata	2, 261	EN
	Mammal	Cingulata	Priodontes maximus	1, 029	VU
	Bird	Passeriformes	Crax fasciolata	3, 122	VU
	Mammal	Primate	Sapajus cay	8, 098	VU
	Reptile	Squamata	Bachia bresslaui	9, 151	VU
SP	Mammal	Artiodactyla	Mazama bororo	15, 801	VU
	Mammal	Felidae	Leopardus guttulus	5, 571	VU
	Bird	Passeriformes	Formicivora paludicola	400, 000	CR
	Mammal	Primate	Leontopithecus chrysopygus	117, 762	EN
	Mammal	Primate	Brachyteles arachnoides	169, 748	CR

Table 2: Calibrated $STAR_T$ scores of the 24 species selected in each AoI with their taxonomic group, subgroup and IUCN Red List status (source Suzano)

At the end of this phase, Suzano had finalised a first version of analysis of threats for each AoI with an initial prioritisation based on their scope and severity. The results in each AoI presented a scale of STAR scores varying across the business units. To enable robust and objective prioritisation of threats within each AoI, the typologies 'very high', 'high', 'medium', 'low', and 'very low' were assigned using a statistical classification approach. Specifically, the k-means clustering method was applied to the distribution of $STAR_T$ scores (using an optimised seed to minimise class variance), ensuring that the categorisation of threat levels was data-driven and consistent across business units.

Table 3 presents their preliminary results for ARAMUC for the threats present in the AoI.

Threat	ARAMUC Threat score classification
Fire & fire suppression	Very High
Garbage & solid waste	High
Annual & perennial non-timber crops	Medium
Hunting & collecting terrestrial animals	Medium
Livestock farming & ranching	Medium
Wood & pulp plantations	Medium
Air-borne pollutants	Low
Droughts	Low
Habitat shifting & alteration	Low
Logging & wood harvesting	Low
Storms & flooding	Low
Temperature extremes	Low
Agricultural & forestry effluents	Very Low
Industrial & military effluents	Very Low
Conflicts with humans and domestic dog attacks	Very Low
Problematic native species/diseases	Very Low
Roads & railroads	Very Low
Utility & service lines	Very Low

Table 3: Ranking of threats after the calibration process at the end of IUCN RHINO's Evaluate phase for ARAMUC

The analysis performed during this phase meets the requirements for species of the TNFD E3 phase related to measuring changes to the state of nature and E4 which recommends assessing the severity of impact for materiality assessment.

A3. Assess

Through this phase, as part of the IUCN RHINO approach, a company will identify the most important threats to mitigate, engaging with stakeholders and experts of the landscape to get a shared perspective on the priorities. This phase was implemented between April and June 2025.

Assess most important threats

The ranking of threats developed for each AoI in the Evaluate phase led to a list of 21 threats (eg. level 2 threats in the IUCN Threats Classification Scheme), which could apply differently on the 24 species and could be ranked differently across the different AoI.

From the outset, Suzano aimed to identify and focus on the most relevant threats, in order to ensure that resulting actions would be both effective and manageable for future implementation and monitoring.

In order to guide a prioritisation of actions that could be meaningful for both species and business, Suzano prioritized threats in two ways. First, they selected the most important threats in each AoI, using the 'very high', 'high', 'medium' typology, as shown in the Evaluate phase. Then, the prioritisation process incorporated the severity and scope for each threat-species combination. Threats were prioritised for action when the combined severity and scope indicated a high potential impact on both population decline and area affected[3]. The comparison of the two approaches led to a reduced list of 15 potential priority threats to address to reduce the species extinction risk in all the business units.

Anticipating on the Prepare phase, the project team further started to explore possible standard actions that could be implemented to reduce the threat, as well as indicators and methods to monitor the progress of actions. This early analysis enabled Suzano to evaluate the feasibility of the actions in terms of management, before including them in any future action plans and objectives.

Socialise results

Results obtained in terms of priority species and threats were presented to external stakeholders and experts, with the objectives to ensure that no major threats had been missed and to prepare stakeholders to get involved in the action plans. The consultation was carried out during a three-hour stakeholder workshop convened by IUCN and attended by 30 representatives from the research, government, NGO and business world. Breakout sessions organised for the Amazon, Atlantic Forest, and Cerrado biomes were an opportunity for biome and species experts to provide feedback to the analysis presented by Suzano. The analysis included the list of priority threats organised by taxonomic group (mammals, birds, reptiles). Corresponding standard actions that could be taken were also presented to collect inputs and suggestions for the next phases of IUCN RHINO. Figure 4 shows an example of material (for Atlantic forest mammals) that supported the discussion. Synergies with existing conservation initiatives were also discussed to feed into future action plans.

[3] This approach was adopted by Suzano for operational reasons and is presented here as a case-specific application within the RHINO framework.

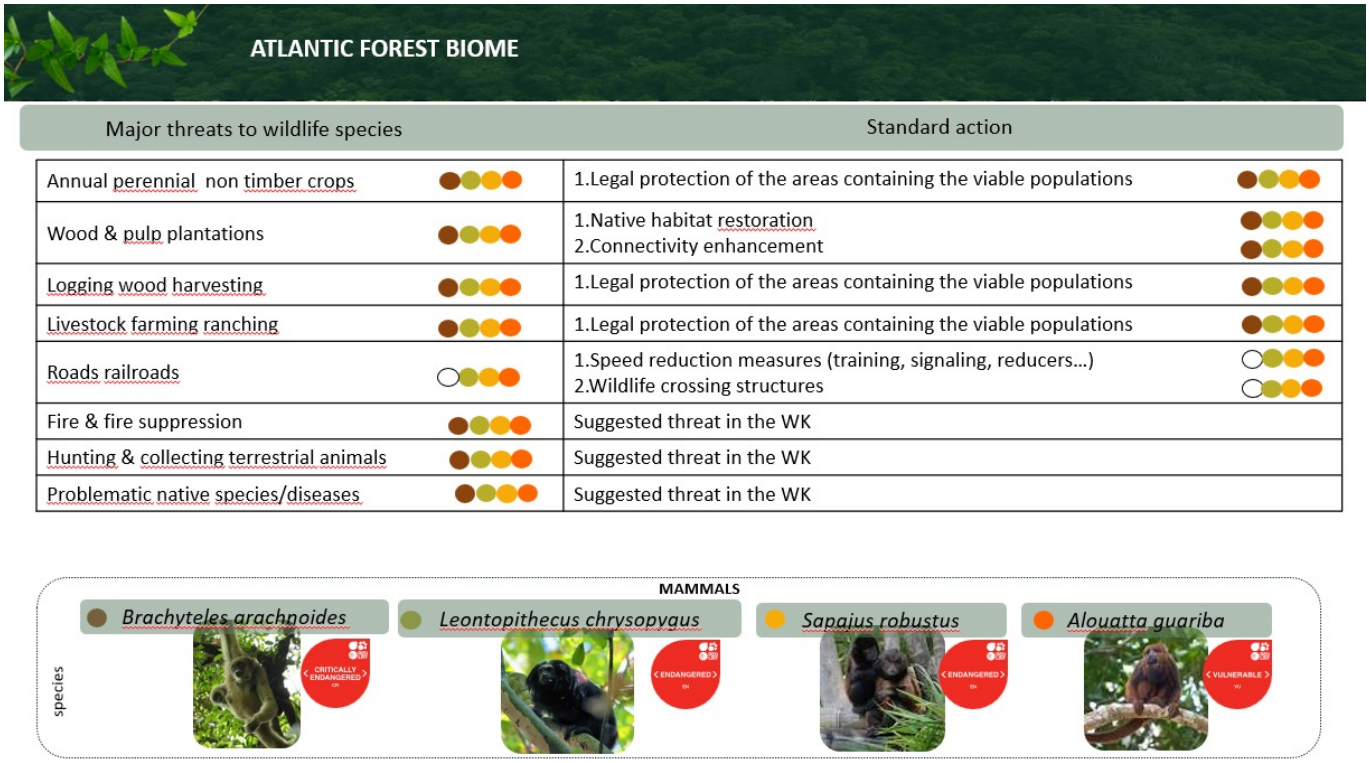


Figure 4: Example of document presented during the first workshop with stakeholders and experts held in May 2025 to support discussion (source Suzano)

Overall, the participants agreed on the approach and the relevance of the STAR assessment. Several recommendations, questions and comments were shared by participants:

- Species selection: Participants expressed their interest to see the calculation performed for other taxonomic groups, such as trees or amphibians, whenever possible. This recommendation is aligned with IUCN RHINO's vision to contribute to halting the loss of all species and ecosystems.
- Species status: Participants understood that the objective to determine contributions to the KM-GBF justifies the use of the IUCN Global Red List species status for STAR scores. However, they noted that, unlike the National Red List, the Global Red List does not have any legal application in Brazil.
- Threat prioritisation: the discussions conducted in break-out groups led to changes in the prioritisation of threats. For instance, the importance of fire and fire suppression was increased across all biomes, while the relative importance of threats such as commercial and industrial areas in the Atlantic Forest and agricultural and forestry effluents in the Cerrado was reduced, reflecting a more nuanced understanding of current pressures in each biome.

Recalculate baseline in response to new data and insights

Following the workshop, the calculation of calibrated $STAR_T$ score was performed to include the feedback of stakeholders on threats. The new prioritisation of threats will serve as a baseline for target-setting and monitoring progress towards nature-positive outcomes.

The outcome of this phase of IUCN RHINO can inform, for the species-related elements, the TNFD LEAP A3 'Risk and opportunity measurement and prioritisation' and A4 'Risk and opportunity materiality assessment'.

A4. Prepare

The objective of this phase of the IUCN RHINO approach is to understand how to respond to the material impacts on nature identified in the Evaluate phase and risks to the organisation identified in the Assess phase. The outcome will be the formulation of an action plan to address the most important threats, thereby delivering the greatest contribution to Nature Positive outcomes. The action plan can be translated into a science-based target for the reduction of the threats that cause species extinction risk. This part of the work started in September and is still on-going.

Define priorities and compile threat response and action plan

With threats clearly prioritised at the end of the Assess phase, Suzano has been working to define actionable threat responses, and possible indicator and measure, since July 2025. Among the standard actions set for each species-threat combination, the most impacting were first specified in key actions.

Following the first webinar, Suzano decided to focus its analysis first on actions addressing Fire and fire suppression, identified as the main threat in all biomes by experts, and Roads and railroads, particular important in the MAPATO business unit. Once the approach is tested with these two threats successfully, Suzano's intent is to iterate the work for the 13 other threats.

A second workshop with stakeholders and experts, organised by IUCN, took place in September 2025 to develop a full understanding of the specific manifestations of Fire and fire suppression and Roads and railroads in the three biomes. The results should help Suzano and stakeholders identify a management response for these threats. This consultative approach is in line with the IUCN RHINO approach, which recommends to engage actively with stakeholders to determine actions to mitigate impacts and create an action plan.

Once outcomes of the process are compiled for the set of priority threats, Suzano will be in a position to work on the next steps which include:

1. Identify resources required to implement actions, in line with TNFD LEAP's component P1.

2. Quantify threat baselines and index measures: Threat baselines could be informed by official data from the Instituto Chico Mendes de Conservação da Biodiversidade (ICMBio), Brazil's Institute for Biodiversity Conservation. The expected threat reduction through priority actions and resulting outcome target will have to be quantified to calculate corresponding Target $STAR_T$.

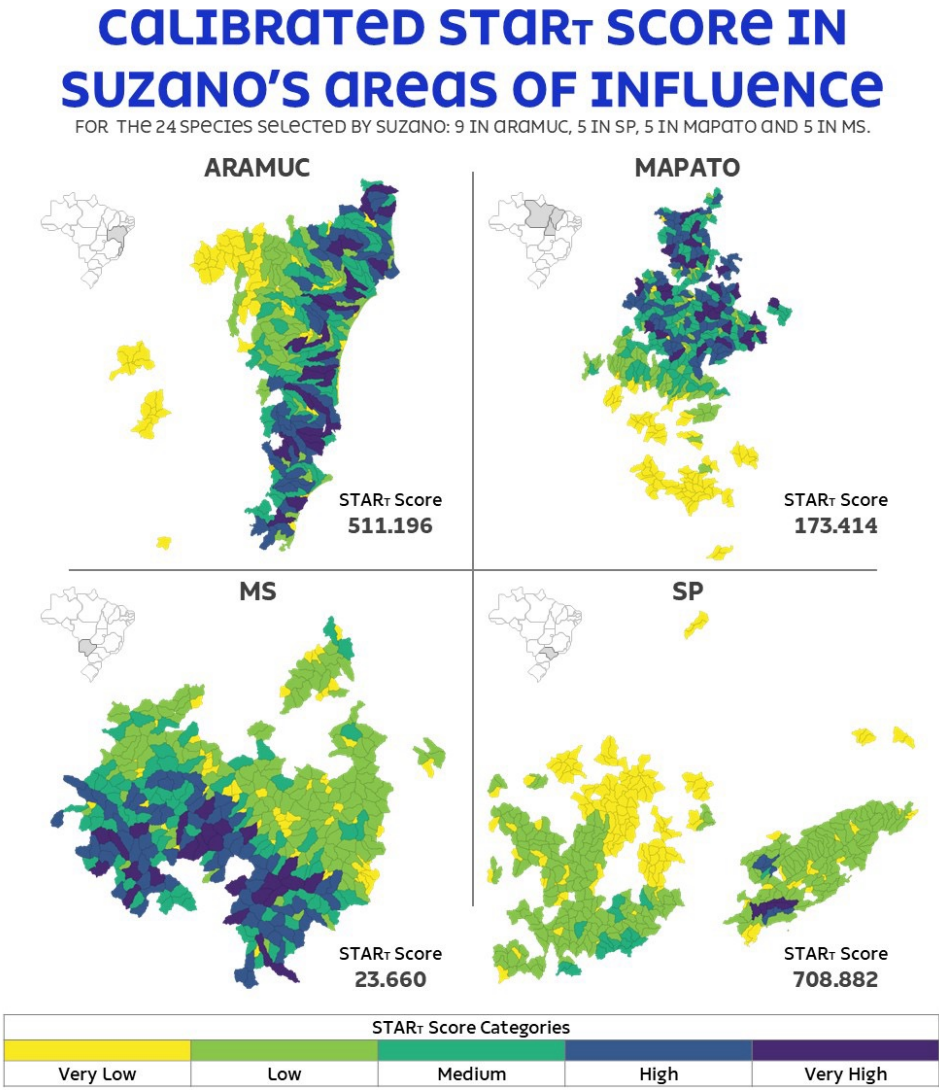
3. Formulate targets, objectives and indicators for action for the management plan

The achievement of threat reduction targets may depend on several stakeholders, even if actions are managed by Suzano. It is therefore important to assess the feasibility of these targets with stakeholders involved, and potentially to share roles and accountabilities. After finalising this phase, Suzano should be in a position to disclose their science-based targets and action plans for nature-positive outcomes and include them in their nature commitments and strategy.

Meanwhile, stakeholders already welcome the IUCN RHINO approach and Suzano's willingness to pioneer it: "It is invigorating to witness this level of mobilisation, where experts from across sectors sit together to co-design practical action plans for species conservation," said Maria Cecilia Wey de Brito, Chair of the IUCN Brazilian National Committee and Director of Institutional Relations at Instituto Ekos Brasil, in her closing remarks after the first workshop. "This is what leadership for nature looks like: collaborative, data-driven, and focused on results."

Annex 1

Maps of the four Areas of Influence and the sub-polygons at watershed level with the calibrated $STAR_T$ scores for the 24 selected species (source Suzano)



Annex 2

List of 125 species found in each AoI with their IUCN Red List status, showing the 24 species selected for the evaluation of threats (source Suzano)

Business Unit (AoI)	Species scientific name	Status[1]	Species included in the 24 selected
ARAMUC	Acanthochelys radiolata	NT	
ARAMUC	Alouatta guariba	VU	Yes
ARAMUC	Amadonastur lacernulatus	VU	
ARAMUC	Amazona rhodocorytha	VU	
ARAMUC	Amazona vinacea	EN	
ARAMUC	Ameivula nativo	EN	Yes
ARAMUC	Callicebus melanochir	VU	
ARAMUC	Callicebus personatus	VU	
ARAMUC	Callithrix flaviceps	CR	
ARAMUC	Carpornis melanocephala	NT	
ARAMUC	Cercomacra brasiliana	NT	
ARAMUC	Chaetomys subspinosus	VU	Yes
ARAMUC	Conirostrum bicolor	NT	
ARAMUC	Cotinga maculata	CR	
ARAMUC	Crax blumenbachii	EN	Yes
ARAMUC	Crypturellus noctivagus	NT	
ARAMUC	Dysithamnus plumbeus	VU	
ARAMUC	Glaucis dohrnii	VU	Yes
ARAMUC	Herpsilochmus pileatus	NT	
ARAMUC	Laniisoma elegans	NT	
ARAMUC	Leopardus wiedii	NT	
ARAMUC	Myrmoderus ruficauda	EN	
ARAMUC	Myrmotherula urosticta	VU	
ARAMUC	Neopelma aurifrons	NT	
ARAMUC	Orchesticus abeillei	NT	
ARAMUC	Panthera onca	NT	
ARAMUC	Phylloscartes paulista	NT	
ARAMUC	Piculus polyzonus	-	
ARAMUC	Pionus reichenowi	VU	Yes
ARAMUC	Primolius maracana	NT	
ARAMUC	Pyrrhura cruentata	VU	Yes
ARAMUC	Pyrrhura leucotis	VU	Yes
ARAMUC	Sapajus robustus	EN	Yes
ARAMUC	Stilpnia peruviana	VU	
ARAMUC	Thripophaga macroura	VU	
ARAMUC	Touit surdus	VU	
ARAMUC	Tringa flavipes	VU	
ARAMUC	Tringa melanoleuca	NT	
ARAMUC	Xipholena atropurpurea	VU	
MAPATO	Aburria cujubi	VU	
MAPATO	Alipiopsitta xanthops	NT	
MAPATO	Alouatta belzebul	VU	
MAPATO	Amazona aestiva	NT	
MAPATO	Ara chloropterus	LC	
MAPATO	Cebus Kaapori	CR	Yes
MAPATO	Celeus obrieni	VU	
MAPATO	Charitospiza eucosma	NT	
MAPATO	Chiropotes satanas	EN	Yes
MAPATO	Contopus nigrescens	LC	
MAPATO	Dendrocolaptes medius	-	
MAPATO	Falco deiroleucus	NT	
MAPATO	Guaruba guarouba	VU	
MAPATO	Harpia harpyja	VU	Yes
MAPATO	Herpailurus yagouaroundi	LC	

MAPATO	Hylopezus paraensis	-	
MAPATO	Ibycter americanus	LC	
MAPATO	Leopardus tigrinus	VU	Yes
MAPATO	Lepidothrix iris	VU	
MAPATO	Lontra longicaudis	NT	
MAPATO	Micrastur mintoni	NT	
MAPATO	Neothraupis fasciata	NT	
MAPATO	Nystalus torridus	-	
MAPATO	Penelope ochrogaster	VU	
MAPATO	Penelope pileata	VU	
MAPATO	Phlegopsis nigromaculata	LC	
MAPATO	Piculus paraensis	-	
MAPATO	Porphyrospiza caerulescens	NT	
MAPATO	Psophia obscura	CR	Yes
MAPATO	Pyrilia vulturina	LC	
MAPATO	Pyrrhura amazonum	NT	
MAPATO	Pyrrhura coerulescens	-	
MAPATO	Sapajus libidinosus	NT	
MAPATO	Spizaetus ornatus	NT	
MAPATO	Tinamus guttatus	NT	
MAPATO	Tinamus tao	VU	
MAPATO	Xipholena lamellipennis	NT	
MS	Alectrurus tricolor	VU	
MS	Alouatta caraya	NT	
MS	Bachia bresslaui	VU	Yes
MS	Blastocerus dichotomus	VU	
MS	Chrysocyon brachyurus	NT	
MS	Crax fasciolata	VU	Yes
MS	Lycalopex vetulus	NT	
MS	Myrmecophaga tridactyla	VU	
MS	Ozotoceros bezoarticus	NT	
MS	Penelope superciliaris	NT	
MS	Priodontes maximus	VU	Yes
MS	Pteronura brasiliensis	EN	
MS	Puma concolor	LC	
MS	Rhea americana	NT	
MS	Sapajus cay	VU	Yes
MS	Speothos venaticus	NT	
MS	Sporophila cinnamomea	VU	
MS	Sylvilagus brasiliensis	EN	
MS	Tapirus terrestris	VU	
MS	Tayassu pecari	VU	
MS	Thylamys macrurus	NT	
MS	Urubitinga coronata	EN	Yes
SP	Accipiter poliogaster	NT	
SP	Anabacerthia amaurotis	NT	
SP	Biatas nigropectus	VU	
SP	Brachyteles arachnoides	CR	Yes
SP	Callicebus nigrifrons	NT	
SP	Callithrix aurita	EN	
SP	Coendou prehensilis	LC	
SP	Dysithamnus stictothorax	NT	
SP	Formicivora paludicola	CR	Yes
SP	Ischnocnema erythromera	LC	
SP	Ischnocnema guentheri	NT	
SP	Leontopithecus chrysopygus	EN	Yes
SP	Leopardus guttulus	VU	Yes
SP	Mazama bororo	VU	Yes
SP	Onychorhynchus swainsoni	VU	
SP	Phyllomyias griseocapilla	NT	
SP	Piculus aurulentus	NT	

SP	Piprites pileata	NT
SP	Procnias nudicollis	NT
SP	Pseudastur polionotus	NT
SP	Pteroglossus bailloni	NT
SP	Sapajus nigritus	NT
SP	Sporophila falcirostris	VU
SP	Sporophila frontalis	VU
SP	Tangara cyanocephala	LC
SP	Tinamus solitarius	NT
SP	Touit melanonotus	NT

[1] The species with status marked as "-" are not listed in the IUCN Red List, but are included in Brazilian national lists with the following classifications: Dendrocolaptes medius, Hylopezus paraensis, Piculus paraensis, and Pyrrhura coerulescens are classified as Vulnerable (VU); Nystalus torridus is Near Threatened (NT); and Piculus polyzonus is Endangered (EN)

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