



## **GEF PRÓ-ESPÉCIES PROJECT**

### **National Strategy for the Conservation of Threatened Species**

#### **EXECUTIVE SUMMARY**



MINISTÉRIO DO  
MEIO AMBIENTE



## PROJECT DATA SHEET

Project Title	National Strategy for the Conservation of Threatened Species (PRÓ-ESPÉCIES)
Project's Goal	To conduct initiatives to reduce threats and to strengthen the conservation status of threatened species
Date of approval of the project design document (PIF)	April 1st, 2016
Date of approval of the project by the GEF's Board of Directors (Full)	July 20th, 2017
Project ID (GEF ID)	9271
Expected project start date	July 2018
Expected project duration	48 months
Partners directly involved in project implementation	MMA, WWF-Brazil, ICMBio, IBAMA, JBRJ and State Environmental Agencies (MA, BA, PA, AM, TO, GO, SC, PR, RS, MG, SP, RJ, and ES)
GEF funds	13,435,000 USD
Matching funds	50,942,867 USD
Project Team	<p>Technical Coordinators:  Ministry of the Environment  Secretariat for Biodiversity  Department of Species Conservation and Management  Head: Ugo Eichler Vercillo  Lead Coordinator: Marília Marques Guimarães Marini</p> <p>Technical Staff:  Bianca Chaim Mattos  Ceres Belchior  Roberta Magalhães Holmes  Samuel Fernando Schwaida  Tatiani Elisa Chapla</p> <p>GEF's Implementing Agency: Brazilian Biodiversity Fund  Project Lead: Fabio Leite</p> <p>Executing Agency: World Wide Fund for Nature - WWF-Brazil  Executive Director: Maurício Voivodic</p>

## BACKGROUND

The term “Biodiversity” describes the variety of life on the planet. The services provided by biodiversity and its ecosystems are the basis of human well-being. However, many of these services are at risk due to the loss of biodiversity. Threats to biodiversity and the primary causes of species extinction include degradation and fragmentation of natural environments, which results from clearance of large areas for pasture or conventional agriculture, uncontrolled extraction, urban expansion, road network expansion, forest fires, creation of lakes for hydroelectric power generation and mining. Coastal and marine ecosystems are being heavily affected by human activities, with degradation leading to reduced mangroves coverage, seaweed, and coral reefs. In addition, over-fishing causes both marine and freshwater species to decline. The rate and risk of introducing invasive alien species have risen significantly in the recent past and will continue to rise as a result of increased travel, trade and tourism. These species provide competitive advantages in comparison with native species, and could cause alterations in ecological cycles and drive native populations or species into extinction<sup>1</sup>.

Halting biodiversity loss globally will require that the factors underlying biodiversity loss be reduced. Individuals and governments must change their behaviors in order to address the factors driving biodiversity loss. An understanding, awareness and appreciation of the various values of biodiversity are necessary to sustain individuals' ability and willingness to make such social and political changes<sup>2</sup>.

Given this global concern about the loss of biological diversity and its effect on human well-being, the Parties to the Convention on Biological Diversity (CBD) have adopted the Strategic Plan for Biodiversity for the period 2011-2020 with the 20 Aichi Targets in order to achieve the main conservation of biological diversity goals, the sustainable use of its components, and the fair and equitable sharing of the benefits from the use of genetic resources.

The Global Biodiversity Outlook 4 (GBO-4) 4 has recently been published to help monitor progress towards the achievement of the Aichi Targets (GBO-4)<sup>4</sup>. According to this document, the actions currently being conducted are not sufficient to achieve the majority of the 20 targets by 2020, in particular Target 12, which aims to avoid extinction of species and improve their conservation status (Fig. 1).

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<sup>1</sup> SECRETARIAT OF THE CONVENTION ON BIOLOGICAL DIVERSITY, Global Biodiversity Outlook 4, 2014. Montreal. Available in: <<https://www.cbd.int/gbo/gbo4/gbo4-summary-en.pdf>> Accessed on December 5th, 2016.

<sup>2</sup> LEADLEY, P.W.; KRUG, C.B.; ALKEMADE, R., *et al.* *Progress towards the Aichi Biodiversity Targets: An Assessment of Biodiversity Trends, Policy Scenarios and Key Actions*. Secretariat of the Convention on Biological Diversity, Montreal, Canada. Technical Series 78, 2014. p. 500.

According to the GBO-4, concerted conservation actions have proven to be effective in reducing the risk of extinction of vertebrate species<sup>3 4</sup>, and other actions may prevent some extinctions that would otherwise occur by 2020. However, estimates suggest that it is very unlikely that all extinctions of threatened species (birds and mammals) will be prevented by 2020. Indeed, many species are at risk of imminent extinction and the level of resources needed to prevent their extinction is above the current level of funding provided<sup>5</sup>. In addition, many undescribed species are now extinct, or will become extinct by 2020 before we could discover them<sup>6</sup>.

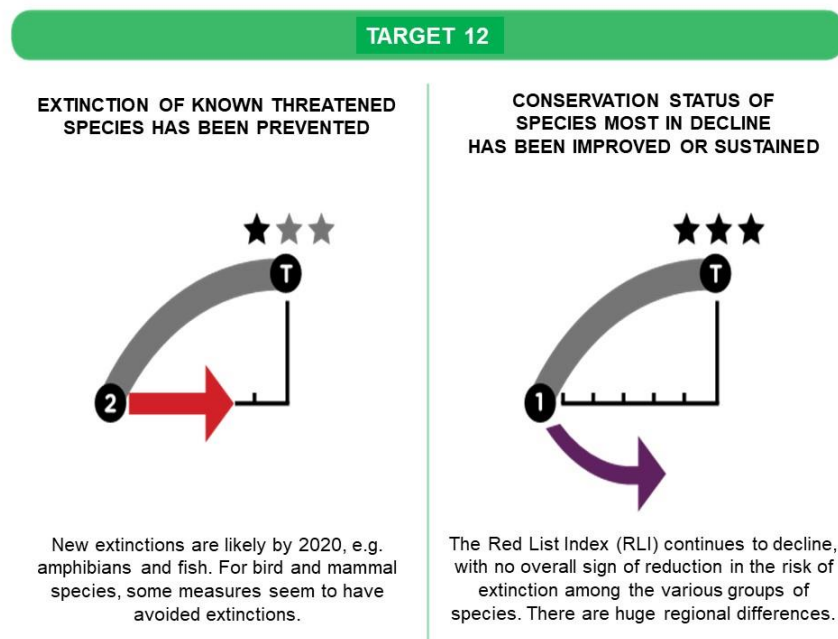


Figure 1. Global progress towards Aichi Biodiversity Target 12.

According to the GBO-4, in order to avoid further species extinctions, substantial investments in conservation in terrestrial, freshwater and marine ecosystems are required. Conservation at the species level should be complemented by policy measures on a landscape or ecosystem scale with a view to reducing major threats such as habitat loss.

<sup>3</sup> BUTCHART, S. H. M.; STATTERSFIELD, A. J.; BROOKS, T. M. 2006. *Going or gone*: defining 'possibly extinct' species to give a truer picture of recent extinctions. *Bulletin of the British Ornithological Club*: v 126A, p. 7-24.

<sup>4</sup> HOFFMANN M., C. HILTON-TAYLOR, A. ANGULO, M. BOHM, T. M. BROOKS, S. H. M. BUTCHART, K. E. CARPENTER, *et al.* "The impact of conservation on the status of the world's vertebrates." *Science*: v 330, n 6010, p. 1503-1509. 2010.

<sup>5</sup> MCCARTHY *et al.* Resource Requirements for Achieving Aichi Targets 11 and 12. CONVENTION ON BIOLOGICAL DIVERSITY, Montreal, Canada. 2012.

<sup>6</sup> MORA, C.; WEI C-L, ROLLO A, AMARO T, BACO AR, BILLET D, *et al.* Biotic and human vulnerability to projected changes in ocean biogeochemistry over the 21 Century. *PLoS Biology* v 11, 2013.

Based on the various lines of evidence used in the GBO-4, the following actions may be effective and will help speed up progress towards achieving Target 12 if they are widely implemented. Actions to reduce the risk of extinction of species are also relevant to achieve other Targets as shown in brackets below:

- ✓ Identifying and prioritizing species for conservation activities based on assessments of species conservation status (Target 19);
- ✓ Filling gaps in existing national, regional and global species conservation status assessments (Target 19);
- ✓ Developing and implementing species action plans that include specific conservation actions aimed at particular threatened species, for example through restrictions on trade, captive breeding and reintroductions;
- ✓ Developing more representative and better-managed protected area systems, prioritizing sites of special importance to biodiversity, especially those that contain unique populations of threatened species (Target 11);
- ✓ Reducing the loss, degradation and fragmentation of habitats (Target 5), and actively restoring degraded habitats (Target 15);
- ✓ Promoting fishing practices that take account of the impact of fisheries on marine ecosystems and non-targeted species (Target 6);
- ✓ Controlling or eradicating invasive alien species and their pathogens (Target 9) in order to avoid their introduction and establishment;
- ✓ Reducing pressures on habitats through sustainable land-use and management practices (Target 7); and
- ✓ Ensuring that no species is subject to unsustainable exploitation for domestic or international trade, including by taking actions agreed under the Convention on International Trade in Endangered Species (CITES), and reducing demand for products derived from such actions (Target 4).

Understanding the conservation status of biodiversity is the basic starting point for robust planning of measures that must be taken to reduce the risk of species extinction and to ensure their survival. The assessment of species extinction risk underpins the development of priorities in public policies for conservation and resource allocation.

Of the 3,286 species currently officially recognized as threatened in Brazil, 947 are under the Vulnerable category, 1,553 are Endangered, and 785 are Critically Endangered, while ten species are considered Extinct and one is Extinct in the Wild in the Brazilian territory. Four extinctions are relatively old (over a century) and seven are recent extinctions.

Fauna has a total of 1,173 threatened species, and the group of inland fish contains the largest number of species under some category of threat (310 species), followed by the group of birds (233), land invertebrates (233) and mammals (110) (Fig. 2).

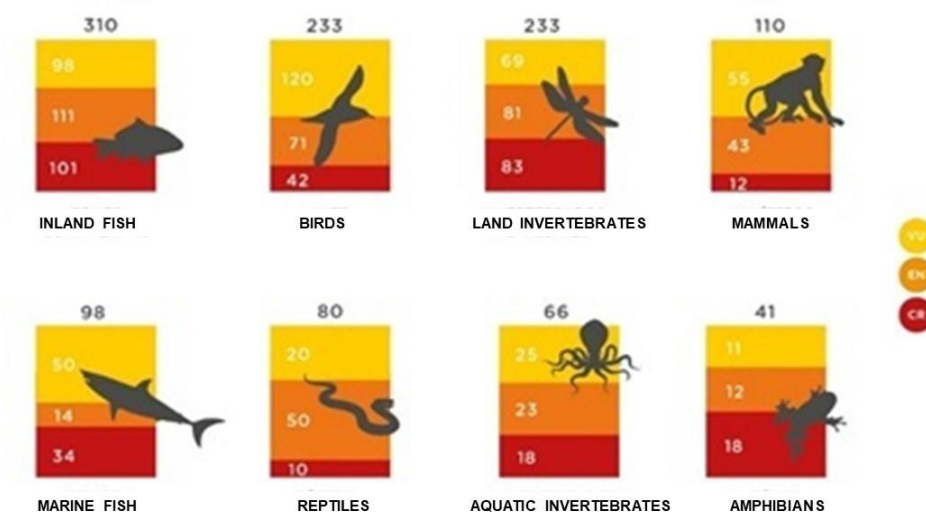


Fig. 2. Number of threatened fauna species and threat categories for each taxonomic group (CR: Critically endangered, EN: Endangered, and VU: Vulnerable).

Of the flora species assessed, 2,113 species are under some category of threat. Angiosperms are the leading group with the highest number of species at risk of extinction (1,999 species), followed by ferns and lycophytes (91 species) (Fig. 3).

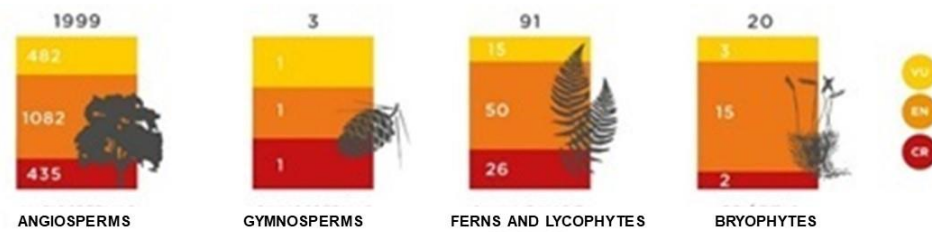


Fig. 3. Number of threatened flora species and threat categories for each taxonomic group (CR: Critically endangered, EN: Endangered, and VU: Vulnerable).

The number of threatened species by biome shows that the Atlantic Forest has the highest number of threatened species, with 1,031; followed by Cerrado, with 988 and Caatinga, with 310 (Fig. 4). The Atlantic Forest also has the highest number of species in the highest risk category – 446 species are Critically Endangered. These data indicate that some species occur in more than one biome.

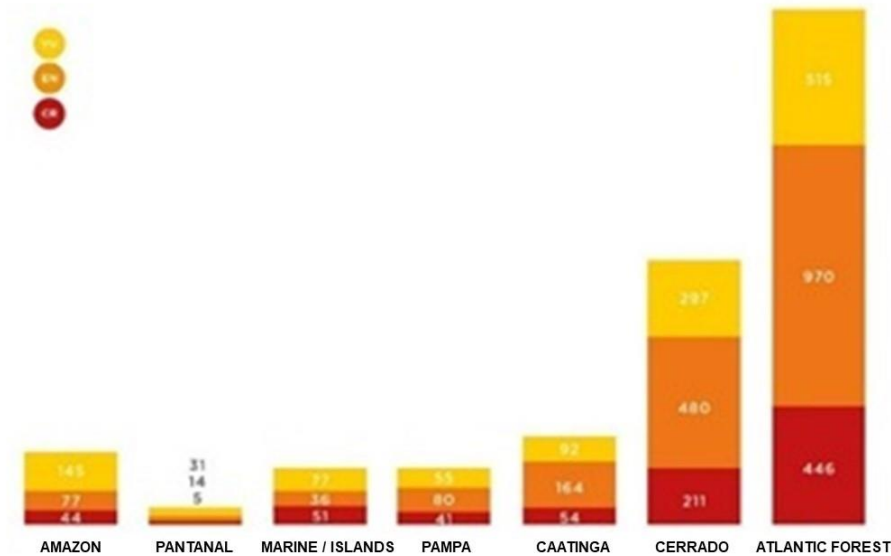


Figure 4 Graph – Threatened species by biome and threat categories.

In order to design and implement actions for prevention, conservation, management, and governance with a view to minimizing threats and the risk of extinction of species of the national fauna and flora, the MMA established, through MMA Directive 43/2014, the National Program for the Conservation of Threatened Species – Pró-Espécies, which is the culmination of a collaboration involving the MMA, ICMBio and JBRJ, and represents a major breakthrough in the harmonization of targets for the conservation of threatened species and the allocation of responsibilities. The Program is based on the following three instruments: National Official Lists of Threatened Species; National Action Plans for the Conservation of Threatened Species (NAPs); and Databases and information systems.

The lists of threatened species are undoubtedly the basis for initiatives to protect species at the local, regional or global scale<sup>7</sup>. Municipal, state, and federal land use and management policies should take into account the presence of threatened species. These lists are a powerful tool in that they can be used as legal mechanisms for any level of action.

The data collected during development of the National Lists informs the MMA’s regulations to restrict and prohibit the use of threatened species, and makes it possible to identify industries that are potentially

<sup>7</sup> TABARELLI, M.; PINTO, L.P.; SILVA, J.M.C.d.; COSTA, R.C. Espécies ameaçadas e planejamento da conservação. In: GALINDO-Leal, C.; CÂMARA, I.d.G. MATA ATLÂNTICA: Biodiversidade, ameaças e perspectivas. Carlos Ibsen de Gusmão. São Paulo: Fundação SOS Mata Atlântica. p. 86-94. 2005.



involved, which in turn improves planning and implementation of other instruments under the Pró-Espécies Program, such as Action Plans for species conservation (NAPs) and information systems.

NAPs for species conservation have been successfully developed over the past decade. They help prioritize the design of intermediate- and short-term actions. In this process, a vast array of tasks is outlined and implemented through a directive of the relevant environmental agency, ranging from local activities, such as environmental education, to national initiatives, as well as proposed amendments to regulations, with the purpose of reversing or minimizing the negative impact of factors driving decline in species populations or environment degradation.

Brazil started implementing NAPs in 2004 and has since adopted different methodologies to put them in place. The first methodology focused on specific species, where 17 NAPs were developed, and the second methodology was related to taxonomic groups, and has been used in another 17 NAPs. As of 2009, NAP implementation has been relying on cooperation from local partners, taking a territorial approach (by biomes, ecosystems or regions), but also maintaining the taxonomic approach. There are currently 17 NAPs following this approach, such as the Action Plan for Atlantic Forest Parrots (2010), Herpetofauna in the Southeast of Brazil (2011) and Primates in the Northeast (2011). The ecosystem approach was used for another three NAPs, with an emphasis on the Corals NAP (2014).

The territorial approach is one of the most recent methodologies used in NAPs, and it covers all threatened fauna or flora species within a single territory. This approach was tailored to four different NAPs, including the NAPs for the Paraíba do Sul River (2010) and the Threatened Flora in the Southern Serra do Espinhaço (2015).

The territorial NAP model maximizes efforts and resources as it benefits all threatened species that occur in the target conservation territory. It also covers species for which little scientific knowledge is available, or even those that are not yet known to science. In addition, the territorial approach helps consider socioeconomic features of the target region, which supports development of actions that are more feasible and consistent with the local settings. This new NAP model is part of the national strategy for the implementation of the Pró-Espécies Program, including expansion so as to include other conservation instruments, such as plans for the recovery of threatened species, fishing exclusion zones, protected areas, and management plans.

As a result of the efforts made over the past few years, the coverage of policies for the conservation of threatened species in Brazil has increased significantly. Approximately 75% of threatened species are protected by some conservation measure (Fig. 5 and 6). Of the 2,113 threatened plant species, 1,495 species (71%) had at least one occurrence in Protected Areas, and 403 species (19%) are under NAPs,

with 303 species (14.5%) covered by both initiatives. Of the 1,173 threatened animal species, 765 species (65%) have at least one occurrence in Protected Areas, and 498 species (42.5%) are under NAPs, with 399 species (34%) supported by both initiatives.

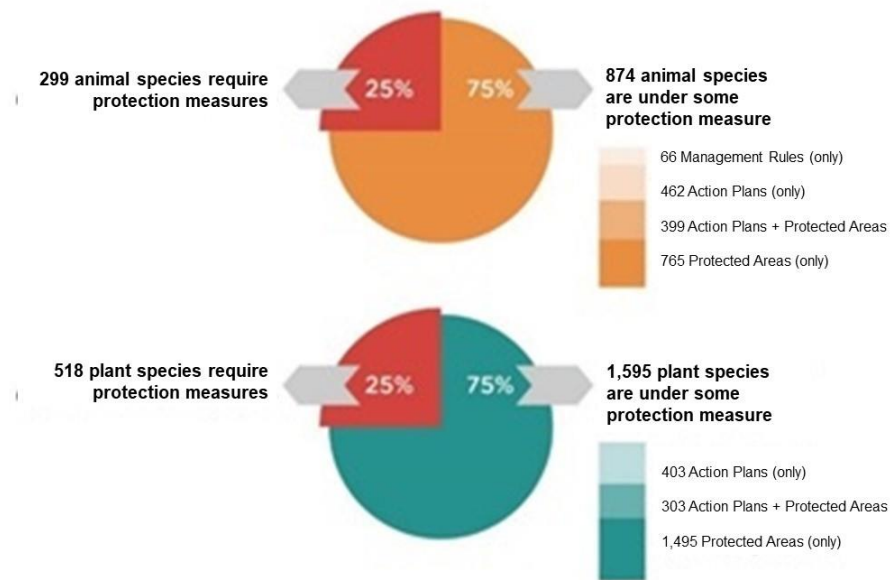


Figure 5. Graphs showing the percentage of fauna and flora species supported by conservation actions in Brazil.

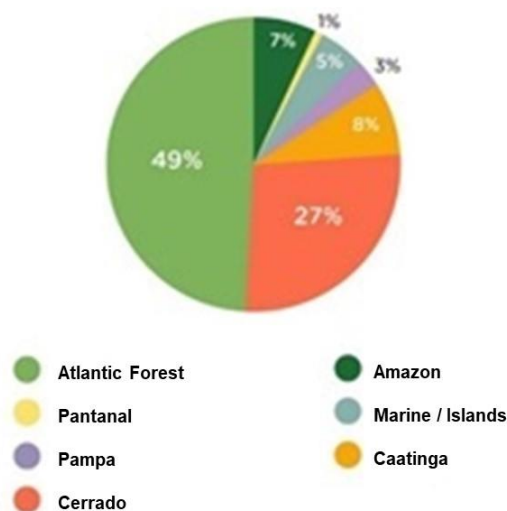


Figure 6. Graph showing the percentage of threatened species by biome that benefit from protection mechanisms

Despite the efforts made by the Brazilian Government to conserve threatened species, the number of species for which no conservation actions are being taken – the so-called Gap Species – is still substantial. There are currently 836 gap species – 267 animal species and 569 plant species –, and the three major threats to biodiversity continue unchecked in Brazil: 1) habitat loss, primarily due to agricultural expansion and infrastructure works, 2) poaching and illegal fishing and harvesting, and 3) introduction of invasive alien species.

The current challenge is to find new ways and national strategies to minimize these threats and change the status of the increasing number of threatened species that are not covered by any effective protection measures, which is the focus of this project.

## **GOAL OF THE GEF PRÓ-ESPÉCIES PROJECT**

The GEF Pró-Espécies Project is intended to improve the management of at least 290 species under the critically endangered category and with a low coverage in protected areas. The focal areas will be based on the occurrence of these threatened species, and will cover at least 9 million hectares, where this project is expected to help improve management of the local environment.

To this end, the project is based on four action strategies, or components:

- ✓ The purpose of “Component 1” is to implement measures to reduce threats and strengthen the framework of conservation policies for threatened species by integrating species conservation into public policies in place. This goal will be achieved through strategic actions and policies to expand implementation of land management plans and measures to mitigate the impacts of anthropogenic activities;
- ✓ “Component 2” aims to increase effectiveness in coping with illegal or non-compliant exploitation of biodiversity. To this end, measures will be implemented for the development of national capacities to combat environmental offenses, and measures and initiatives to engage local communities to prevent and combat illegal trafficking in fauna and flora;
- ✓ “Component 3” focuses on the creation of a System for Early Warning and Detection of Invasive Alien Species - SAI to prevent and control new biological invasions in Brazil;

- ✓ “Component 4” refers to the dissemination of project actions to raise awareness among and engage citizens to tackle the challenges involved in conserving the species covered by the project.

## LOGICAL FRAMEWORK FOR THE PROJECT

<b>Table 1. Logical Framework of the GEF Pró-Espécies Project</b>			
<b>Component</b>	<b>Sub-Component</b>	<b>Macro-Level Activity</b>	<b>Indicators</b>
<b>1. Integration of threatened species conservation criteria into sector-specific policies</b>	<b>1.1. Creation and implementation of a national strategy for the conservation of threatened species</b>	Establishment of the National Strategy	Implementation of the National Strategy for the conservation of threatened species
		Development and implementation of NAPs	At least 12 Action Plans and other conservation initiatives covering at least 290 critically endangered species within a range of 9 million hectares.
	<b>1.2. Development of enabling conditions for incorporating conservation of threatened species into sector-specific policies</b>	Advice and guidelines for the private sector or licensing bodies	3 handbooks developed containing guidelines for environmental impact assessments on threatened species.
		Analysis of relevant areas for the conservation of threatened species regarding the applicability of public policies	Territories assessed regarding the applicability of public policies.
	<b>1.3. Management of information on threatened species</b>	Assessment of the conservation status of threatened species	National Lists of Threatened Species updated and published in a Directive. Information portals updated

<b>2. Control and prevention of poaching, illegal fishing, plant harvesting and traffic in wild species</b>	N/A	Development of an institutional intelligence framework to combat crimes against fauna and flora	Development of tools to combat environmental offenses (based on the ICCWC).
		Training of civil servants in the new intelligence framework	At least 200 instructors qualified in the training programs.
		Mechanisms created or adapted and implemented to raise awareness among and engage local communities to prevent and combat crimes against fauna and flora	Awareness and engagement campaigns implemented in priority territories
<b>3. Prevention and early detection of and rapid response to invasive alien species</b>	N/A	Management of invasive alien species in place at the national and subnational level, including a risk analysis procedure regarding the introduction of species.	Invasive Species Combat Network established and Early Warning and Detection System implemented.
		Risk analysis system for invasive alien species developed and implemented	Protocols for risk analysis of alien species and early detection outlined and implemented.
<b>4. Coordination and reporting</b>	N/A	Project communication plan	Strategic Communication Plan consolidated according to the CEPA.

## AREA OF PROJECT COVERAGE

The project will operate in the territorial areas identified as most relevant for the conservation of threatened species. The spatial analysis to establish the areas of Project covered identified as priority sites with a high number of species under the Critically Endangered (CR) category that are not covered by any conservation instruments (Protected Areas or National Action Plans), CR gap species (Fig. 7).

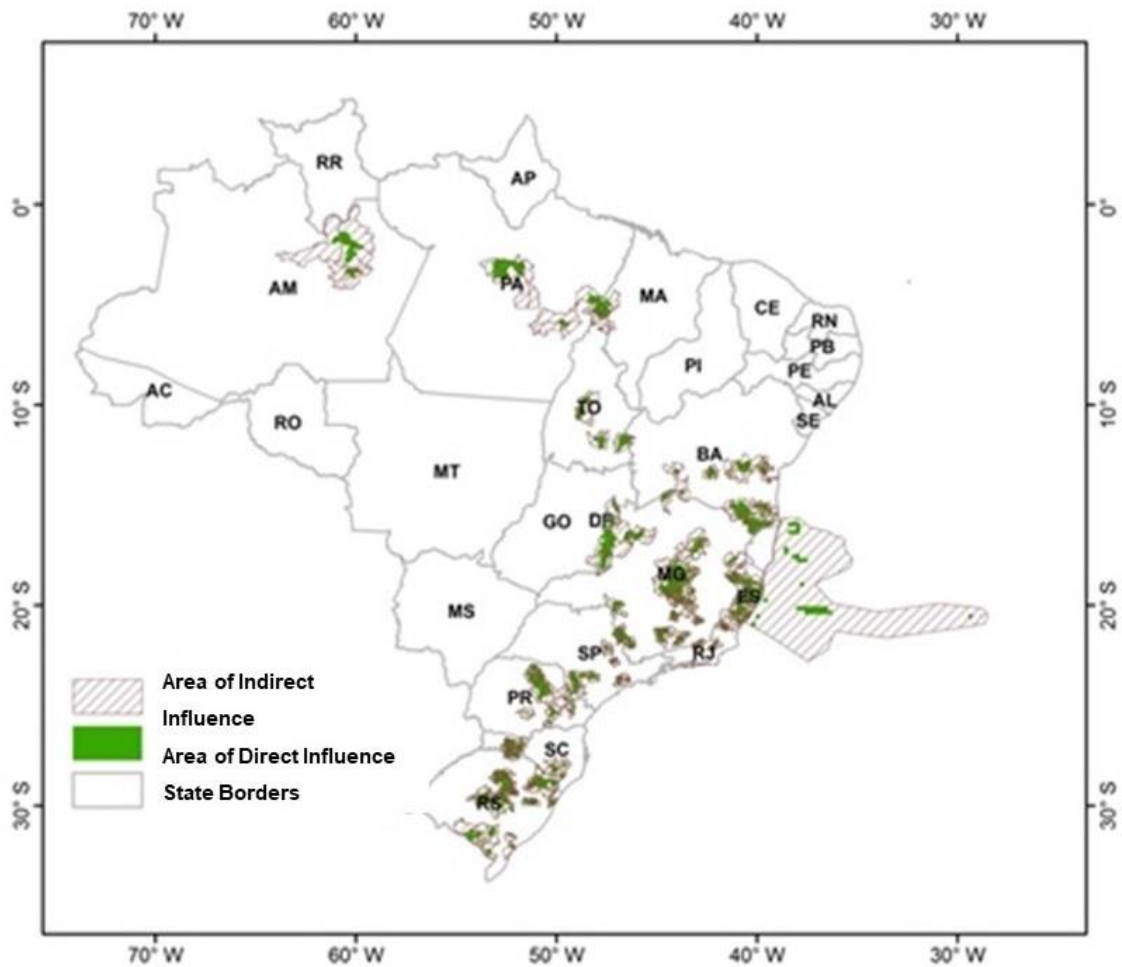


Figure 7. Map showing the 24 Areas of Direct Influence and municipalities covered by the project.

As a result of conservation actions in the intervention areas of the project, in addition to threatened gap species, a total of 2,755 threatened species will also be covered.

The project is also expected to support measures to expand knowledge on 34 CR gap species that are highly endemic or for which only historical records are available. The purpose is to verify the occurrence of these species and to design measures for their protection, including creation of sites of the Brazilian Alliance for Zero Extinction (BAZE). Thus 22 areas with an indication of specific actions targeting these 34 CR gap species were identified (Fig. 8).

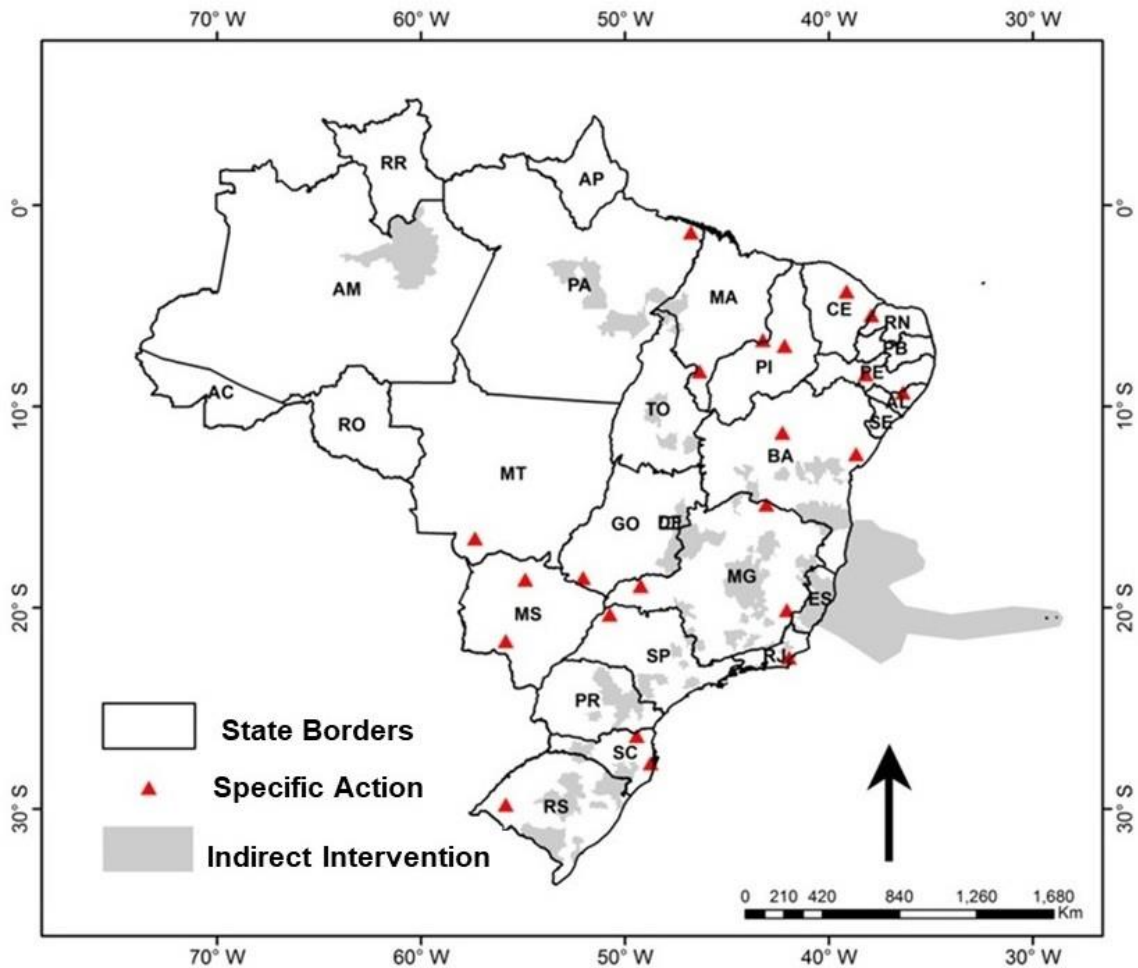


Figure 8. Demonstrative map of areas with an indication of Specific Project Actions.

## PROJECT DESIGN

### Component 1- Integration of threatened species conservation into sector-specific policies

The first component focuses on the implementation of the Pró-Espécies Program, and is divided into following three sub-components: i) development and implementation of the national strategy for the conservation of threatened species; ii) incorporation of related to threatened species into sector-specific policies; and (iii) improved management of information on threatened species.

### ***Sub-Component 1.1 - Development and Implementation of the National Strategy for the conservation of threatened species***

With the objective of enhancing the governance arrangements of the Pró-Espécies Program and establishing measures to prevent extinction of species, the MMA will coordinate efforts by the federal, state and other actors to develop a National Strategy.

National seminars and regional meetings with state environmental agencies and key actors will be held as part of the development of a national strategy to boost the effectiveness of existing conservation instruments. Implementation of this strategy will be monitored annually by experts in order to identify gaps in protection by species and to propose actions to integrate the instruments, especially those related to NAPs.

In the project's areas of intervention, at least 12 NAPs with a territorial approach will be developed and implemented, based on the improved methodologies previously established by ICMBio and JBRJ so as to ensure integration of fauna and flora species in a single NAP.

The involvement of state governments and local civil society organizations will be critical for successful implementation of NAPs in the project intervention areas. As such, partnerships will be set up with institutions that will work on the management, implementation and monitoring of the most effective actions for species conservation.

### ***Sub-Component 1.2 - Integration of threatened species conservation criteria into sector-specific policies***

The purpose of this sub-component is to influence some processes included in sector-specific public policies by incorporating criteria related to threatened species in order to support biodiversity conservation in steps in the Rural Environmental Registration, National Plan for the Recovery of Native Vegetation, and Environmental Licensing.



Studies and technological tools will be developed to identify relevant areas for the conservation of threatened species on rural properties. The objective is for these areas to be prioritized in initiatives related to legal reserve allocation, restoration and enhancement of environmental reserve quotas, and recovery of Permanent Preservation Areas (PPAs) and their connectivity, thus improving on the implementation of Law 12,651/2012.

The landscape for threatened species will also be improved through adoption of best restoration practices under the National Plan for the Recovery of Native Vegetation - PLANAVEG.

### ***Sub-Component 1.3 - Improvement of management of information on threatened species***

The goal of this sub-component is to improve the management of information on threatened species, especially to make the assessment of the conservation status of species and NAP development and implementation more organized, transparent and streamlined.

The organization and availability of data on Brazilian species is key for the assessment of their conservation status. To this end, studies will be conducted to integrate and harmonize the development of national lists of fauna and flora and state lists, thus encouraging assessment at the regional level and implementation of measures to restrict use. The project will encourage states to create or update state lists of threatened species of flora and fauna. In order to improve information management on Brazil's biodiversity, users' demands will be mapped, sources of information available will be identified and an assessment of data gaps on species and their threats will be performed. Information on threatened species should be available from an on-line platform in an integrated fashion in order to guide management and also enable cross-referencing of species information with those resulting from implementation of other public policies, such as those from the Rural Environmental Registry (CAR), Priority Conservation Actions, Sustainable Use and Benefit Sharing of Brazilian Biodiversity, and Biodiversity Monitoring in Protected Areas.

## **Component 2 - Control and prevention of poaching, illegal fishing, plant harvesting and traffic in wild species**

The purpose of Component 2 is to establish an institutional intelligence framework to combat crimes against fauna and flora and provide management reports within the existing control systems. This framework will include a network of actors from federal and state regulatory bodies involving the Federal Police, the Federal Road Police, the Military Police, the Civil Police and the Public Prosecutor's Office. Success of this component will also depend on technical capacity-building and the creation and

implementation of mechanisms to raise awareness among and engage local communities in the priority territorial areas to prevent and combat crimes against fauna and flora.

The new institutional intelligence framework will be based on the Indicator Framework for Combating Wildlife and Forest Crime (ICCWC)<sup>8</sup>. This is a guide designed to enhance capacity and add to the efforts made by national wildlife law enforcement agencies and subregional and regional networks that combat illegal trafficking in wild fauna and flora.

Once databases have been integrated and systems have been enhanced, a network of actors from federal and state regulatory bodies involving the Federal Police, the Federal Road Police, the Military Police, the Civil Police the Public Prosecutor's Office, and the Forest and Environmental Police will be set up and trained. Once trained, the agents and police officers will be instructors in their home organizations and states. Hence, for the delivery of four training courses to combat crimes against fauna and flora, the following materials will be developed: i) wildlife surveillance and policing manual; ii) manual for the identification of the most trafficked species; and iii) a compilation of environmental regulations.

By Year Four, a total of 200 instructors will have received training. In addition to classroom-based classes, there are plans to increase the number of trained students by developing an on-line learning environment or e-learning platform.

Awareness raising and engagement of local communities in the territorial areas of the Project will be carried out in order to support prevention and combat of poaching, and illegal fishing, extractivist activities and trafficking in fauna and flora, taking into account the globally recognized recommendations for the involvement of populations for the conservation of nature<sup>9 10 11</sup>.

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<sup>8</sup> UNITED NATIONS. International Consortium on Combating Wildlife Crime (ICCWC). Wildlife and Forest Crime Analytic Toolkit. 2012. Available in <[https://www.unodc.org/documents/Wildlife/Toolkit\\_e.pdf](https://www.unodc.org/documents/Wildlife/Toolkit_e.pdf)> Accessed on January 9, 2017.

<sup>9</sup> IUCN SULi, IIED, CEED, Austrian Ministry of Environment and TRAFFIC (2015) Symposium Report, 'Beyond enforcement: communities, governance, incentives and sustainable use in combating wildlife crime', 26-28 February 2015, Glenburn Lodge, Muldersdrift, South Africa. Available in: <http://pubs.iied.org/G03903/?a=I+SULi> Accessed on April 6, 2017

<sup>10</sup> CONFERENCE OF THE PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY. Cancun, Mexico, Dec. 2016. Decision XIII/2. Progress towards the achievement of Aichi Biodiversity Targets 11 and 12. CBD/COP/DEC/XIII/2. Available in <<https://www.cbd.int/doc/decisions/cop-13/cop-13-dec-02-en.pdf>> Accessed on April 6, 2017

<sup>11</sup> CONFERENCE OF THE PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY. Cancun, Mexico, Dec. 2016. Decision XIII/8. Sustainable use of biodiversity: bushmeat and sustainable wildlife management. CBD/COP/DEC/XIII/8 Available in: <<https://www.cbd.int/doc/decisions/cop-13/cop-13-dec-08-en.pdf>> Accessed on April 6, 2017

### **Component 3 - Prevention and early detection of and rapid response to invasive alien species**

Component 3 is designed to enhance mechanisms and partnerships for the prevention and early control of invasive alien species, and aims at developing a system for early warning and detection of invasive alien species.

Early prevention and detection of invasive alien species, followed by a rapid response (eradication and control), are more effective than any action taken after an alien invasive species becomes established. The system will consist of the organized ability to respond promptly to new outbreaks of biological invasion before they reach a scale that involves high costs and is difficult to control, thus minimizing risks to threatened species and preserving the resilience and functioning of natural ecosystems.

A national coordination unit to deal with invasive alien species will be set up with the aim of improving the legal framework, capacity and management mechanisms in line with improvements in the management of threatened species.

The development of an early detection system requires a database on invasive alien species and risk analysis. Risk analysis protocols will be developed at two levels. The first level refers to a streamlined protocol that includes the most relevant characteristics for invasion by a biological group, and is intended to inform decision making within the early detection and rapid response process. The second level covers complete risk analysis protocols that are to be updated or adapted for use in Brazil from existing models available both in Brazil and abroad. These protocols are part of the early detection system for use in case of little known species, and will also serve as a basis for importing and/or introducing species to Brazil or Brazilian states. The project will create the necessary conditions for the incorporation of risk analysis into import authorization procedures regarding alien species.

The pathway and vector analysis involves identification and prioritization of the main points of entry of invasive alien species in Brazil. As such, this analysis will help inform prioritization of activities and areas for the development of surveillance and monitoring systems for the purpose of early detection and rapid response.

Establishment of a supporting network comprised of citizens, researchers, PA staff, research centers, IBAMA's decentralized offices, environmental licensing bodies, state and municipal environmental agencies, and civil society organizations is fundamental to sustain the system. Promotional materials and campaigns will be prepared to disseminate the system so that it can receive inputs from the general

public, whose participation is of utmost importance. People in close proximity to priority areas will receive information on species identified as likely to occur based on the findings from vector and pathway analyzes or species at an imminent risk of being introduced into priority areas.

#### **Component 4 - Coordination, monitoring and reporting**

Component 4 will be a part of the remaining components in the project through cross-cutting coordination, monitoring and reporting measures. Its main focus, therefore, will be to ensure visibility and dissemination of the stages and outcomes of the broader project, with ongoing involvement of the key actors.

Coordination and monitoring of the project will be performed by forums that will ensure the information across the federal government, academic community, states and local beneficiaries is integrated, also allowing inputs from specialists during specific stages. To this end, meetings will be held by the project governance group.

The information generated by the project will comprise a management panel of the National Strategy for the Conservation of Threatened Species, with the integration of data from other projects and related activities, which will allow for ongoing monitoring of the impact generated by the cooperation projects in the selected territories.

## INSTITUTIONAL ARRANGEMENT AND PROJECT GOVERNANCE

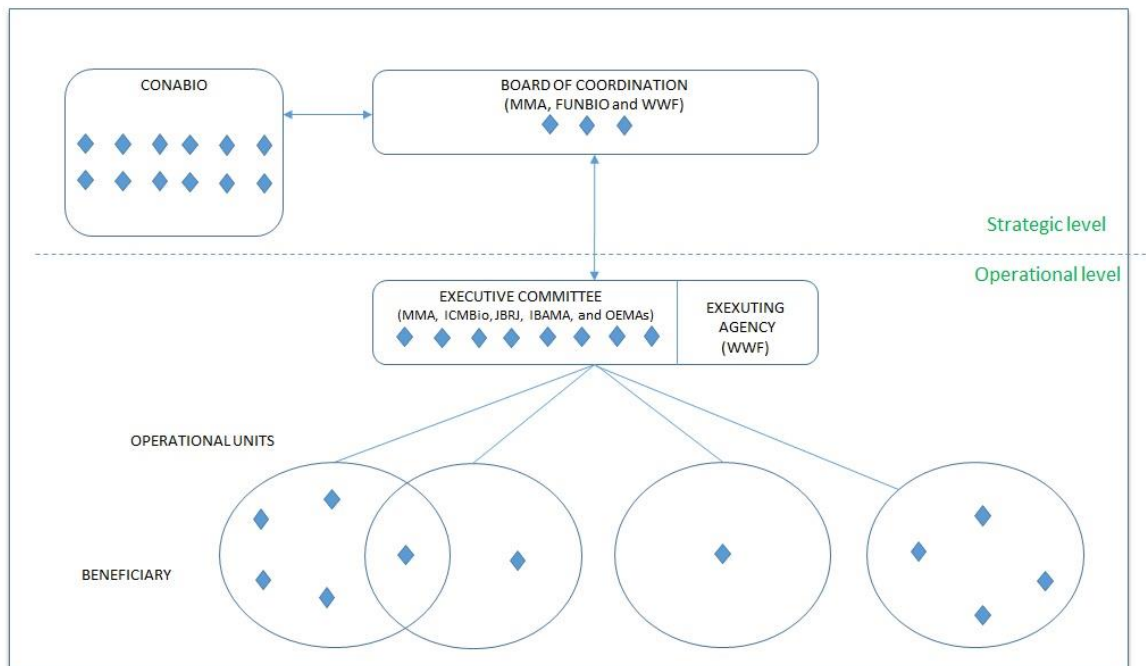


Figure 9. Governance framework of the GEF Project Pró-Espécies

Five levels of governance have been established (Fig. 9) as outlined below:

**Board of Coordination - MMA, FUNBIO and WWF-Brazil:** Comprised of the technical coordinators team (MMA), the implementing agency (FUNBIO) and the executing agency (WWF-Brazil). It is responsible for making the strategic decisions related to the project.

**CONABIO:** Membership of the National Biodiversity Commission (CONABIO), established by Decree No. 4,703/2003, includes representatives from government agencies and civil society organizations, and plays a major role in the discussion and implementation of policies on biodiversity. Under the GEF Pró-Espécies Project, CONABIO will strategically monitor the project outcomes, discussing institutional arrangements and suggesting adjustments to maximize results and leverage other initiatives.

**Executive Committee** - DESP/MMA, ICMBio, JBRJ, IBAMA, environmental bodies at state level (OEMAs), and WWF-Brazil: Group of focal points in the Operational Units. It is the governance body for the project responsible for ensuring that the implementation of activities and allocation of resources are consistent with the planning. In addition, the Executive Committee plays the role of ensuring the flow of information on the guidelines for implementing the project to other stakeholders and of mediating any conflicts or disputes that may arise at the operational level.

**Operational Units:** They may consist of one or more beneficiaries responsible for actions implemented within a specific component or territory of the project, and are primarily coordinated by OEMAs or research centers and regional offices of ICMBio, JBRJ and IBAMA. Each Operational Unit acts as the project planning and implementation unit. Specific roles of the Operational Unit include: preparation of the Annual Operational Plan; mobilization, coordination and engagement of beneficiaries and stakeholders; risk analysis; participation in the Executive Committee; reporting and availability for exchanges with other Operational Units.

**Beneficiaries:** Institutions responsible for the implementation of specific actions under the project (NGOs, MMA, ICMBio, JBRJ, IBAMA, or OEMAs). Specific roles of the beneficiaries include implementation of actions in the territories, sharing of executive information within the the Operational Units, reporting and availability to join efforts with other beneficiaries in order to maximize results.