

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

BRAZIL

**CONSERVATION, RESTORATION AND SUSTAINABLE MANAGEMENT IN THE CAATINGA,
PAMPA AND PANTANAL**

GEF TERRESTRE

(BR-G1004)

GRANT PROPOSAL

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ELECTRONIC LINKS

REQUIRED (REL)

1. [Pluriannual Execution Plan \(PEP\) and Annual Operational Plan \(AOP\)](#)
2. [Monitoring and Evaluation Plan](#)
3. [Environmental and Social Management Report \(ESMR\)](#)
4. [Procurement Plan](#)

OPTIONAL (OEL)

1. [Technical Design Document – Component 1](#)
2. [Technical Design Document – Component 2](#)
3. [Technical Design Document – Component 3](#)
4. [Technical Design Document – Component 4](#)
5. [Technical Design Document – Component 5](#)
6. [ESA and ESMP](#)
7. [Economic Viability Analysis](#)
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10. [Letter from Ministry of Environment Regarding Executing Mechanism](#)
11. [Commitment Letters from Project Partners](#)
12. [Technical References](#)
13. [Safeguard Policy Filter \(SPF\) and Safeguard Screening Form \(SSF\)](#)

ABBREVIATIONS

AOP	Annual Operational Plan
BES	Biodiversity and Ecosystem Services
CRF	Corporate Results Framework
CS	Country Strategy
DEM	Development Effectiveness Matrix
EA	Executing Agency
ESMR	Environmental and Social Management Report
ESS	Environmental and Social Strategy
FUNBIO	Brazilian Biodiversity Fund
GEF	Global Environment Facility
IDB	Inter-American Development Bank
IBGE	Brazilian Institute of Geography and Statistics
ICMBio	Chico Mendes Institute for Biodiversity Conservation
IRR	Internal Rate of Return
JBRJ	Botanical Garden of Rio de Janeiro
MMA	Brazilian Ministry of Environment
NPV	Net Present Value
OMP	Operation Manual and Regulations of the Project
PA	Protected Area
PAN	National Action Plan for the Conservation of Threatened Species
PEA	Project Executive Agency
PIR	Project Implementation Report
POD	Proposal for Operation Development
PMR	Project Monitoring Report
PMU	Project Management Unit
SNUC	Brazilian National System of Conservation Units
SPF	Safeguard Policy Filter
SSF	Safeguard Screening Form
UC	Conservation Unit (as defined by SNUC)
UTCP	Technical Project Coordination Unit (in MMA)

PROJECT SUMMARY
BRAZIL
CONSERVATION, RESTORATION AND SUSTAINABLE MANAGEMENT IN THE CAATINGA, PAMPA
AND PANTANAL - GEF TERRESTRE
(BR-G1004)

Financial Terms and Conditions				
Beneficiary: Federative Republic of Brazil, through the Ministry of Environment (MMA)				
Executing Agency (EA): Fundo Brasileiro para a Biodiversidade (FUNBIO)				
Source	Amount (US\$)	%		
IDB (Global Environment Facility - GEF) Total:	32,621,820 ^(a)	100	Disbursement Period:	5 years
			Execution Period:	5 years
			Currency of Approval:	US\$ Dollars
Project at a Glance				
<p>Project Objective/Description: The general objective of the project is to contribute to the long-term viability of threatened priority species, avoid carbon emissions and increase forest and non-forest area under sustainable management practices in three Brazilian biomes. The specific objectives are to: (i) expand coverage and effectiveness of the protected areas system in those biomes (Components 1 and 2); (ii) improve management of priority habitats and priority species (Components 3 and 4); and (iii) foster community-driven sustainable use practices in productive areas associated to the Protected Area (PA) system (Component 5).</p>				
<p>Special Contractual Clauses prior to the first disbursement of the IDB/GEF resources: (i) evidence of the establishment of the Project Management Unit (PMU) within the organizational structure of FUNBIO and the selection of, at minimum, the technical team specified in ¶3.3 (¶3.2); (ii) evidence of the entry into effect of the Technical Cooperation Agreement between MMA and FUNBIO, on terms and conditions acceptable to the Bank (¶3.4); (iii) entry into effect of the Operation Manual and Regulations of the Project (OMP) on terms and conditions acceptable to the Bank (¶3.6); and (iv) adaptation and customization of FUNBIO's project system to generate the financial and procurement reports required by the Bank (Annex III).</p>				
<p>Special Contractual Clauses of execution: The entry into effect of project-specific Technical Cooperation Agreements between FUNBIO, MMA and the strategic partners on terms and conditions acceptable to the Bank prior to the execution of any activity financed with IDB/GEF resources in their respective States (¶3.5). See Annex B of the Environmental and Social Management Report (ESMR) for the special environmental and social contractual conditions.</p>				
Exceptions to Bank Policies: None.				
Strategic Alignment				
Challenges^(b):	SI <input type="checkbox"/>	PI <input type="checkbox"/>	EI <input type="checkbox"/>	
Cross-Cutting Themes^(c):	GD <input type="checkbox"/>	CC <input checked="" type="checkbox"/>	IC <input type="checkbox"/>	

^(a) The project will also benefit from US\$159.15 million in parallel co-financing provided by government institutions, the state governments in which the project will work, and KfW.

^(b) SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

^(c) GD (Gender Equality and Diversity); CC (Climate Change and Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

I. DESCRIPTION AND RESULTS MONITORING

A. Background, Problem Addressed, and Justification

- 1.1 **Conservation of the Caatinga, Pampa and Pantanal Biomes: Challenges and Opportunities.** With a total area of 1.17 million km² the Caatinga, Pampa and Pantanal constitute 13.6% of Brazil's continental land area ([IBGE, 2004](#)) and three biomes of elevated socio-environmental importance: The semi-arid Caatinga, the only exclusively Brazilian biome, includes some of the poorest areas in the Northeast region; the Pampa is a fertile plains habitat intrinsically linked into the culture and economic activity of the state of Rio Grande do Sul; and the Pantanal is one of the world's largest freshwater wetland systems, straddling the agro-industrial states of Mato Grosso and Mato Grosso do Sul.
- 1.2 **Caatinga.** This biome, dominated by xerophyte shrubland and thorn forests, presents the highest solar radiation and mean annual temperature and the lowest levels of relative humidity and pluviometric precipitation in Brazil, with precipitation being highly irregular in both time and space. Partly as a result of these extreme conditions, the Caatinga is rich in biodiversity, with 178 species of mammals, 591 of birds, 177 of reptiles, 79 of amphibians, 241 of fish and no less than 22 species of bees ([MMA, 2012](#)). Much of this biodiversity is endemic to the Caatinga: 318 out of 932 plant species, 137 fish species, at least 57 reptiles and amphibians, and three mammal species (Almanaque Socioambiental, 2008). Yet, only 7.7% of the Caatinga is legally protected at all, and most of it through sustainable usage conservation units; only 1.2% of the biome is within conservation units that grant strict protection ([MMA, 2016](#)).
- 1.3 **Pampa.** The Pampa is a fertile grassland-dominated lowland with annual precipitation averages of 1,250–2,000mm, relatively uniformly distributed during the year ([FAO, 2002](#)), and four well-characterized seasons ([Wurdig Roesch, et al., 2009](#)). By virtue of its biogeological age, the Pampa harbors an estimated 3,000 plant species, 500 species of birds and 100 species of mammals ([MMA, 2012](#)). However, only 2.7% of the Brazilian Pampa is legally protected and a mere 628km² enjoy strict protection ([MMA, 2012](#)) in a context of strong anthropic pressures on the biome and its remaining natural vegetation.
- 1.4 **Pantanal.** This wetland system, which has been recognized on the Ramsar List of Wetlands ([Ramsar, 2016](#)) of International Importance and as a UNESCO World Heritage Site ([UNESCO, 2000](#)), forms part of the *Alto Paraguai* Basin. The vast majority of the basin, an approximate area of 362,376km², lies within Brazilian territory and includes the Pantanal plain (equivalent to the Pantanal biome) and the surrounding plateaus (located in the Cerrado and Amazon biomes) that harbor the springs waters of the Pantanal rivers ([IBGE, 2004](#)). During the rainy season (October to March, with precipitation averages of 1,400mm annually), flooding inundates some 80% of the plains ([Alho & Silva, 2012](#)). The Pantanal biome's ecological importance is reflected by the number of species catalogued to date within its boundaries (fish: 263, amphibians: 41, reptiles: 113, birds: 463, mammals: 132 ([MMA, 2016](#))) and the fact that it links the Amazon and the La Plata Basins, providing a biogeographical corridor for certain species of flora and fauna between the two largest river basins in South America.
- 1.5 The protection rate in these three biomes is low compared to other biomes in Brazil whose average protection rate is 16%. Aware of their biological importance, Brazil

has committed to increasing their protection, aiming to protect at least 17% of the Caatinga, Pampa and Pantanal through protected areas. Currently, levels of protection are 7.5%, 2.7%, and 4.6%, respectively. In the Caatinga and Pampa, sustainable use protected area category predominate (for these two biomes combined, 84% of the area is under this protection category), while in the Pantanal, 64% of PA is in the full protection category.

- 1.6 Limitations are also found in PA management. Of the 1,979 conservation units established in Brazil, 1,189 are the responsibility of the public sector, depending for their financing on governmental budget and international aid. Allocated budgets tend to be insufficient for cover operating and investment costs, resulting in scarcity of infrastructure, equipment, maintenance, staff and other services. The MMA estimates an annual funding gap of nearly US\$29 million per year for the PA included in this project. These deficiencies result in limited capacity to prevent and combat illegal use of the resources protected in each conservation unit; in time, they have given way to invasions and other illegal occupation or use of those territories. A comparative evaluation of the management effectiveness of protected areas, implemented by ICMBio/WWF in 2005-06 and 2010 (Protected Areas Management Effectiveness Information Module - RAPPAM), whose sample included PA in the two of the three biomes, found a medium 48% effectiveness overall, and showed low scores for specific aspects of management, such as shortage of human and financial resources and a general lack of thorough communication and information sharing. Using GEF's management effectiveness scorecard the PA included in the project obtained an average 41 score (out of 100).
- 1.7 These deficiencies in management effectiveness and budgetary restrictions carry broad directives towards the needs to strengthening conservation unit management capabilities, as well as adequate planning and funding to undertake core activities such as elaboration or revision of management plans and their implementation, including public use programs, biodiversity monitoring, species and habitat preservation, research and sustainable use of specific resources according to the pertinent management category. In particular, the integration of sustainable financing plans into general management plans, would help reduce the impact of budget shortages. Additionally, participatory management is required to provide conservation units with protection against encroachment from urban and agricultural sprawl. The impact of these types of activities on the effectiveness of protected area has been recently documented by the GEF's Independent Evaluation Office.
- 1.8 Adding to these low levels of critical ecosystem protection and weak protected area management, are the significant anthropic pressure these ecosystems are facing. In the Caatinga, approximately 27 million people live within the region, most of them in socio-economic conditions that result in a significant dependency on natural resources for sustenance and fire wood. The illegal and unsustainable consumption of fire wood, for both domestic and industrial purposes, together with overgrazing and conversion of natural areas to pasture and agricultural land has led to the deforestation of 46% of the biome's total area.
- 1.9 In the case of the Pampa biome, its natural grasslands are a source of forage for around 18 million animals, mainly cattle and sheep. The introduction and progressive expansion of monocultures and exotic species-based pastures have contributed to a rapid degradation and degeneration of natural Pampa landscapes: in 2002 an estimated 41.3% of natural areas remained intact, compared to 36% in

2008. An aggravating factor is the sandy texture of the soil that makes the soils highly susceptible to water and wind erosion: inappropriate human activities have led to intense soil degradation, which in turn has contributed to losses of both biodiversity and socio-economic opportunities.

- 1.10 Despite its low level of legal protection, the Pantanal plain is still relatively well preserved. Based on 2009 satellite imagery, the Pantanal biome retained 83.07% of its vegetation, having lost 15,31% of its area to deforestation ([MMA, 2012](#)). In contrast, the original vegetation in its plateaus has suffered more severe reduction, with about half of the original area having been deforested ([Sanchez, 2009](#)). Deforestation is linked to two principal economic activities in the Pantanal: cattle ranching and mining. Other key activities of the Pantanal economy are tourism and fisheries, with ecotourism and sport fishing being the prime tourism segments.
- 1.11 Despite drawbacks from weak management, protected areas are an effective tool to reduce the impact of deforestation. Empirical evidence demonstrates their effectiveness, though more recent studies which control for the nonrandom siting of PA suggest a more moderate success than traditional simple inside-outside comparison of PA impacts on land use. A recent *World Development* special issue devoted to forests, livelihoods, and conservation ([Wunder, Angelsen and Belcher, 2014](#)) highlights the importance of this emerging trend to control for systematic location differences when assessing the impacts of protected areas, including whether they alleviate or exacerbate poverty. The thin but quickly growing body of evidence using such approaches suggests that on average, even after controlling for nonrandom siting, protected areas are in fact effective in reducing deforestation, although substantially less effective than indicated by a simple inside-outside comparison. For example, using a global sample, ([Joppa and Pfaff, 2010](#)) find that protected areas stem deforestation in three quarters of the 147 countries in their sample, but typically by less than half the amount that an inside-outside comparison would suggest. ([Nelson and Chomitz, 2011](#)) find that in Latin America and the Caribbean as a whole, strictly protected areas that prohibit all extractive activity reduce fire incidence (a proxy for tropical deforestation) by 3% to 4%, multiuse protection reduces it by 5% to 6%, and protected areas in indigenous areas reduce it by 16% to 17%. ([Andam et al., 2008](#)) find that protected areas in Costa Rica reduce deforestation by 10 percentage points. And in northern Thailand, Sims (2010) finds that protected areas cut deforestation by 7 to 19 percentage points.
- 1.12 Of concern also, is the effect of PA on local communities, as in many instances, communities may be faced with restrictions over use of resources when PA are created. An emerging literature also examines protected areas' effects on local communities, controlling for their preexisting characteristics. ([Andam et al., 2010](#)) find that protected areas reduce poverty by 1.27% in Costa Rica and by 7.9% in Thailand. In the case of Costa Rica, poverty was measured using a poverty index at the community level, while in Thailand poverty was measured using the poverty headcount ratio at the subdistrict level. Likewise, ([Robalino and Villalobos, 2010](#)) find that nonagricultural wages earned close to parks in Costa Rica are higher only for people living near tourist entrances. ([Canavire and Hanauer, 2013](#)) find mixed results for Bolivia, depending on the socioeconomic indicator. Finally, ([Clements et al., 2014](#)) assess the impact of two protected areas on the welfare of households in Cambodia. They find that compared to households in buffer zones, those inside

protected areas are worse off, because they had worse access to markets and social services. However, when compared to a matched sample of households in similarly remote sites, those inside the protected area are better off than those outside the park, because of better and more secure access to land.

- 1.13 Despite their elevated socio-environmental importance, the three biomes have, historically, received relatively little conservation effort compared to other forest biomes in Brazil ([Overbeck G.E., et al., 2007](#)), and the efforts applied have not been extensive and rigorous enough to ensure effective conservation, restoration and sustainable management in these biomes. Currently, principal issues are: the limited extent of existing protected areas; the state of degradation of habitat and carbon stocks in conservation units and adjacent areas; and land use practices that increase the risks of wildfires and losses in ecosystem services and biodiversity, including endangered species of fauna and flora.
- 1.14 Sustainable management of these biomes also depends on the ability of the protected area system to involve local communities living within the limits of existing or proposed protected areas. In the three biomes there are indigenous and traditional populations whose rights are protected under the law, and who must be integrated under the conservation objectives to ensure sustainability of the effort. For areas not yet under protection, there are also settlements of populations not protected under the law, which will nevertheless need to be considered at the time of establishing the management category, limits and conditions under which such new areas would operate (see Environmental and Social Safeguards section below).
- 1.15 **Priority areas for protection in the three biomes.** The MMA, responsible for the coordination of the Brazilian National System of Conservation Units (SNUC), has made a selection of priority areas to be included under new Protected Areas for each of the three biomes. Working in coordination with State-level Secretariats of Environment, the MMA has targeted: (i) 1,428,764 ha in the Caatinga Biome; (ii) 312,822 ha in the Pampa Biome; and (iii) 868,905 ha in the Pantanal Biome. Of these, approximately 1M has have been targeted as the focus of the present proposal (400,000 ha of Caatinga and 300,000 ha each of Pampa and Pantanal). Once these new Protected Areas are established, the percentages of coverage for each biome are targeted to be: Caatinga 8.1%, Pampa 4.5% and Pantanal 6.6% ([CBD, 2010](#)).
- 1.16 The process selecting existing PA consisted of a stepwise multiple-criteria analysis, that assessed, among others, the following criteria: (i) the existence of threatened species in the area; (ii) the need for investments for equipping the protected area; (iii) interest and human and financial capacity to implement project activities; and (iv) the likelihood of establishing working partnerships with local communities. The exercise resulted in the preliminary choice of: (i) 1,493,999 ha in the Caatinga biome; (ii) 339.916 ha in the Pampa biome; and (iii) 333.521 ha in the Pantanal biome.
- 1.17 **Government Strategy.** In addition to the need to increase protection of priority ecosystems and its biodiversity, by both creating new PA and improving the management effectiveness of current PA, the government strategy includes critical actions to deal with degraded landscapes, fire and threatened species management.

- 1.18 **Deteriorated landscapes within priority areas.** Degradation of natural vegetation is derived mostly from man-made factors including deforestation, fires and introduction of invasive alien species. In particular, deforestation for agriculture places pressure on PAs, fragmenting landscapes and reducing the viability of flora and fauna communities. Restoration of degraded areas can mitigate the effects of fragmentation by increasing connectivity and reducing the extent of forest border areas, and thus the incursion of pioneering species.
- 1.19 **Biome-appropriate fire management.** All three biomes are subject to wildfires related to land-use practices, but the nature and frequency of wildfires differs in the three biomes. Data from INPE's *Programa Queimadas* monitoring of hot spots in these biomes show high year-to-year variability with long term trends either stable or slightly decreasing. Fires in the Caatinga are most commonly of anthropic origin: to clear land, force vegetative resprouting or assist with firewood collecting, or simply the result of negligence ([Funch, 2007](#)). Yet, the use of fire degrades both vegetation and soils, thus being of short-lived benefit to those who employ it and resulting in considerable losses in surface and sub-soil carbon stocks. In contrast, the Pampa plains evolved under the influence of fire and adapted to these disturbances; the native grassland species have developed mechanisms to resist fire and/or regenerate quickly ([UFRGS, 2015](#)). However, with the increasing conversion of native vegetation, this coevolved protection is being lost. Finally, the Pantanal, being a wetland, experiences only occasional surface fires (caused by lightning, especially at the beginning of the rainy season), though it is quite commonly subject to subsoil fires in the peatland regions. Given these natural and anthropic differences, fire management – in order to be effective and cost-efficient – has to be tailored to the specific context in each biome.
- 1.20 Considering current practices in the biomes, it also becomes clear that fire management has to become integrated and inclusive: Integrated, in the sense that the protocols and practices (reducing dry biomass, prescribed burns, firebreaks etc.) to be established for each biome should consider institutional and structural aspects, socio-cultural elements related to the use of fire as a land management practice, and the effect of the fire management regime on biodiversity, ecosystem services and carbon stocks. And inclusive, in the sense that integrated fire management in the three biomes has to move beyond the boundaries of preservation areas and include local communities in reducing the risks of devastating large-scale wildfires.
- 1.21 **Management of threatened species of flora and fauna.** The challenge of managing threatened species of flora and fauna in Brazil, one of the world's 17 megadiversity countries ([Mittermeier, Robles-Gil, Mittermeier, 1997](#)), is embodied by a few numbers: in 2015, the total number of *known* native species in Brazil was estimated at over 148,000 ([MMA, 2015](#)), which in turn is thought to be less than 10% of the country's total biota ([Lewinson & Prado, 2005](#)). In 2014, 3,286 (2%) of the known native species of flora and fauna were officially recognized as threatened ([MMA, 2014](#)) - almost certainly only a fraction of the actual number, and likely to increase with increasing pressures from land-use conversions and expanding socio-economic activities. But already the 3,286 recognized species pose a formidable challenge in terms of how to plan, monitor and implement effective actions for reducing their extinction risk in line with Brazil's 12th National Biodiversity Targets 2011-2020 under the Convention on Biodiversity ([MMA, 2015](#)).

- 1.22 The fundamental planning tool for this task is the National Action Plan for the Conservation of Species Threatened with Extinction (PAN), that defines *in situ* and *ex situ* actions for the conservation and recovery of threatened species over a five-year time horizon. Between 2009 and 2016, the number of threatened species with a PAN rose from 30 to 1011; a significant increase, but still over 2000 PAN's short. In the three biomes covered by this project, only 35 species have PANs, from a total of 391 threatened species found in these biomes. With a view to rapidly scaling up planning efforts, the MMA together with ICMBio and the JBRJ established a methodology for the development of territorial PANs, rather than species-specific PANs as they were more commonly developed until now. These territorial PAN's define conservation and recovery actions for threatened species found within the delimited geographic area, and promote the collaboration of key actors within that area to achieve more integrate and agile implementation of actions [\(ICMBIO, 2012\)](#).
- 1.23 **Experience in the sector.** Two Bank operations are particularly relevant to the technical and operational design of the project: Recovery and Protection of Climate and Biodiversity Services in Brazil's Southeast Corridor (GRT/FM-14550-BR), approved in 2014; and Serra do Mar and Atlantic Forest Mosaic System Socioenvironmental Recovery (2376/OC-BR), approved in 2010. Lessons learned from these operations are summarized below.

Table I-1. Lessons Learned

Issue	Description	Application
Establishment of new PA in territories where indigenous or traditional populations are present	There is a high level of risk associated to the establishment of new PA in territories where indigenous or traditional populations are present. In spite of the careful compliance with Bank Operating Policies, there is risk of significant delays during project execution.	Involuntary resettlement has been included as an exclusion criterion in the selection of new PA to be established.
Weight of social and cultural conditions in planning and implementation of conservation actions	Engagement of populations associated to PA results in project appropriation and improved project design; project activities fostering social communication and cultural expression have enhanced project benefits and communities' commitment to project success (2376/OC-BR).	A full component has been added in the project to facilitate and enhance community participation (Component 5).
Complexity of project execution structure	Projects that require the involvement of multiple levels of government (Federal and State in this case), particularly in the case of Brazil, require significant levels of support at the coordination and administration levels, which implies relatively high costs and involves the participation of third parties (GRT/FM-14550-BR).	The MMA designated a private organization to act as PEA. Administrative costs reflect the complexity of this task; a cap has been established based upon recommendations from the Bank.

- 1.24 **Conceptualization of the project.** The GEF Terrestre project supports GEF's Global Operational Strategy by contributing to the long-term protection of Brazil's globally important ecosystems. It takes actions required for expanding and strengthening the country's protected area system whilst enhancing knowledge and effective protection of endangered wildlife. In coherence and coordination with other initiatives, the current proposal aims at consolidating the SNUC and the improved protection of endangered species. The project is in line with the GEF Focal Area Strategies on biodiversity, climate change mitigation and land

degradation as it aims to: (i) improve management effectiveness of existing and new protected areas and greater coverage of unprotected ecosystems and threatened species; (ii) restore and enhance carbon stocks in forests and non-forest land; and (iii) develop and apply good management practices in protected and productive areas.

- 1.25 The project aims at tackling the principal limitations affecting Brazil's efforts to protect the Pantanal, Pampa and Caatinga biomes described in preceding sections, by gathering and generating the information and tools necessary to strengthen the SNUC and promote sustainable management of adjacent forest and non-forest lands. Project activities will be based on a unit-specific assessment of protected area effectiveness and endangered species conservation status, as well as on the identification of main threats and conservation opportunities. The issue of habitat fragmentation in the three biomes will be addressed through new mosaic approaches, combining the establishment of protected areas with sustainable management in surrounding buffer zones and productive landscapes. Improved management of PA (newly created and existing) will be complemented by protocols for advanced fire management, land restoration tools and action plans for *in situ* biodiversity monitoring, thus ensuring the improvement of degraded landscapes and reducing the impact of natural and manmade events on ecosystems and endangered species. To promote private landowner and local community participation in implementing management protocols and tools in the areas surrounding PAs, the project will provide public awareness and training on sustainable practices which can provide some direct benefits for landowners.
- 1.26 **Strategic Alignment.** The program is consistent with the Update to the Institutional Strategy (2010-2020) (AB-3008) and is aligned with the cross-cutting issues climate change and environmental sustainability. The project will contribute to strengthening the region's ability to address this cross-cutting issue by increasing the forested surface under protection, reducing CO₂ emissions, improving management of forest and non-forest areas, and strengthening the protected areas system and its management capabilities. According to the [joint MDB approach on climate finance tracking](#), 100% of total IDB funding for this project result in climate change mitigation and adaptation activities. This contributes to the IDBG's climate finance goal of 30% of combined IDB and IIC operational approvals by year's end 2020. Additionally, the program will contribute to the Corporate Results Framework 2016-2019 (GN-2727-6) (CRF) by generated benefits aligned with the following CRF Country Development Results Indicators: (4) reductions of CO₂ emissions with support of IDBG financing (annual million tons CO₂ equivalent) and (11) beneficiaries of improved management and sustainable use of natural capital.
- 1.27 The project is also aligned with the Bank's Country Strategy for Brazil 2016-2018 (GN-2850) as the Strategy places climate change as one of the cross-cutting issues supporting the policy objectives identified in the Update to the Institutional Strategy referenced above; the Bank intends to improve the debate to reduce the risks associated with the issue of climate change in Brazil by supporting institutional strengthening of the various levels of government, creating innovative mechanisms and instruments to leverage national and external resources to reduce carbon emissions, supporting the production of strategic knowledge for decision-making; boosting cooperation initiatives among the countries in the region to improve climate risk mapping and management, and supporting public-private

best practices and strategies to expand investments aimed at reducing greenhouse gas emissions.¹ The CS also mentions institutional strengthening and modernization of public sector management system as a strategic area of support, to which the project contributes through support given to improving management in the PA sector.² Finally, the operation is consistent with the Environment and Biodiversity Sector Framework Document (GN-2827-3), by contributing to improving environmental performance through policy frameworks, governance, and management instruments, as well as with the Climate Change Sector Framework Document (GN-2835-3), by supporting the use of international climate funding to support mitigation activities.

B. Objective, Components and Cost

- 1.28 **Objective.** The general objective of the project is to contribute to the long-term viability of threatened priority species, avoid carbon emissions and increase forest and non-forest area under sustainable management practices in three Brazilian biomes. The specific objectives are: (i) expand coverage and effectiveness of the protected areas system in those biomes (Components 1 and 2); (ii) improve management of priority habitats and priority species (Components 3 and 4); and (iii) foster community-driven sustainable use practices in productive areas associated to the PA system (Component 5).
- 1.29 **Component 1. Creation of New Protected Areas (US\$2,830,265).** This component fosters an improved representativeness of the SNUC by supporting the legal protection of ecologically important but currently unprotected areas within each of the three target biomes, and exploring sustainable financing options for newly created areas. Specifically, the component will finance the following activities: (i) biological, soil, socio-economic and land-titling assessments; (ii) public consultations and participation events; (iii) elaboration of legal documents to establish the PA; (iv) for units with tourism/visitation potential, basic outreach and information materials; and (v) for units with sustainable use provisions, analyses related to sustainable development of natural capital in the conservation unit.
- 1.30 **Component 2. Management of Existing Protected and Adjacent Areas (US\$12,736,192).** This component aims to increase protected area management effectiveness by strengthening planning, monitoring and implementation capacity with PA's; promoting biome-appropriate fire management, and fostering biodiversity and ecosystem services-based management practices to benefit communities adjacent to PA's. It consists of three sub-components:
- a. **Effective Conservation Management.** This sub-component will finance: (i) preparation and implementation of planning tools, including management and monitoring plans and sustainable financing plans; (ii) selection and implementation of priority actions to improve management effectiveness; (iii) biodiversity monitoring programs and equipment; and (iv) together with parallel financing, the project will finance the implementation of priority actions such as control of alien species; basic infrastructure for conservation, public use and surveillance, including demarcation, signage, trails and ranger stations; surveillance and equipment; and basic outreach and information

¹ CS places climate change adaptation and mitigation as direct contributor to improved productivity and competitiveness in most economic and public services sectors (See ¶3.16, ¶3.21, ¶3.33, ¶3.35).

² See ¶3.58 and ¶3.60 in the CS.

materials for visitors. Besides partially financing such priority actions, parallel financing will also provide remote sensing data to support these activities.

- b. **Fire Management.** This sub-component will finance the implementation of an Integrated Fire Management program, including the following activities: (i) fire prevention, monitoring and control activities within PA's; (ii) community outreach and collaboration; (iii) fire management protocols; and (iv) outreach and training to promote implementation of fire management protocols in areas adjacent to PA's.
- c. **Sustainable Management of Productive Landscapes.** This sub-component aims to reduce potential negative impact of some economic activities on biodiversity based on local ecosystem services. Three areas will be selected to develop land use plans or similar instruments that regulate local community's natural resources uses in order to conciliate economic activities and biodiversity conservation. This sub-component will finance the following activities: (i) land-use plans for prioritized sustainable use in PA related to Biodiversity and Ecosystem Services (BES); and (ii) BES-based business plans, to be developed and implemented with communities adjacent to PA's.

1.31 **Component 3. Restoration of Deteriorated Areas (US\$6,572,360).** This component will contribute to improving landscape connectivity, both within PA's and with surrounding areas by providing information essential for discerning prioritization of restoration efforts and by thereafter restoring prioritized areas. As such, the component will finance: (i) analytical decision-making instruments and monitoring protocols for Caatinga, Pampa, Pantanal and Cerrado;³ (ii) restoration maps for the three target biomes; (iii) implementation of restoration plans for selected areas of degraded landscapes, including community engagement; and (iv) land-use plans for prioritized sustainable use protected areas, incorporating BES valuations. Parallel financing will finance restoration activities by private land owners and activities to prevent, control and combat desertification in the Caatinga biome.

1.32 **Component 4. Monitoring of Flora and Fauna Extinction Risks (US\$5,660,530).** This component will promote more effective management of threatened species in the three biomes through an innovative planning approach, targeted risk-reduction activities, effectiveness evaluations and improved access to information. The component will finance the following activities: (i) territorial PAN⁴ developed for the three biomes; (ii) implementation of threatened species guidelines planned in PAN in the three biomes; (iii) monitoring of implemented PANs; (iv) effectiveness assessment of selected PA for the conservation and recovery of threatened species; (v) assessment of threatened species extinction risks; and (vi) consolidation of biodiversity information portal. Scientific analysis for the territorial PAN, as well as the implementation of priority conservation actions for selected threatened species as well as an update of extinction risks and threats to priority species, will be financed both, with GEF resources and parallel financing.

³ These planning instruments include the Cerrado biome due to its strong ecological and hydrological connectivity to the Caatinga and Pantanal biomes.

⁴ National Action Plans for the conservation of threatened species, instituted by the "Programa Pró-Espécies" (art. 8º Portaria MMA 43/2014), identify appropriate management instruments needed to curb existing threats to specific species. GEF Terrestre will adapt PANs to include a territorial aspect, where more numerous species and their habitat can be included in the conservation effort.

- 1.33 **Component 5. Integration and Community Relations (US\$1,086,651).** This component will support the other four components by fostering effective collaboration between different levels and areas of government, as well as communication and participation programs designed to engage local communities in the creation and effective implementation of conservation activities. This component's activities will complement the community-oriented activities specified in previous components. Specifically, it will finance: (i) seminars to foster institutional collaboration; (ii) technical guidance and workshops for participatory communication with affected communities; (iii) biodiversity and ecosystem services based business opportunities training for women head of households; (iv) production and dissemination of communication materials to assist local engagement; and (v) implementation of conflict resolution mechanisms. Potential beneficiaries in terms of number of inhabitants in local communities adopting environmental friendly practices have been estimated approximately as follows: (i) Pampa 88,000 persons; (ii) Pantanal 62,000 persons; and (iii) Caatinga 114,000 persons – counting only those living inside existing PA.
- 1.34 **Cost.** The total cost of the project is US\$191,776,491, to be financed with US\$32,621,820 from the IDB/GEF, and parallel financing of US\$159,154,671 from several Federal and State-level sources.⁵ Parallel financing will support investment in the creation and management of protected areas, remote sensing and mapping data, restoration of degraded landscapes, elaboration of land use plans, evaluations of extinction risks and implementation of priority mitigation measures, as well as a program - *Bolsa Verde* - to support communities in the implementation of environmental practices (see Annex II for details).

Table I-2. Cost and Financing of the Project (in million US\$)

Investment Category	IDB/GEF	Parallel financing*	Total	%
I. Direct Costs	28.89	159.15	188.07	98%
Component 1. Creation of New Protected Areas	2.83	9.13	12.18	
Component 2. Management of Existing Protected and Adjacent Areas	12.74	98.31	111.01	
Component 3. Restoration of Deteriorated Areas	6.57	24.72	31.10	
Component 4. Monitoring of Flora and Fauna Extinction Risks	5.66	20.00	25.77	
Component 5. Integration and Community Relations	1.09	6.99	8.02	
II. Project Administration	3.73	0.00	3.69	2%
Administration & Coordination**	3.26	0.00	3.26	
Monitoring, evaluations and audits	0.47	0.00	0.43	
Total	32.62	159.15	191.77	100%
Percentage	17%	83%	100%	

* The project will benefit from US\$159.15 million in parallel financing provided by government institutions, the state governments in which the project will work, and KfW Development Bank.

** Administrative costs are not to exceed 10% of total GEF financing.

⁵ MMA; ICMBio; Botanical Garden of Rio de Janeiro; State Secretariats of the Environment in the States of Bahia, Ceara, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Paraíba, Pernambuco, Piauí, Rio Grande do Sul e Rio Grande do Norte. The KfW *Entwicklungsbank* Development Bank will also contribute investment resources for this purpose. Specific investment and in-kind commitments from each of these sources will be detailed in the Technical Cooperation Agreement to be signed between the MMA as main project beneficiary, the FUNBIO, and the other operational and strategic partners whose contributions are listed here.

C. Key Results Indicators

- 1.35 The main expected outcomes of the project are: (i) increase of extension of conservation priority areas in each biome that are legally protected, with view to meeting the following national and internationally agreed targets: Caatinga 8.1%; Pampa 4.5% and Pantanal 6.6%; and (ii) improved effectiveness of conservation of biodiversity, ecosystem services and endangered species of flora and fauna in existing protected areas and productive landscapes measured by management effectiveness scores, with a target of achieving scores or 60 or higher (see also Annex II).

D. Economic Evaluation

- 1.36 As discussed earlier, protected areas provide a variety of ecosystems services, including biodiversity benefits. Ecosystem services provided by the three biomes targeted by this project include: (i) water supply quality and quantity for human consumption and hydroelectric energy generation derived from savannah, wetlands and grasslands; (ii) hydrologic and nutrient cycle regulation by large water masses such as Pantanal; (iii) carbon sequestration by forest and non-forest ecosystems; (iv) soil erosion control; and (v) forest products and by-products, natural forage and medicinal plants. Protected areas have an economic value as a result of the provision of these services. However, given that no formal markets exist for the services, price observations for the services are not possible, though different economic valuation techniques are available to obtain estimates of the economic value of these services. Using previous studies that value one or more ecosystem services in the three biomes, whose results can be used as proxies for those services, Arriagada (2016) calculates the annual total economic value of the ecosystem services provided by the protected areas included in this project as US\$278 million for Caatinga, US\$397 million for Pampa and US\$2.8 billion for Pantanal ([Economic Viability Analysis Link](#)).
- 1.37 An economic evaluation was conducted to assess the viability of establishing new PA and enhancing conservation, restoration, and sustainable management of existing PA in the Caatinga, Pampa and Pantanal, considering a social discount rate of 12%. Overall, the Net Present Value (NPV) of BR-G1004 is greater than US\$469 million. The Internal Rate of Return (IRR) is robust at 44%. Benefits from establishing new PA amount to US\$520 million. In addition, benefits from an effective conservation management and restoration of deteriorated areas amount to US\$91 million. Furthermore, the economic benefits of avoided deforestation as a result of new PA is US\$20 million. Sensitivity analyses were also conducted and, under the most conservative assumptions, the NPV of benefits is still US\$240 million with an IRR of 21%, reflecting that BR-G1004 is a viable investment from an economic standpoint.

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing Instruments

- 2.1 This project is structured as an investment grant operation financed with resources from the GEF, to finance goods, services and consulting services, operational costs, and scholarship support.⁶ Use of the GEF resources will be supervised by the IDB as a GEF Implementing Agency for the project. (Parallel financing activities

⁶ Eligible activities and the eligibility criteria for scholarship support will be detailed in the OMP.

will be accompanied by FUNBIO, but execution is the responsibility of each project partner, in accordance with their respective commitment letters – see also [OEL 11](#)). The disbursement period will be five (5) years as of the signature date of the Non-Reimbursable Financing Agreement between IDB and FUNBIO, in accordance with the following preliminary financial plan:

Table II-1. Disbursements Schedule (US\$)

Source	Year 1	Year 2	Year 3	Year 4	Year 5	Total
IDB/GEF	3,725,914	5,096,639	7,918,089	9,253,814	6,627,364	32,621,820
%	11.4%	15.6%	24.3%	28.4%	20.3%	100%

B. Environmental and Social Safeguard Risks

- 2.2 The project has been classified as Category “B” in accordance with directive B.3 of the Environment and Safeguard Compliance Policy (OP-703). During the preparation of the project, an Environmental and Social Impact Assessment ([ESA](#)) was conducted and confirmed that, although most of the project’s environmental and social impacts are likely to be positive, there are potential negative impacts to those indigenous, traditional and vulnerable communities who live within the PAs caused by the restrictions of access and use of natural resources, which could potentially result in economics displacement and change of livelihood conditions. The resistance from local communities to new conservation units as well as potential conflicts and frustration of expectations by local communities were also identified as potential risks. Concerning the key environmental impacts, most of them are local, short term and of limited significance, which can be effectively mitigated.
- 2.3 As required by the directive B.5, an Environmental and Social Management Plan ([ESMP](#)) was prepared to detail the proposed measures to avoid, minimize, compensate and mitigate the key social and cultural impacts of the project. As its main mitigation strategy, the project will not finance or continue financing activities related to the declaration or implementation of new conservation units with “integral protection status” whose creation is determined to entail involuntary physical resettlement. With respect to potential economic and cultural impacts, the ESMP proposes as mitigation measures the development of socioeconomic alternatives and income generation activities. These will be designed through participatory process with the affected population that will take place as part of the Integration and Relation with Communities process. This considers the various forms of social participation in the creation, implementation and management of conservation areas stipulated by Brazilian law, and complements them with specific recommendations for the execution of the activities of the present project. The ESMP sets out the procedures and conflict resolution mechanisms that must be followed with respect to determining and avoiding potential physical resettlements and impacts on indigenous, traditional and other vulnerable populations. FUNBIO will implement and be responsible for the management of this mechanism throughout the project’s execution period.
- 2.4 As required by directive B.6 for Category “B” operations, affected parties were consulted during a public event organized during the preparation and review of the ESA and ESMP, when different stakeholders representing communities from the three biomes received appropriate information in a timely manner that allowed them to be meaningfully consulted, to form an opinion and to comment on the

proposed project's design.⁷ Both the ESA and the ESMP have been made available to the public as required by the Bank's Disclosure of Information Policy (OP-102). The results of the consultation process, that will be kept ongoing during execution, have been included in the ESA and ESMP as well as published on the websites of the Bank, government beneficiary (MMA) and EA (FUNBIO).

C. Fiduciary Risk

- 2.5 An institutional evaluation of FUNBIO's capacity to plan, organize, execute and control the program, applying the Bank's SECI methodology, was conducted during project preparation. The assessment concluded that the level of fiduciary risk was low. The principal recommendation of the assessment is to carry out an independent audit that is exclusively focused on the activities of the GEF Terrestre, rather than include the project in FUNBIO's general annual audit. This has been incorporated in the implementation plan (¶3.8) and the budget (¶1.34).

D. Other Key Issues and Risks

- 2.6 A Risk Assessment was prepared for the project and the following risks identified: (i) macroeconomic and fiscal sustainability: increase in poverty-driven habitat degradation, low prioritization and/or political support for conservation measures, including reduced parallel financing, due to macroeconomic situation; (ii) public management and governance: insufficient coordination among participants could cause delays in execution; (iii) environmental and social sustainability (see ¶2.2); and (iv) development: potentially low interest or participation by the private sector that could hinder implementation of key activities. All identified risks are being mitigated through: (i) project design provisions, such as investing in sustainable financing plans for PAs and dedicating a Component 5 to foster involvement of local communities and private sector in the project; (ii) adoption of clear execution guidelines - the Operational Manual and ESMP establish clear criteria for engagement with the communities and establishing conflict resolution mechanisms; and (iii) complementary legal agreements between FUNBIO and federal and state-level partners to solidify commitments and responsibilities.
- 2.7 **Participation of women.** The proposed project is consistent with the mandate established in the Bank's Gender Equality in Development policy (document OP-761) in the sense that activities included in the project will contribute to empowering women in project intervention areas. The project includes workshops on developing BES based business opportunities for women head of households and is linked to Component 2's promotion of these business ventures. Additionally, the following project activities will benefit women particularly: (i) women will be encouraged to participate actively in project-related public consultations through adequate and timely information; (ii) participation of women associations and individuals in PA planning and management will be fostered, placing emphasis on their participation in Consultative Committees established to support decision-making in PA; and (iii) fire control benefits will impact positively on women, as fire events limit the availability of firewood for household consumption,

⁷ As the preparation of the operation progressed and deeper analysis were available its environmental and social category changed, from Category "C" to Category "B". This change of category triggered a Special Safeguards mission to ensure compliance with the social and environmental safeguards policy of the Bank, although this mission was not called an Analysis mission. The required environmental and social documents were disclosed prior to this Special Safeguards mission.

which is a woman's responsibility. Women participation will be monitored and reported under Component 5.

- 2.8 **Climate Change Risks.** Regarding the potential for increased GHG emissions from possible leakage outside of the project boundaries, it is not anticipated that this will constitute a risk in the present project. The GHG reductions sought by the project will be attained through applying improved fire management protocols and sustainable forest management practices in collaboration with private landowners. While better land management in the three fragile target biomes is anticipated to benefit landowners in the medium- to long-term (especially through a reduction in uncontrolled fires), the project will also raise awareness to landowners concerning sustainable practices. As such, the project should neither directly nor indirectly incentivize leakage outside the project area.
- 2.9 **Sustainability Risks.** Bearing in mind the sustainability challenges faced in PAs (¶1.12), the sustainability of the interventions financed are a concern that needs attention through project execution. The program support long-term sustainability of the investments in two main ways: (i) by financing activities that seek to access and maximize funding sources for a steady and sufficient long-term flow of resources for PA management, including the delineation of a long-term strategy based on the definition of baselines (funding status and estimates of the necessary investment) and the mapping and prioritization of funding sources; and (ii) through investments in capacity building, as well as in management plans and protocols for fire management activities, environmental restoration and elaboration of territorial action plans for endangered species, that promote more effective long-term conservation approaches.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of Implementation Arrangements

- 3.1 **Executing Agency (EA).** The EA for the program is the *Fundo Brasileiro para a Biodiversidade* – FUNBIO, a not-for-profit private sector entity specialized in the fiduciary and operational management of environmental projects.⁸ FUNBIO will be responsible for the technical, financial and fiduciary execution and administration of the Project including, among others: (i) operating the accounting system for the Project's financial resources; (ii) implementing and executing the planning and monitoring systems; (iii) executing all procurement activities for goods and services contained in each of the Project's components, and ensuring their effectiveness; (iv) implementing the necessary control systems to ensure the efficiency and transparency in the execution and management of the project's physical and financial resources; (v) opening a bank account for the exclusive administration of the IDB/GEF resources; (vi) preparing the disbursement requests and submitting them to the Bank, along with all the supporting documentation; (vii) in coordination with the Beneficiary, ensuring the quality of the goods and services provided by contractors and vendors; (viii) preparing physical and financial progress reports for the project in accordance with the project's monitoring and evaluation arrangements; (ix) ensuring compliance with Bank policies and provisions of the

⁸ FUNBIO was founded in 1996 as a financial mechanism for the implementation of the UN Convention on Biological Diversity (CBD) in Brazil. Since its foundation, FUNBIO has signed management contracts equivalent to US\$ 579 million, supporting 245 projects from 170 different organizations (Source: FUNBIO).

Non-Reimbursable Financing Agreement to be executed between the Bank and FUNBIO; and (x) monitoring and reporting on parallel financing.

- 3.2 **Project Execution Mechanisms.** Consistent with the results of the institutional capacity assessment, FUNBIO will execute the project using its internal administrative, technical and overall organizational and internal control capabilities. To strengthen its technical execution function, FUNBIO will execute the project through a Project Management Unit (PMU) to be created within its organizational structure and will allocate the necessary human and technical resources needed for project execution. The project will use FUNBIO's existing systems, especially *Sistema Cérebro*, for integrated project planning, procurement, financial administration, reporting, and monitoring, while ensuring compatibility with Bank norms, procedures and control systems. Given FUNBIO's limited experience with Bank operations and the complexity of the current project, **the establishment of the PMU within the organizational structure of FUNBIO and the selection of, at minimum, the technical team specified in ¶3.3, is a special contractual condition prior to the first disbursement of IDB/GEF resources.**
- 3.3 The PMU at FUNBIO will include four full-time technical staff with exclusive dedication to the project: (i) one general coordinator of project activities; (ii) one environmental analyst to support project management; (iii) one administrative assistant to project management activities; and (iv) one technical support in conservation planning and management. Costs for these four full-time technical staff, which are direct project costs, will be covered by the project (up to 3.60% of the of IADB/GEF resources). FUNBIO will make available a multidisciplinary team of professionals, with partial dedication to the project, to support the PMU activities on an as-needed basis. This team will consist at minimum of the following specialties: social and environmental safeguards, financial management, procurement and legal support specialists, as well as support functions such as communications, internal audit and data management. Additional part time technical staff (for example, conservation biologist and GIS specialist) will also be provided by FUNBIO. FUNBIO's projects supervisor will devote part of his/her time to the project. FUNBIO will guarantee the presence of its technical/project personnel in the geographic areas of the project, in direct coordination with the project partners, stakeholders and collaborating governmental entities (¶3.5). The administration costs incurred by FUNBIO will not exceed 10% of the IADB/GEF resources and will be paid proportionally to the project's financial execution according to the Bank's applicable policies and guidelines.
- 3.4 **Government Beneficiary.** The Ministry of Environment (MMA) is the direct project beneficiary, as the MMA will receive the goods, services and knowledge products and will benefit from the results from consulting services procured by FUNBIO with IDB/GEF resources. However, no IDB/GEF resources will be received by or channeled to the MMA. MMA will lead the institutional and technical coordination of the relationship among the government institutions participating in the project (¶3.5), including the elaboration and submission of planning and monitoring inputs for FUNBIO. For this purpose, the MMA will create and maintain a Project Technical Coordination Unit (UTCP/MMA) throughout the project's execution, staffed and funded by the MMA. Given the special nature of the implementation arrangements for this operation with the MMA as direct beneficiary and its institutional and technical coordination and FUNBIO as executing agency, and to

minimize execution risks it is necessary to formalize the specific functions and activities to be carried out by MMA and FUNBIO within the project execution and governance scheme. For this purpose, these two entities will sign a Technical Cooperation Agreement, as per the terms and conditions agreed with the Bank, establishing specific arrangements and responsibilities within the project's execution framework. **Evidence of the entry into effect of the Technical Cooperation Agreement between MMA and FUNBIO, on terms and conditions acceptable to the Bank, is a special contractual condition prior to the first disbursement of IDB/GEF resources.**

3.5 **Collaboration with other governmental entities.** FUNBIO will coordinate the project's execution with the following Brazilian federal and state governmental entities, which have agreed to participate and support the project's execution in the geographic or technical area corresponding to their respective legal mandates: (i) ICMBio will contribute and assist FUNBIO in the operationalization and implementation of activities in all project components, particularly those focused on federal conservation areas and surrounding areas; (ii) Botanical Garden of Rio de Janeiro will contribute to the implementation of Component 4 activities related to endangered species of flora; and (iii) the environmental secretariats for the States of Alagoas, Bahia, Ceará, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Paraíba, Pernambuco, Piauí, Rio Grande do Norte, Rio Grande do Sul and Sergipe, will contribute to the implementation of Components 1 and 2 activities focused on their respective state-level protected areas. Each of these entities will support the project, being also recipients of goods, services and knowledge products provided through FUNBIO; no IDB/GEF resources will be received by or channeled to these entities. Given the complexity of the different institutional arrangements and agreements between the different participants of the project, each of these entities will sign a Technical Cooperation Agreement with FUNBIO and the MMA, in order to establish specific arrangements and responsibilities in the framework of the project's execution scheme. The entry into effect of project-specific Technical Cooperation Agreements between FUNBIO, MMA and any strategic partners on terms and conditions acceptable to the Bank is a contractual condition prior to the execution of any activity financed with IDB/GEF resources in their respective States.

3.6 **Operating Manual and Regulations.** Project execution will be regulated by the Operation Manual and Regulations of the Project (OMP). The OMP will establish: (i) detailed execution mechanism; (ii) activities and responsibilities of FUNBIO, the Beneficiary and other collaborating governmental entities; (iii) applicable fiduciary policies, rules and procedures; (iv) planning, financial administration, monitoring, evaluation and auditing requirements; and (v) regulations and procedures governing the technical execution of the project, especially any potential changes, prioritizations or exclusions of pre-selected areas of intervention; the selection of communities, individuals and/or private properties to be directly benefitted by project activities; and the prioritization of implementation actions financed through Components 2 and 4. The Technical Cooperation Agreements to be signed between FUNBIO, MMA and collaborating Federal and State governmental entities will have to be fully consistent with the OMP. Given FUNBIO's limited experience with IDB operations it is necessary to ensure that the rules and procedures governing the Project's execution are in place, therefore **entry into effect of the OMP on terms and conditions acceptable to the Bank is a special contractual condition prior to first disbursement of the IDB/GEF resources.**

- 3.7 **Disbursement, procurement and supervision.** Procurement administration of the project will take place in accordance with established private sector and commercial practices acceptable to the IDB, as per the terms of IDB Procurement Policies (documents GN-2349-9 and GN-2350-9). Use of private sector procurement regulations is warranted due to FUNBIO private sector nature. The procurement of goods and services, including the selection and contracting of consultants with resources from the IDB/GEF will follow the norms and procedures of FUNBIO, as contained in the FUNBIO Procurement Manual. FUNBIO and the Bank have agreed on a "Procurement Plan" for the 18 months of execution. Any change or revision of the Procurement Plan by FUNBIO will be submitted to the Bank for non-objection. The supervision of the procurement function by the IDB will be based on the "ex post" modality. The Bank will disburse the financial resources to FUNBIO based on an initial advance and periodic requests for advance of funds. The disbursements of the project will be subject to ex post supervision by the Bank and by the external auditors.
- 3.8 **Retroactive financing.** The Bank may finance retroactively under the grant eligible expenses incurred by FUNBIO prior to the date of grant approval in consultancies, services other than consultancies and travel related expenditures, up to the amount of US\$700,000 (2.15% of the proposed grant amount), provided that requirements substantially analogous to those established in the grant agreement have been met. Such expenses must have been incurred on or after June 14, 2016, and under no circumstances shall expenditures incurred more than 18 months prior to the grant approval date be included.
- 3.9 **External Audits.** The financial statements of the Project will be subject to annual independent, project-specific audits to be conducted by a firm of external public accountants, acceptable to the Bank, which will be contracted by FUNBIO with IDB/GEF resources specifically for the Project. These external audits must be conducted in accordance with Terms of Reference approved by the Bank and the Bank's norms for the selection and contracting of auditing firms (AF-200). Auditing reports shall be submitted to the Bank within 120 days following the close of the program's fiscal year.
- B. Summary of Arrangements for Monitoring Results**
- 3.10 Project Monitoring and Evaluation (M&E) will follow IDB and GEF procedures. M&E will focus on: (i) project outcomes and impacts as stated in the projects Results Framework; (ii) delivery of project outputs in accordance with the Annual Operational Plan (AOP); and (iii) monitoring of project implementation and performance through periodic project evaluations. Results Framework's outcomes and results associated to BID/GEF funding will be incorporated in the Project Monitoring Report (PMR), while project outcomes and results associated to the financing and parallel financing will be incorporated into the Project Implementation Reports (PIR), to be reported periodically to GEF. The AOP will be used to monitor progress in physical implementation (see also [REL 2](#)).
- 3.11 **Performance evaluations.** A mid-term evaluation will take place after 2.5 years of project execution or when 50% of IDB/GEF contribution has been disbursed, whichever comes first, to cover: (i) progress in the selection, preparation (including population-related issues—and legal establishment of the new PA; (ii) improvements in management efficiency of PA, under the parameters included in GEF evaluation tools; (iii) progress in the application of parallel financing to

implement recovery activities in degraded areas (Component 3) and scientific research in support of monitoring of flora and fauna (Component 4); (iv) progress in the attainment of results associated to enhanced institutional coordination and community participation (Component 5), including progress in the adoption of BES-based business plans developed and implemented with communities adjacent to PA (Component 2); and (v) *pari passu* and coordination of the application of parallel financing.⁹ An adequate Action Plan will be devised to correct identified problems or delays, if any. A final evaluation will take place within the last six months of project execution and will focus on the results and the perceived impact of the project, as well as fulfillment of the project's objectives.

- 3.12 **Impact evaluation.** The project final evaluation will contain its impact evaluation, which will focus on assessing progress towards achieving the project's impact indicators: (i) long-term endangered species population growth –biodiversity indicator; (ii) carbon emissions avoided in all three biomes through creation of new protected areas and good fire management practices and restoration of selected degraded landscapes –climate change indicator; and (iii) increase habitat quality in degraded landscapes –sustainable forest management indicator.

C. Significant Design Activities Post Approval

- 3.13 The following activities remain to be developed as part of project execution: (i) selection of proposed PA to be legally established and operated initially with project financing; (ii) PA-specific communities and family data collection, and (iii) derivation of site-specific baseline information for the climate change impact indicator (carbon emissions). For institutional and technical reasons, it was only possible to establish a 'short list' of likely PA sites. Yet, site-specific community, family and climate change data depends on the final selection of sites. The definitive selection of PA sites will be made during the first 12 months of execution (from time of total eligibility) and the data collected within 18 months.

⁹ *Pari passu*: IDB/GEF 17%; parallel financing 83%.

Development Effectiveness Matrix		
Summary		
I. Corporate and Country Priorities		
1. IDB Development Objectives	Yes	
Development Challenges & Cross-cutting Themes	-Climate Change and Environmental Sustainability	
Country Development Results Indicators	-Reduction of emissions with support of IDBG financing (annual million tons CO2 e)* -Beneficiaries of improved management and sustainable use of natural capital (#)* -Terrestrial and marine areas with improved management (ha)*	
2. Country Development Objectives	Yes	
Country Strategy Results Matrix		
Country Program Results Matrix	The operation is scheduled for CPD 2018 (BR-O0002)	The intervention is included in the 2018 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		The Country Strategy places climate change as one of its cross cutting issues.
II. Development Outcomes - Evaluability		
3. Evidence-based Assessment & Solution	Partially Evaluable	
3.1 Program Diagnosis	5.7	
3.2 Proposed Interventions or Solutions	1.8	
3.3 Results Matrix Quality	2.4	
3.3 Results Matrix Quality	1.5	
4. Ex ante Economic Analysis	8.5	
4.1 The program has an ERR/NPV, a Cost-Effectiveness Analysis or a General Economic Analysis	4.0	
4.2 Identified and Quantified Benefits	0.0	
4.3 Identified and Quantified Costs	1.5	
4.4 Reasonable Assumptions	1.5	
4.5 Sensitivity Analysis	1.5	
5. Monitoring and Evaluation	5.7	
5.1 Monitoring Mechanisms	2.5	
5.2 Evaluation Plan	3.2	
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood	Medium	
Identified risks have been rated for magnitude and likelihood	Yes	
Mitigation measures have been identified for major risks	Yes	
Mitigation measures have indicators for tracking their implementation		
Environmental & social risk classification	B	
IV. IDB's Role - Additionality		
The project relies on the use of country systems		
	Fiduciary (VPC/FMP Criteria)	
	Non-Fiduciary	
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
	Gender Equality	Yes
	Labor	
	Environment	
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project		
The ex-post impact evaluation of the project will produce evidence to close knowledge gaps in the sector that were identified in the project document and/or in the evaluation plan		

Note: (*) Indicates contribution to the corresponding CRF's Country Development Results Indicator.

The general objective of the project is to contribute to the long term viability of threatened priority species, avoid carbon emissions and increase forest and non-forest area under sustainable management practices in three Brazilian biomes: Caatinga, Pampa and Pantanal. The specific objectives are to: (i) expand coverage and effectiveness of the protected areas (PA) system in those biomes; (ii) improve management of priority habitats and priority species; and (iii) foster community-driven sustainable use practices in productive areas associated to the PA system.

The document provides information on the SNUC and on the specific biomes to be benefited by the project – Caatinga, Pampa, and Pantanal. It also provides some information on the threats faced in these biomes (fire, lack of continuous corridors), however there is no specific diagnosis on the drivers of these threats. In addition, there is no specific diagnosis for management effectiveness or needs for the specific PA's of the project; nor for management of threatened species. This hinders the link between the problems and causes identified and the interventions proposed. The project documentation discusses the effectiveness of protected areas as a conservation tool, citing evidence using remote sensing data and quasi-experimental methods that attempt to control for the non-random citing of PA. The thin but quickly growing body of evidence using such approaches suggests that on average, even after controlling for nonrandom siting, protected areas are in fact effective in reducing deforestation, although substantially less effective than indicated by a simple inside-outside comparison.

The results matrix lacks clear vertical logic, primarily on account of key outcomes related to land cover and community welfare changes not included. At all levels, not all indicators are SMART nor have baselines.

The economic analysis is grounded on the use of benefit transfers to value goods and services provided by the creation and improved management of PAs. The assumptions appear reasonable and mostly justified. A key assumption is related to the decline over time in the capacity of these areas to provide the goods and services valued with and without the project. This is anchored on the observed deforestation rate to infer the slowdown that could be attributed to the creation and improved management of the PAs. However, the analysis fails to take into account existing evidence on deforestation reduction rates that could be credibly attributed to the establishment of protected areas.

The monitoring plan complies with the requirements of the DEM. The evaluation proposed in the Plan is Before – After without attribution.

RESULTS MATRIX

Project Objective:	The general objective of the project is to contribute to the long-term viability of threatened priority species, avoid carbon emissions and increase forest and non-forest area under sustainable management practices in three Brazilian biomes. The specific objectives are to: (i) expand coverage and effectiveness of the protected areas system in those biomes [Components 1 and 2]; (ii) improve management of priority habitats and priority species [Components 3 and 4]; and (iii) foster community-driven sustainable use practices in productive areas associated to the Protected Area (PA) system [Component 5].
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EXPECTED IMPACT

Indicators	Unit	Baseline		Goals		Means of verification	Observations
		Value	Year	Value	Year		
EXPECTED IMPACTS							
Impact 1. BD. Long-term threatened species population growth							
Impact Indicator 1 Increase in threatened species populations							
<ul style="list-style-type: none"> Caatinga: 						MMA Red List Biodiversity in situ Monitoring Reports <i>Observation: Measurements will be taken in 2021, at the end of the project, but goals are set for 2026, given the timelag between conservation actions and species recovery.</i>	Spix's Macaw
<i>Cyanopsitta spixii</i> (Wagler, 1832) - Ararinha-azul	Individuals	0	2016	10	2026		Lear's Macaw
<i>Anodorhynchus leari</i> Bonaparte, 1856 - Arara-azul-de-lear	Individuals	1360	2016	1500	2026		
<ul style="list-style-type: none"> Pampa: 							Pampa's Cat
<i>Leopardus colocolo</i> (Molina, 1782) - Gato-dos-pampas	Individuals	407	2016	600	2026		Yellow Cardinal
<i>Gubernatrix cristata</i> (Vieillot, 1817) - Cardeal-amarelo	Individuals	53	2016	100	2026		
<ul style="list-style-type: none"> Pantanal: 							Marsh Deer
<i>Blastocerus dichotomus</i> (Illiger, 1815) - Cervo-do-pantanal	Individuals	40 ,000	2016	44,000	2026		Jaguar
<i>Panthera onca</i> (Linnaeus, 1758) - Onça-pintada	Individuals	1000	2016	1200	2026		

Indicators	Unit	Baseline		Goals		Means of verification	Observations
		Value	Year	Value	Year		
Impact 2. CC Carbon emissions avoided in all three biomes through creation of new protected areas and good fire management practices and restoration of selected degraded landscapes							
Impact Indicator 2: Reduced CO2 emissions in protected areas	MtCO ₂ equiv.	0	2016	57.9	2021	Annual GHG Emissions Estimates in Brazil: http://www.mct.gov.br/ Fire occurrence monitoring in Protected Areas: http://www.dpi.inpe.br/proarco/bdqueimadas/	Baseline & goal data are lifetime direct post-project emissions avoided ¹

¹ Lifetime direct post-project emissions avoided are the emissions reductions attributable to the investments made outside the project's supervised implementation period, but supported by financial facilities put in place by the GEF project, totaled over the respective lifetime of the investments. These financial facilities will still be operational after the project ends, such as partial credit guarantee facilities, risk mitigation facilities, or revolving funds.

EXPECTED RESULTS

Expected Results	Unit	Baseline		Intermediate		Goals		Means of verification	Observations
		Value	Year	Value	Year	Value	Year		
EXPECTED RESULTS									
Result 1: Increase in terrestrial areas with improved conservation management.									
<u>Indicators:</u> Area of new protected areas (PAs) formally protected as part of the SNUC.	Hectares	0	2016	--	--	1,000,000	2021	CNUC/MMA - www.mma.gov.br/cadastrouc	The baseline uses the value corrected for potential overlap between integrated protection” and “sustainable use” areas, as presented by the CNUC.
Production landscapes where communities are adopting good management practices for BES maintenance	Hectares	0	2016	10,000	2019	25,000	2021	Project progress reports	
Result 2: Improved effectiveness of conservation of biodiversity, ecosystem services and threatened species of flora and fauna in existing protected areas.									
<u>Indicators:</u> Management effectiveness scores (as measured by BD-TT) for priority PAs	Mean Score	41	2016	≥50	2019	≥60	2021	TT Annual Reports	
Reduced area in existing PAs affected by fires	Percent reduction in area affected	0	2016	10	2019	20	2021	Project Progress Report	Baseline to be estimated during first year of project implementation

Expected Results	Unit	Baseline		Intermediate		Goals		Means of verification	Observations
		Value	Year	Value	Year	Value	Year		
Result 3: Effective National Action Plans with a territorial approach (T-PAN) under implementation in the target biomes									
Increase in endangered species included in T-PAN implementation	PAN	67	2016			80	2021	PANs Monitoring and Management Reports	
Result 4: Participatory landscape management adopted in selected areas									
Number of families adopting good management practices in productive areas	Families	0	2016	50	2019	200	2021	Project Semiannual Progress Reports	

PRODUCTS FINANCED BY GEF RESOURCES

Products	Estimated Cost (US\$)	Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Final Goal	Means of verification & Notes
Component 1: Creation of New Protected Areas (US\$2,830,265)									
1.1. Proposed PAs for which all required analyses, consultations and legal documents have been prepared and submitted to competent agencies for legal declaration as a PA ² .	US\$1,600,000	Proposed Protected Areas			3	3	8	14	progress reports
1.2. Proposed PAs whose documentation has been submitted for legal declaration (Product 1.1.) for which a sustainable financing plan has been prepared as part of its planning documents.	US\$500,000	Sustainable Financing Planning			5			5	progress reports
Component 2: Management of Existing Protected and Adjacent Areas (US\$12,736,192)									
2.1. PAs that have an up-to-date Management Plan & adequate Monitoring Program approved.	US\$3,000,000	Protected Areas		3	6	10		19 ⁽³⁾	
2.2. Sustainable Financing Plan developed, as part of planning instruments, for same PAs as Product 2.1.	US\$500,000	Sustainable Financing Planning		3	6	10		19	
2.3 PA with financed actions to implement its management plan.	US\$4,009,692	Program	11	8				19	Progress Report
2.4. Biodiversity Monitoring Protocols developed and tested in PAs	US\$1,100,000	PAs with protocol testing initiated			5	3	3	11	

² According to the analysis during preparation, this area corresponds to 14 new protected areas: 6 in the Caatinga, equivalent to 386,053ha; 5 in the Pampa, equivalent to 312,822ha; and 3 in the Pantanal equivalent to 310,763ha. (See also Component 1 Design document.) Due to the uncertainties involved in the process of declaring PAs, the project will support a total of 29 creation processes, in the expectation that a sufficient number of these process will advance to the final stage of legal declaration so as to achieve or surpass the goal of 1,000,000ha of new protected areas in the three target biomes.

³ For list of proposed protected areas, see Component 2 Design document, Table 2.

Products	Estimated Cost (US\$)	Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Final Goal	Means of verification & Notes
2.5. PAs in which fire management actions have been implemented.	US\$1,500,000	Protected Areas				1	2	3 ⁽⁴⁾	(Incl. prevention, monitoring & education; equipment & activities)
2.6. New area adjacent to PAs in which communities are applying integrated fire management practices to avoid carbon emissions.	US\$1,500,000	Hectares			5,000	9,000	6,000	20,000	
2.7 Area covered by management agreements	US\$1,126,500	Hectares			7,000	8,000	10,000	25,000	Progress Report
Component 3: Restoration of Deteriorated Areas (US\$6,572,360)									
3.1. Biome-specific ⁵ decision trees, monitoring protocols and priority-area maps for restoration developed.	US\$750,000	Planning & Monitoring Instruments		9				9	
3.2. Assessments of degraded areas and Restoration Plans for selected UCs completed.	US\$350,000	Restoration Plans		2	2			4	
3.3. Area of degraded landscapes restored within selected UCs	US\$5,472,360	Hectares				1,250	2,250	1,500 ⁽⁶⁾	

⁴ At least one PA per biome. At time of preparation, the following PAs (all federal) were identified as the most suitable target areas: Caatinga: PN da Chapada da Diamantina - BA; Pampa: PN Aparados da Serra - RS/SC; Pantanal: PN do Pantanal Matogrossense – MT.

⁵ Given the ecological hydrological connectivity of the Cerrado biome with both the Caatinga and the Pantanal biome, decisions and monitoring protocols related to restoration activities are intricately linked between these three biomes. Therefore, this product entails decision trees and monitoring protocols for 4 biomes each - Caatinga, Pampa, Pantanal and Cerrado – as well as priority-area maps for the three target biomes of the project: Caatinga, Pampa and Pantanal, for a total of 9 decision-making instruments.

⁶ At project approval, the estimated areas per biome are as follows: Caatinga 3,800ha, Pampa 600ha and Pantanal 600ha.

Products	Estimated Cost (US\$)	Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Final Goal	Means of verification & Notes
Component 4: Monitoring of Flora and Fauna Extinction Risks (US\$5,660,530)									
4.1. Assessment of PA effectiveness in meeting priority species conservation goals completed	US\$525,000	Assessments				1		1	Assessment based on biodiversity monitoring data
4.2. PANs (T-PANs) prepared for areas within the 3 biomes.	US\$1,934,000	T-PANs			5	6		11	Progress Reports
4.3. PAN actions financed	US\$2,941,530.14	Prioritized territories				5	6	11	Progress Reports
4.4. Existing datasets and systems integrated, up-dated with new data and published.	US\$260,000	Web Portal				1		1	Progress Reports
4.5. Updated analyses of extinction risks and threats to priority species.	US\$340,000	Number of analysis		500	500	500	500	2000	Species Assessment Forms
Component 5: Integration and Community Relations (US\$1,086,651)									
5.1 Technical training workshops conducted for beneficiary communities and key partners	US\$506,652	Workshops	3	5	5	5	4	22	Progress Reports
5.2 BES based business workshops conducted for women head of households	US\$150,000	Workshops			3	3		6	Progress Reports
5.3. Communication strategy developed and implemented to support project engagement at the local level.	US\$430,000	Strategy					1	1	

FIDUCIARY ARRANGEMENTS

COUNTRY: Brazil
PROJECT NUMBER: BR-G1004
NAME: Conservation Restoration and Sustainable Management in the Caatinga, Pampa and Pantanal – GEF Terrestre
EXECUTING AGENCY (EA): *Fundo Brasileiro para a Biodiversidade (FUNBIO)*
PREPARED BY: Jorge Seigneur, Financial Management Sr. Associate
Carlos Carpizo, Financial Management Sr. Associate
Edwin Tachlian-Degras - Procurement Sr. Associate

I. EXECUTIVE SUMMARY

- 1.1 The EA of the program is FUNBIO. FUNBIO is a not-for-profit private sector entity specialized in the fiduciary and operational management of environmental projects. FUNBIO has experience in implementing environmental programs for approximately 18 years. Since its creation, FUNBIO has supported more than 200 projects in 282 environmental protected areas for more than half billion dollars. In 2014, FUNBIO was accredited as a GEF Implementation Agency for projects financed by the GEF in Latin America. FUNBIO also is currently executing two technical cooperation operations financed by the Bank in Brazil (ATN/MC-14220-BR for US\$1 million and ATN/OC14219-BR for US\$3.5 million), both approved in 2013. FUNBIO has the necessary institutional capacity to conduct the execution activities related to the financial management and administration of the IDB/GEF funds for the program. The fiduciary risk is low according to the institutional capacity assessment of FUNBIO.
- 1.2 Since FUNBIO is a private sector entity not included in the national budget, it is not obliged to keep its accounts and budgetary controls within the Public Financial Management System
- 1.3 The amount financed by the Bank with GEF resources for this program is US\$32,621,820. The total amount of the program is US\$191,771,820, considering the amount of US\$ 159,150,000 as parallel financing from other federal and state entities, as well as from the KfW Development Bank.

II. FIDUCIARY CONTEXT OF THE EXECUTING AGENCY

- 2.1 FUNBIO uses a reliable and integrated accounting system RM in which accounting, cash management, portfolio and personal modules are online. FUNBIO also has a project system module called Cerebro (which provides the support to the execution and planning, allowing creating and customizing the defined categories of the project, to generate the reports needed and to complain with the Bank's applicable policies and procedures).

- 2.2 FUNBIO has sound fiduciary policies, procedures, and processes, which were analyzed during the institutional capacity assessment.

III. FIDUCIARY RISK EVALUATION AND MITIGATION MEASURES

- 3.1 The fiduciary risk is low, and to mitigate and keep it in the lower levels, the Bank will provide training to the FUNBIO Staff related to the Bank's fiduciary policies and procedures.

IV. CONSIDERATIONS FOR THE SPECIAL PROVISIONS OF NON-REIMBURSABLE FINANCING CONTRACT

- 4.1 Given FUNBIO's limited experience with the implementation of IDB operations and therefore with its fiduciary requirements, **it is a special contractual condition that prior to the first disbursement of the grant resources, FUNBIO shall provide evidence, to the Bank's satisfaction that FUNBIO's financial management system has been adapted and customized to allow generating the financial reports required by the Bank under the Bank's financial management guidelines (OP-273-6) in a reliable and timely manner.** Compliance with this condition seeks to mitigate the risk of delays in program execution due to errors or inconsistencies in the financial reports presented to the Bank.
- 4.2 FUNBIO will maintain budgetary and accounting records and financial statements of the project in United States Dollars (Dollars) and Brazilian Reals (Reals), and will present them to the Bank in Dollars according to the contractual provisions of the Non-Reimbursable Financing Agreement. The applicable exchange rate to determine the equivalency in Dollars of an expenditure incurred in Reals will be the same exchange rate used in the conversion of resources disbursed in Dollars to Reals.
- 4.3 Once the disbursement period has expired, unused funds shall be returned to the Bank, as per the provisions set forth in the Non-Reimbursable Financing Agreement.

V. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

- 5.1 Procurement administration of the project will take place in accordance with established private sector and commercial practices acceptable to the IDB, as per the terms of IDB Procurement Policies (documents GN-2349-9 and GN-2350-9, appendix 4). Use of private sector procurement regulations is warranted due to FUNBIO private sector nature. The procurement of goods and services, including the selection and contracting of consultants with resources from the IDB/GEF will follow the norms and procedures of FUNBIO, as contained in the FUNBIO Procurement Policy.
- 5.2 FUNBIO has a contracting and procurement policy, based on best practices. The general principles of this policy are transparency, efficiency, economy and aims at the implementation of socio-environmental best practices. The procurement methods include for the procurement of Goods, Work and Services: shopping

(R\$10,000–R\$500,000), National Competitive bidding (R\$500,000-R\$4 Million), International Competitive Bidding (above R\$4 Millions). The use of electronic reverse auction is also allowed for procurement between R\$500,000-R\$4 Million, using the Banco do Brasil e-licitações system. For consulting services, FUNBIO procurement policy establishes two methods: Quality and Cost Based selection and Individual Consultant selection. Direct selection / contracting is allowed under specific conditions only, consistent to those included in the IDB procurement policies. FUNBIO has also created an Automatic Procurement mechanism allowing using the result of a previous process to buy similar products, up to R\$100,000.

- 5.3 To complement its Contracting and Procurement Policy, FUNBIO has also created a Procurement and Contracting Operational Document (*Procedimentos Operacionais de Compras e Contratações*) and special provisions applicable to procurement specialist in the FUNBIO’s Code of Ethics. All the procurement policy and operational document, as well as the Code of Ethics are available online on FUNBIO’s website.
- 5.4 FUNBIO and the Bank have agreed on a “Procurement Plan for the first 18 months of program execution.” FUNBIO will update the Procurement Plan on an annual basis or when material changes are necessary. Any change or revision of the Procurement Plan by the FUNBIO will be submitted to the Bank for non-objection. The supervision of the procurement processes by the IDB will be based on the “ex post” modality.

VI. MAIN PROCUREMENT ACTIVITIES

Activity	Procurement Method	Estimated Date	Estimated Amount 000’US\$
Goods			
Equipment for UCS			\$ 833,333.33
Equipment and goods for the implementation of PANs			\$ 789,474.00
Firms			
Development and monitoring of restoration plans for at least four (4) conservation units	Quality-Cost Based Selection		\$ 5,502,777.78
Individuals			
Technical advisor for coordination of project activities	3 CVs		\$ 453,000.14

- 6.1 The project will finance grants for approximately 43 fellowship students whose research projects will support a number of program activities, such as: (i) the preparation of Territorial Action Plans (PANs); (ii) the evaluation and updating of the conservation status of threatened species; (iii) the consolidation of biodiversity portal; and (iv) the evaluation of environmental protected areas effectiveness in protecting threatened fauna and flora. Fellowships will be paid under fellowship grants, and will entail the submission of periodic and final research reports. Fellowships will be paid by FUNBIO with IDB/GEF resources and will be technically coordinated by the program beneficiary and participating institutions such as ICMBio and JBRJ, as per the terms of the respective technical cooperation agreements. Fellowship students’ selection will be a competitive process, in line

- with the IDB procurement principles of competition, transparency and efficiency; principal selection criteria will be the alignment of research proposals to the research requirements of the program. Eligible activities and the eligibility criteria for scholarship support will be detailed in the OMP.
- 6.2 **Retroactive Financing.** The Bank may finance retroactively under the grant, eligible expenses incurred by FUNBIO prior to the date of grant approval in consultancies, services other than consultancies and travel related expenditures, up to the amount US\$700,000 (2.15% of the proposed grant amount), provided that all the requirements are substantially similar to those set out in the grant agreement requirements. These expenses must have been incurred on or after June 14, 2016, and under no circumstances shall expenditures incurred more than 18 months prior to the grant approval date be included.
- 6.3 **Procurement supervision.** Program supervision shall be done through ex post review by the Bank or by third parties appointed by the Bank for review purposes (program auditing firm).
- 6.4 **Records and files.** The EA should have filing systems containing the complete and organized documentation of procurement processes. The documentation should include information of all stages involved in the pre-contractual, contractual, and post-contractual.

VII. FINANCIAL MANAGEMENT

A. Programming and Budget

- 7.1 FUNBIO is a registered private sector non-profit civil association according to the applicable Brazilian Laws. Consequently, its expenses are not defrayed with resources from the public treasury. The institution's budget is structured according to its Strategic Action Plan, which is used to plan the course of action on the business fronts for the year and operating expenses. FUNBIO's President Committees and its Board of Directors monitor the budgetary execution.
- 7.2 Programming and budget planning, execution and monitoring at the project level will rely on IDB's project financial management formats and procedures. FUNBIO will prepare annually, an Annual Operation Plan (AOP), a procurement plan and a twelve-month detailed financial plan.

B. Accounting and Information Systems

- 7.3 FUNBIO will be responsible for the accounting and the auditing reports, which will be prepared on an annual basis, using a reliable and integrated system (Accounting; cash and management modules). The audited financial statements for this program will be prepared on a cash basis.

C. Disbursements and Cash Flows

- 7.4 Project financial management will be executed according to the Bank's financial management guidelines (OP-273-6). FUNBIO will open a bank account exclusively for managing the funds involved in the program (designated account). Cash flow

will be based on activities derived from the Annual Operation Plan and Procurement Plan and payment terms agreed with suppliers. The period of execution cannot exceed the deadline for the last disbursement of the program, since funds unused by the deadline of the last disbursement shall be returned to the Bank.

D. Internal Control and Internal Audit

7.5 FUNBIO has an internal control system and an internal audit unit, which both report to its Board of Directors. FUNBIO has a code of Ethics, an audit manual and a quality and operations manual. It also applies the standards of the Institute of Internal Auditors of Brazil (IIA) in the performance of its work and it also delivers an annual report on Evaluation Management of the Internal Control System to the Board of Directors.

E. External Control and Reports

7.6 The financial statements of the program will be audited annually by an independent audit firm acceptable to the Bank. The auditor will carry out procedures necessary for verifying the use of funds in light of the program execution scheme. The auditing fees shall be financed with IDB/GEF resources. The audited financial statements for the program will be delivered to the Bank within hundred and twenty (120) days following the close of the program's fiscal year, during the disbursement period or its extensions, with the last of these reports to be presented within hundred and twenty (120) days following the closure of fiscal exercise of the year of the last disbursement date, in accordance with the procedures and terms of reference previously agreed upon with the Bank.

F. Financial Supervision Plan

7.7 The Bank's financial specialist will conduct at least one onsite review per year, in addition to desk reviews of the auditing statements and disbursement requests. Visits for fiduciary supervision in financial management will include verification of the financial and accounting arrangements employed for program administration, tracking of disbursed funds in accordance with the execution mechanism, and implementation of any other recommendations issued by this program's independent auditor.

G. Execution Mechanism

7.8 FUNBIO will be responsible for the administration of IDB/GEF grant resources. The resources will be executed through a Project Management Unit (PMU) to be created within FUNBIO, using the existing fiduciary system and will prepare an Annual Operation Plan (AOP) and procurement plan and a twelve-month detailed financial plan indicating cash flow needs for the execution of project activities stemming from AOP and procurement plans. The twelve-month financial plan will serve as the basis for advance of funds disbursements.

H. Other Financial Management Agreements and Requirements

- 7.9 There are no agreements in addition to those described above. However, the fiduciary agreements and requirements included in this annex may be altered as the program progresses, under the Bank's supervision and according to applicable Bank's policies and procedures.

**CONSERVATION, RESTORATION AND SUSTAINABLE MANAGEMENT IN THE CAATINGA, PAMPA AND
PANTANAL - GEF TERRESTRE**

BR-G1004

CERTIFICATION

I hereby certify that this operation was approved for financing under the **Global Environment Facility (FMM)** through a communication dated February 6, 2018 and signed by Brady Martin (ORP/GCM). Also, I certify that resources from said fund are available for up to **US\$32,621,820** in order to finance the activities described and budgeted in this document. The commitment and disbursement of these resources shall be made only by the Bank in US dollars. The same currency shall be used to stipulate the remuneration and payments to consultants, except in the case of local consultants working in their own borrowing member country who shall have their remuneration defined and paid in the currency of such country. No resources of the Fund shall be made available to cover amounts greater than the amount certified herein above for the implementation of this operation. Amounts greater than the certified amount may arise from commitments on contracts denominated in a currency other than the Fund currency, resulting in currency exchange rate differences, represent a risk that will not be absorbed by the Fund.

****original signed****

Sonia M. Rivera
Chief
Grants and Co-Financing Management Unit
ORP/GCM

February 7, 2018

Date

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/18

Brazil. GRT/FM-____-BR. Nonreimbursable Investment Financing of the Global Environment Facility (GEF). Conservation, Restoration and Sustainable Management in the Caatinga, Pampa and Pantanal – “GEF Terrestre”

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized in the name and on behalf of the Bank, as Administrator of the Global Environment Facility (GEF) Trust Fund (Fund), to enter into such agreement or agreements as may be necessary with Fundo Brasileiro para a Biodiversidade (FUNBIO), as Executing Agency, and with the Federative Republic of Brazil, through the Ministry of Environment (MMA), as Beneficiary, for the purpose of granting a nonreimbursable investment financing for a sum of up to US\$32,621,820 chargeable to the resources of the Fund, and to adopt such other measures as may be pertinent for the execution of the project proposal contained in document PR-_____.

(Adopted on ____ 2018)