REQUEST FOR CEO ENDORSEMENT
PROJECT TYPE: FULL-SIZED PROJECT
TYPE OF TRUST FUND: GEF TRUST FUND

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PART I: PROJECT INFORMATION

Project Title: : Conservation, Restoration and Sustainable Management Strategies to enhance Caatinga, Pampa and Pantanal Biodiversity – GEF Terrestre			
Country(ies):	Brazil	GEF Project ID:[1]	4859
GEF Agency(ies):	IADB	GEF Agency Project ID:	BR-G1004
Other Executing Partner(s):	Fundo Brasileiro para a Biodiversidade – FUNBIO; Ministry of Environment - MMA	Submission Date:	08/04/2017
GEF Focal Area (s):	Multifocal Area	Project Duration(Months)	60
Name of Parent Program (if applicable): ➢ For SFM/REDD+ ☐ ➢ For SGP ☐ ➢ For PPP ☐	N/A	Project Agency Fee ($):	3,262,180

A. FOCAL AREA STRATEGY FRAMEWORK[2]

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount ($)	Cofinancing ($)
(select) BD-1	1.1. Improved management effectiveness of existing and new protected areas.	Output 1. New protected areas and coverage (1,000,000 ha) of unprotected ecosystems.	GEF TF	13,626,570	115,083,582.44
(select) BD-1	1.2. Increased revenue for protected area systems to meet total expenditure required for management.	Output 2. Sustainable financing plans (24).	GEF TF	3,668,692	7,421,472.22
(select) BD-2	2.1. Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation.	Output 2. Sub-national land-use plans that incorporate biodiversity and ecosystem services valuation (3).	GEF TF	7,494,614	29,009,902
CCM-5 (select)	5. Restoration and enhancement of carbon stocks in forests and non-forest lands, including peatland.	Forest and non-forest lands under good management practices (20,000ha).	GEF TF	4,499,912	7,007,280.17

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[1] Project ID number will be assigned by GEFSEC.
[2] Refer to the Focal Area Results Framework and LDCF/SCCF Framework when completing Table A.

(select) SFM/REDD+ - 1	1.2. Good management practices applied in existing forests.	Forest area (5,000 ha) under sustainable management, differentiated by forest type.	GEF TF		3,332,032	632,434.29
Total project costs					32,621,820	159,154,672

B. PROJECT FRAMEWORK

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: Caatinga, Pampa e Pantanal. 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 Protected Areas (PA) system (Component 5).

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount ($)	Confirmed Cofinancing ($)
Component 1: Creation of new protected areas (PAs)	TA/INV	• Improved representativeness of major biomes in the National System of Protected Areas (SNUC), by expanding PAs for Caatinga, Pantanal and Pampa in 1,000,000 hectares • Avoided emissions of 57.9 million tCO2 of carbon stock in intervention areas	• At least 1M ha of new protected areas under process of declaration. • Financing plans prepared for 5 of the new PAs	GEF TF	2,830,265	9,129,481
Component 2: Management of existing PAs and Adjacent Areas Subcomponent 2.1: Effective conservation management Subcomponent 2.2: Fire management Subcomponent 2.3: Sustainable Management of Production landscapes	TA/INV	• Selected PAs consolidated, having achieved pre-defined levels of management capacity, equipment and infrastructure provisions, with mean management effectiveness scores (measured by	• Management plans or specific management programs (e.g. fire management, biodiversity monitoring) prepared or revised for 19 priority PAs • Sustainable financing plans prepared for 19 priority PAs	GEF TF	12,736,193	98,312,769

		BD-TT) from an average of 41 to equal or higher than 60 • Improved capacity for fire management and effective conservation management in 3 PA • Reduced conflicts and threats from productive activities on biodiversity	• 19 priority PAs equipped (especially for fire management and biodiversity monitoring) and provided with basic infrastructure • Good fire management practices implemented through trainings and equipment improvements in PAs and in 20,000ha of adjacent areas • Biodiversity and Ecosystem Services based instruments such as management agreements and good management practices under implementation in 3 selected communities associated to PAs or in production landscapes			
Component 3: Restoration of degraded landscapes	TA/INV	5000 ha of increased natural habitat and reduced habitat fragmentation in target biomes (Caatinga, Pampa and Pantanal) by means of strategic restoration and sustainable land management	• 3 planning and monitoring biome-specific restoration instruments • 4 Restoration plans for identified priority sites prepared • At least 5,000 ha of degraded landscapes are under restoration and managed according to sustainable practices	GEF TF	6,572,360	24,723,562
Component 4: Monitoring of flora and fauna extinction risks	TA/INV	• Increased capacity to manage flora	• 3 assessment of PA effectiveness in meeting threatened flora		5,660,530	19,998,649

		and fauna extinction risks • Improved management of priority threatened species through improved monitoring under territorial National Action Plans (PAN)	and fauna conservation goal completed • Categorization of flora and fauna extinction risks and identification of key threats to conservation developed • 11 Action plans for threatened species prepared			
Component 5: Integration and community relations	TA	• Functional institutional integration and collaboration with complementary government, private sector and civil society initiatives in Caatinga, Pampa and Pantanal biomes and strongly supporting community relations	• Effective participatory mechanisms, such as management agreements and community based restoration, management and biodiversity monitoring protocols established • Communication program undertaken to achieve strong community support for conservation objectives in areas with new PAs		1,086,652	6,990,211
Monitoring and evaluation				GEF TF	475,000.00	0
Subtotal					29,361,000.00	159,154,672
Project management Cost (PMC)[3]				GEF TF	3,260,820.00	0
Total project costs					32,621,820	159,154,672

C. SOURCES OF CONFIRMED COFINANCING FOR THE PROJECT BY SOURCE AND BY NAME ($)

Please include letters confirming cofinancing for the project with this form

Sources of Co-financing	Name of Co-financier (source)	Type of Cofinancing	Cofinancing Amount ($)
National Government	Ministry of the Environment	In-kind	1,390,401.16
	Ministry of the Environment	Investment	9,440,916.71

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[3] PMC should be charged proportionately to focal areas based on focal area project grant amount in Table D below.

National Government	ICMBio	In-kind	28,658,567.88
National Government	ICMBio	Investment	77,491,282.23
National Government	Botanical Garden of Rio de Janeiro	In-kind	10,963,561.11
Local Government	States of Bahia, Ceará, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Paraíba, Pernambuco, Piauí, Rio Grande do Norte and Rio Grande do Sul (10 States)	In-kind	8,834,914.16
Local Government	States of Bahia, Ceará, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Paraíba, Pernambuco, Piauí, Rio Grande do Norte and Rio Grande do Sul (10 States)	Investment	11,097,029
Bilateral Aid Agency (ies)	KfW- LifeWeb/SNUC	Investment	11,278,000
Total Co-financing			159,154,672

D. TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY[1]

GEF Agency	Trust Fund	Country Name/Global	Focal Area	Programming of Funds	(in $)		
					GEF Project Financing (a)	Agency Fee [a] (b)[2]	Total (c)=a+b
IADB	GEF TF	Brazil	BD-1	(select as applicable)	13,626,570	1,362,657	14,989,227
IADB	GEF TF	Brazil	BD-1		3,668,692	366,869	4,035,561
IADB	GEF TF	Brazil	BD-2	(select as applicable)	7,494,614	749,461	8,244,075
IADB	GEF TF	Brazil	CCM-5	(select as applicable)	4,499,912	449,991	4,949,903
IADB	GEF TF	Brazil	SFM-REDD 1	(select as applicable)	3,332,032	333,203	3,665,235
Total Grant Resources					32,621,820	3,262,181	35,884,001

F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Grant Amount ($)	Cofinancing ($)	Project Total ($)
International Consultants			
National/Local Consultants	11,500.000.00	22,450,000.00	33,950,000.00

G. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT?   NA

(If non-grant instruments are used, provide in Annex D an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/NPIF Trust Fund).

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN OF THE ORIGINAL PIF[4]

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[4] For questions A.1 –A.7 in Part II, if there are no changes since PIF and if not specifically requested in the review sheet at PIF stage, then no need to respond, please enter "NA" after the respective question.

A.1 National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, Biennial Update Reports, etc.:

1.   The proposed project will support Brazilian government efforts for increasing protected area coverage and effectiveness, develop tools to incentivize changes in land use practices and land reclamation with a view to promoting habitat connectivity and increased provision of ecosystem services, including those related to climate change, through the engagement of local communities in conservation measures. The Project's intervention strategy is aligned with national environmental policies, including the National System of Protected Areas (Law N° 9.985 from 2000), National Program for Conservation of Threatened Species – ProSpecies (Ministerial ordinance N° 43 from2014), National Policy for Native Vegetation Recovery (Decree N° 8.972 from 2017), the National Strategy for Communication and Environmental Education within Protected Areas and the revised Law of Native Vegetation Protection (also known as the "Forest Code"). Hence, it complements and creates synergies with other policies and programs, within the Ministry of Environment but also with other federal and state government entities mentioned below. Brazilian government has been working on the review and update of its National Biodiversity Strategies and Action Plan for the 2016-2020. The ministry started with the establishment of clear commitments based on its institutional and financial capacity, and by reinforcing the inter-institutional articulation aimed at reaching a solid commitment from different sectors, line ministries and subnational governments. In order to enhance the efficacy of those efforts a project to articulate inter-institutional dialogue and GEF resources will be critical to jumpstart and upscale conservation efforts in those biomes.

2.   The present project supports the achievement of the National Biodiversity Targets for the period of 2011-2020, as established by the National Biodiversity Commission (CONABIO), listed below:

National Biodiversity Targets	Project contribution
National Target 1: By 2020, at the latest, Brazilian people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.	This project will develop a communication program in order to increase community support for conservation objectives.
National Target 5: By 2020, the rate of loss of native habitats is reduced by at least 50% (in comparison with the 2009 rate) and, as much as possible, brought close to zero, and degradation and fragmentation is significantly reduced in all biomes. National Target 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced through conservation and restoration actions, including restoration of at least 15% of degraded ecosystems, prioritizing the most degraded biomes, hydrographic regions and ecoregions, thereby contributing to climate change mitigation and adaptation and to combatting desertification.	This project will finance the creation of new protected areas which is considered one of the more efficient strategies to avoid habitat loss. This project will finance restoration of 5,000 ha of degraded land and promote sustainable management practices that is expected to avoid carbon emissions (fire and livestock management) in 20,000 hectares.
National Target 7: By 2020 the incorporation of sustainable management practices is disseminated and promoted in agriculture, livestock production, aquaculture, silviculture, extractive activities, and forest and fauna management, ensuring conservation of biodiversity.	Combined Actions from components 2, 3 and 4 will contribute to sustainable management practices in project's intervention areas. Protected Areas management plans will be prepared; fire management protocols will be developed and will be later adopted by local communities; restoration instruments will help landowners to restore their areas when needed; and National Action Plans for threatened species will be implemented in partnership with productive sectors.

National Target 11: By 2020, at least 30% of the Amazon, 17% of each of the other terrestrial biomes, and 10% of the marine and coastal areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through protected areas foreseen under the SNUC Law and other categories of officially protected areas such as Permanent Protection Areas, legal reserves, and indigenous lands with native vegetation, ensuring and respecting the 154 demarcation, regularization, and effective and equitable management, so as to ensure ecological interconnection, integration and representation in broader landscapes and seascapes.	This project will finance the establishment of approximately 14 new protected areas in the Caatinga, Pantanal and Pampa biomes, totaling around 1,000,000 hectares.
National Target 12: By 2020, the risk of extinction of threatened species has been significantly reduced, tending to zero, and their conservation status, particularly of those most in decline, has been improved. This project will support conservation of threatened species by categorizing extinction risks of fauna and flora as well as the key threats to its conservation.	Territorial Action Plans (T-PANs) will be developed, including guidelines on threatened species and habitat management requirements to meet specific needs of priority species

3. With respect to Climate Change, Brazil recently published its third national communication to the UNFCCC[5]. According to it, a set of institutional frameworks and management tools were created to assist Brazil in fulfilling its commitments under the Convention, including: the National Policy on Climate Change (PNMC), the National Plan on Climate Change and a set of sectoral plans on mitigation and adaptation[6]. The present project contributes to the achievements of several of these institutional frameworks and management tools, including the following:

Actions under 3rd UNFCCC communication	Project contribution
PNMC Objective 5: Eliminate the net lost of forest area in Brazil	Recovery/ restoration of 57.9 million tCO2 of carbon stock in intervention areas in 15 years.
Program for the Prevention and Control of Burnings and Forest Fires - PROARCO	Improved capacity for fire management and effective conservation management in three PAs
Capacity building and training for the promotion of mitigation measures	In addition to fire management plans and trainings, the project will promote restoration plans for identified priority sites as well as specific restoration instruments focusing on the monitoring of the biomes.

4. Additionally, as per its Intended Nationally Determined Contribution (INDC), by 2025, Brazil plans to reduce greenhouse gas emissions by 37% below 2005 levels. The present project includes activities focused on avoiding emissions (supporting the creation of new PA, developing Integrated Fire Management and controlling of the burning of forests and other vegetation in their vicinity) and on carbon stock restoration (vegetation restoration – at least 5000 hectares); both types of activities contribute directly to Brazil's GHG emissions reductions target and should result in 57.9

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[5] Brazil's 3rd National Communication to the UNFCCC: http://unfccc.int/national_reports/non-annex_i_natcom/items/2979.php
[6] Sector plans were prepared for the agriculture, transport, energy and mining. Other sectors and line ministries have established working groups to develop such plans or similar instruments. For further information visit: http://www.mma.gov.br/clima/politica-nacional-sobre-mudanca-do-clima/planos-setoriais-de-mitigacao-e-adaptacao.

million tCO2 of carbon benefits. Climate change mitigation capacities will directly result from activities planned for component 1 (creation of PA), component 2 (strengthening of PA management, fire management, training of PA management teams, awareness raising in PA surrounding communities and promoting good management practices in production landscapes) and component 3 (strategic restoration of 5,000 hectares of degraded areas inside PAs and their surroundings).

5.   The Project also supports the implementation of the provision of Brazil's Native Vegetation Protection Law[7], that establishes, inter alia, general rules for the protection and management of natural vegetation in private areas; forest management; control and prevention of forest fires; and the use of economic incentives to achieve those objectives. This law recognizes the relevance of the protection of native vegetation cover in private lands (53% of the total native vegetation) for biodiversity conservation and provision of ecosystem services through: i) Permanent Protected Areas (APP in its Brazilian acronym) that are riparian forests, hilltops, wetlands, etc., and; ii) legal reserves (RL) that are the minimum fraction of native vegetation cover to be mandatorily maintained in rural private lands. According to this law all landowners must register their property and identify, in a spatially explicit way, the precise limits of their APP and RL in a "Rural Environmental Register" (CAR), supported by a nationwide federal Rural Environmental Registry System (SICAR). This system provides georeferenced images where the landowners define and locate native vegetation within their property. Registration in the CAR is mandatory. Currently the CAR is the main instrument to regulate and manage land use on rural private lands.

6.   The institutional capacities developed under the project are expected to contribute to the sustainability of project outcomes and engagement of local communities in the following manners: (1) the strengthening of PA management activities should improve effective biodiversity conservation and reduce deforestation. Also, the development of financial sustainability plans will assist in ensuring that the effective management of PA continues in the medium and long-term. (2) Fire management and the adoption of good management practice protocols by local communities will contribute to the reduction of forest fires, therefore reducing and avoiding greenhouse gas emissions. Such positive impact may extend beyond the project implementation period. (3) Restoration of degraded areas will contribute to an increase in carbon stocks, as well as the enhancement of connectivity and gene flow between PAs. (4) A demand for restoration activities may also strengthen the productive chain linked to restoration (as an economic activity) in the target biomes, particularly with respect to seedbanks, seedling production, availability of materials and labor skills available for restauration, which in turn helps the promotion of future restoration actions. (5) The strategic actions related to restoration supported by the project (decision trees for restoration planning; restoration monitoring protocols for target biomes and maps of priority areas for restoration) will contribute to research, public policies, development and promotion of restoration in the three biomes, radiating through the respective biomes as a whole, and, therefore, to the sustainability of project outcomes.

A.2. **GEF** **focal area and/or fund(s) strategies, eligibility criteria, and priorities.**

7.   Land use plans planned at PIF stage aimed to identify priority areas for restoration and implementation of sustainable practices management. During project preparation, the intervention areas were already defined. Thus, proposed activities to achieve BD-2 objective focus on the mainstreaming of biodiversity conservation into productive activities (specially plant extractivism and livestock). They aim to regulate natural resources uses by local communities in order to conciliate economic activities with biodiversity and ecosystem services maintenance on productive areas. This will be done through the adoption of site specific good management practices described in subcomponent 2.3.

A.3 The GEF Agency's comparative advantage: N/A

A.4. The baseline project and the problem that it seeks to address:

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[7] http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2012/lei/l12651.htm

8.   With a total area of 1.17 million km², the Caatinga, Pampa and Pantanal constitute 13.6% of Brazil's continental land area. The three biomes have an elevated socio-environmental importance, but so far, have received relatively little conservation effort compared to other biomes in Brazil[8]. Furthermore, the efforts applied have not been extensive, coordinated and rigorous enough to ensure an efficient and effective conservation. According to Brazil's 11th National Biodiversity Targets, at least 17% of the Caatinga, Pampa and Pantanal biomes should be set aside as protected areas. Yet, current levels of protection for each biome are as follows: Caatinga 7.6%, Pampa 2.7% and Pantanal 4.6%. Deforestation rates in the project biomes, is as follows: 1) Pampa: the current average rate of deforestation rate is of 0.2%/year. This biome has lost 54% of its original area, of 177.767 km². The main sources of pressures on native vegetation are the expansion of planted pastures, and forests and grain plantations; 2) Pantanal: with a total area of 151.313 km² still has lost about 17,80% original area and a deforestation rate estimated around 0.12%/year, being the main causes of habitat loss the expansion of agriculture, livestock and hydropower plants that affect drastically the natural hydrological regimes; and 3) the Caatinga: with an original area of 826.441 km², had lost 45.82% up until 2011 with a deforestation rate of approximately 0.12%/year, mostly associated with animal grazing. Under a business as usual scenario Greenhouse Gases emissions from land use change in the three biomes are estimated to be of 113.1 million tCO2 (stock loss) and 3.61 million tCO2 (emissions from conversion).

9.   The three biomes harbor a number of threatened species according to the Brazilian Red List[9]. For fauna, in Caatinga, Pampa and Pantanal there are 247 species, 50 of them occurring inside PAs and 114 encompassed by existing PANs (National Action Plans). In relation to flora, there are 391 threatened species on those biomes, 250 on Caatinga, 120 on Pampa and 21 on Pantanal, with 157 species occurring inside PAs and 35 species contemplated by PANs. It is important to highlight that the methodology to be adopted for the development of PANs no longer focuses on species or specific taxonomic groups, but instead follows a territorial approach, covering the area of occurrence of a significantly greater number of species.

10.   The current coverage and representativeness of protected areas in targeted biomes is insufficient to ensure minimal protection levels. Brazil's National System of Protected Areas (SNUC) seeks to articulate conservation efforts at national and sub-national (state and municipality) levels. However, for such coordination to function smoothly federal government investments in its own and in state managed protected areas is critical. It is worth observing that protected areas alone, may prove to be insufficient to achieved the desired levels of conservation in places where land tenure is mostly in to private hands. Hence , the main issues hindering conservation efforts in the Project's biomes to which the project seeks to contribute, include: i) the weak coordination between federal and state governments efforts in identifying and prioritizing conservation actions; ii) financial and budgetary constraints for the creation and effective management of protected areas; iii) the difficulties in eliciting private landholders and communities' collaboration in conservation efforts.

11.   **Coordination issues**: Under a business-as-usual scenario, the creation and management of protected areas at those different levels respond to threats and opportunities perceived in an often-uncoordinated manner, often leading to suboptimal conservation results. Following a systematic and participatory prioritization process during project preparation the project seeks to coordinate the different levels of government lead to resource allocation optimization. The present Project creates a platform upon which federal and subnational governments, civil society and private sector may coordinate efforts to maximize synergies and improve the likelihood of success of conservation geared initiatives. In fact,

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[8] Overbeck G.E., et al. (2007). Brazil's neglected biomes : the South Brazilian Campos. *Perspectives in Plant Ecology, Evolution and Systematics*, 9: 101-116.
[9] **Portaria nº 443/2014 Flora Ameaçada**
pesquisa.in.gov.br/imprensa/jsp/visualiza/index.jsp?data=18/12/2014&jornal=1&pagina=110&totalArquivos=144
Portaria nº 444/2014 Fauna Ameaçada
pesquisa.in.gov.br/imprensa/jsp/visualiza/index.jsp?jornal=1&pagina=121&data=18/12/2014
Portaria nº 445/2014 Peixes e Invertebrados Aquáticos Ameaçados
pesquisa.in.gov.br/imprensa/jsp/visualiza/index.jsp?jornal=1&pagina=126&data=18/12/2014

once the legal basis, partnerships and the staff's work and dedication are secured and running, the GEF' support are critical to making the development of the planned actions possible. Brazil will need to coordinate federal and state level efforts to optimize the use of scarce resources allocated for nature conservation and achieve these policy objectives in a sound and efficient manner. Thus, according to the design detailed below the proposed project will provide critical and catalytical support to the Brazilian efforts to achieve its national objectives and contribute to its commitments under the CBD

12.   **Financing issues**: In 2009 MMA, has initiated to estimate the recurrent and investment cost for running the National Protected Areas System (SNUC) using the Minimum Conservation System software developed by the World Bank. Based on such estimation running the SNUC would require ca. USD 332.300.000/yr. for which the federal government allocated the USD 42.390.000 in 2016 budget, meaning an annual deficit of approximately USD 289.910. 000. Extrapolating those figures to the protected areas in the biomes under the proposed project (72.456.000 hectares) the projected financing gap would be around USD 28.900.000, or USD 3,7/hectare. With German Cooperation in the SNUC/LifeWeb Project, MMA is currently developing a more accurate tool to quantify the costs its protected areas costs, which should be available in 2018 for all PA management institutions to use for individual areas and to PA systems or sub-systems.

13.   **Local community engagement issues**: as mentioned above, protected areas coverage is low in the Caatinga, Pampa and Pantanal. Thus, community engagement plays a significant role in achieving conservation objectives both in side and outside PAs. In PA support will be done mostly through two management instruments: Management Agreements (Acordos de Gestão[10]) and Commitment Terms[11] (Termos de Compromisso). Management agreements is a management instrument that contains the rules agreed between the population of the protected area managing body seeking to reconcile traditional cultural economic activities with the sound management of natural resources. Commitment terms is a management and conflict resolution instrument between the managing body of the PA and people residing in protected areas whenever their presence is not permitted or their activities conflict with the PA's management objectives. It is a transitional arrangement that aims to guarantee conservation of the biodiversity whilst preserving the socioeconomic and cultural characteristics of the social groups involved.

14.   Outside PA, private areas contribute to ecosystem connectivity and fauna and flora species conservation. The implementation of public policy instruments, other than protected areas and command-and-control, is critical for an efficacious and cost-effective biome conservation strategy. Thereby, such as the provision of incentives, technical assistance, fire management, native vegetation restoration and communities' capacity building activities in conjunction with the provisions of the Native Vegetation Protection Law, are key to complement conservation efforts in protected areas. The Project results will depend on continuous dialogue to obtain community support and engagement in conservation actions. Audiences can be very different among components and biomes, for example: plant extractivists in the Caatinga, family farmers in the Pampa, and traditional ranchers or artisan fishers in the Pantanal.

15.   Additionally, the Brazilian governments has a number of programs and initiatives aiming at protecting its environmental assets through investments in social inclusion and enhancement of household incomes, including, for example the Bolsa Verde, a conditional cash-transfer program targeting poor families in environmentally important areas (with an allocation of approx. USD 30.0 million in 2016). The Brazilian governments understands that implementation

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[10] Additional information may be found at: http://www.icmbio.gov.br/portal/images/IN_29_de_05092012.pdf

[11] Additional information may be found at:
http://www.lex.com.br/legis_23497845_INSTRUCAO_NORMATIVA_N_26_DE_4_DE_JULHO_DE_2012

of public policy instruments, other than sheer command-and-control type, to elicit social cooperation is critical for an efficacious and cost-effective biome conservation strategy.

16.   In addition to the three systemic/institutional issues pointed above, fire management, forest restoration and management represent technical and operational challenges that so far also haven't received much attention in the Caatinga, Pampa and Pantanal.

17.   **Fire management in protected areas and their vicinity**: Governmental initiatives to establish early warning systems and to create strength institutional capacity for fire management include the IBAMA Prevfogo, a National center to prevent and control forest fires, and the Program for monitoring burnt by satellites (Programa Queimadas) from the National Institute of Spatial Research (INPE). Since the early 90's fire control projects took place in Brazilian Amazon and cerrado, however more recently the integrated fire management (IFM) strategies has been used(applied) to manage and protect biodiversity in protected areas and enhance community livelihoods by supporting sustainable land management practices. This strategy has been supported by the Brazilian-German cooperation in Cerrado-Jalapão Project. It considers that fire is a viable economic tool to attain land management objectives by rural people and local communities often have traditional knowledge on how to manage and prevent fire. However there are no experiences of IFM in Caatinga, Pampa and Pantanal biomes and this Project will be pioneer in investing on its viability for controlling fireburn in this target biomes.

18.   **Forest restoration and forest management**: are still at their early stages in the Project's target biomes and present a set of different challenges when compared to other Brazilian biomes, particularly to the Amazon and the Atlantic Forest, which have received significantly more attention and investments. Several projects such as PROMANEJO, Projeto Mata Atlântica, the recent GEF Mata Atlântica have invested in developing know-how, instruments and capacity building to both restore and manage forests in these biomes. The proposed project's activities will enable to initiate or strengthen forest restoration and agroforestry systems with high biodiversity in project's target biomes. Forest management is of special importance in Caatinga, where there is a high demand for wood and coal for energy production, in Pantanal and Caatinga for non-timber forest products and in Pampa for maintaining native grasslands by farmers. The restoration of converted areas is one of the objectives of the National System of Conservation Units - SNUC, an action that allows to promote the improvement of environmental services, reduce the risk of extinction of species, control erosive processes, mitigate the impacts of invasion of exotic species, increase the connectivity between fragments, and consequently promote the conservation of biodiversity. It's better to restore areas within a PA due the smaller risk of further degradation. Degraded areas existing prior to the creation of PAs are generally livestock pastures or abandoned agricultural areas, but also mining areas. Abandoned livestock pastures are often sources of dispersal of invasive alien species into protected areas. In many cases these anthropogenic areas continue to expand even after the interruption of human action.

19.   **The state of land requiring restoration in the project biomes is as follows:** Caatinga: Natural vegetation has been removed and soils exposed through deforestation, grazing and unnatural fires regimes, giving place to less biologically diverse communities and erosion. In this biome land degradation is mostly associated to animal grazing. Pampa: The grassland ecosystems are threatened by the expansion of agriculture and forestry, and degraded by the invasion of exotic species, and by inadequate management of cattle herds. Pantanal: Natural vegetation has been removed through deforestation, substitution of natural herbaceous vegetation for alien grasses species, grazing and unnatural fires regimes, giving place to fire prone less biologically diverse communities. Cattle farming in one of the main drivers of land degradation, restoration will be associated to alien species eradication and cattle management to avoid erosion and soil compaction in restored areas.

20.   The following map indicate project intervention areas. The different colors represent the areas of intervention in each biome according to project Component: solid purple indicates areas for the creation of new PA or expansion of existing ones (Component 1); solid green represents PAs to be consolidated (Component 2); the orange outline highlights

potential areas for restoration (Component 3); and in the blue outline are the selected territories for National Action Plans for the Conservation of Threatened Species (PANs) (Component 4). Intervention areas for components 1 and 4 were based, among other criteria, on Priority Areas for Conservation, Sustainable Use and Benefit Sharing of Brazilian Biodiversity (Ministerial Ordinance N° 9 from 2007) and intervention areas for component 2 considered: a) interest and human and financial capacity to implement project activities; b) the need for investments for equipping the protected area; c) the absence or need of reviewing management plans; c) historic problems related to fire; d) the need of restoring native vegetation; e) the existence of threated species; f) problems related to alien species; and g) the likelihood of establishing working partnerships with local communities to adopt good management practices.

GEF Terrestre
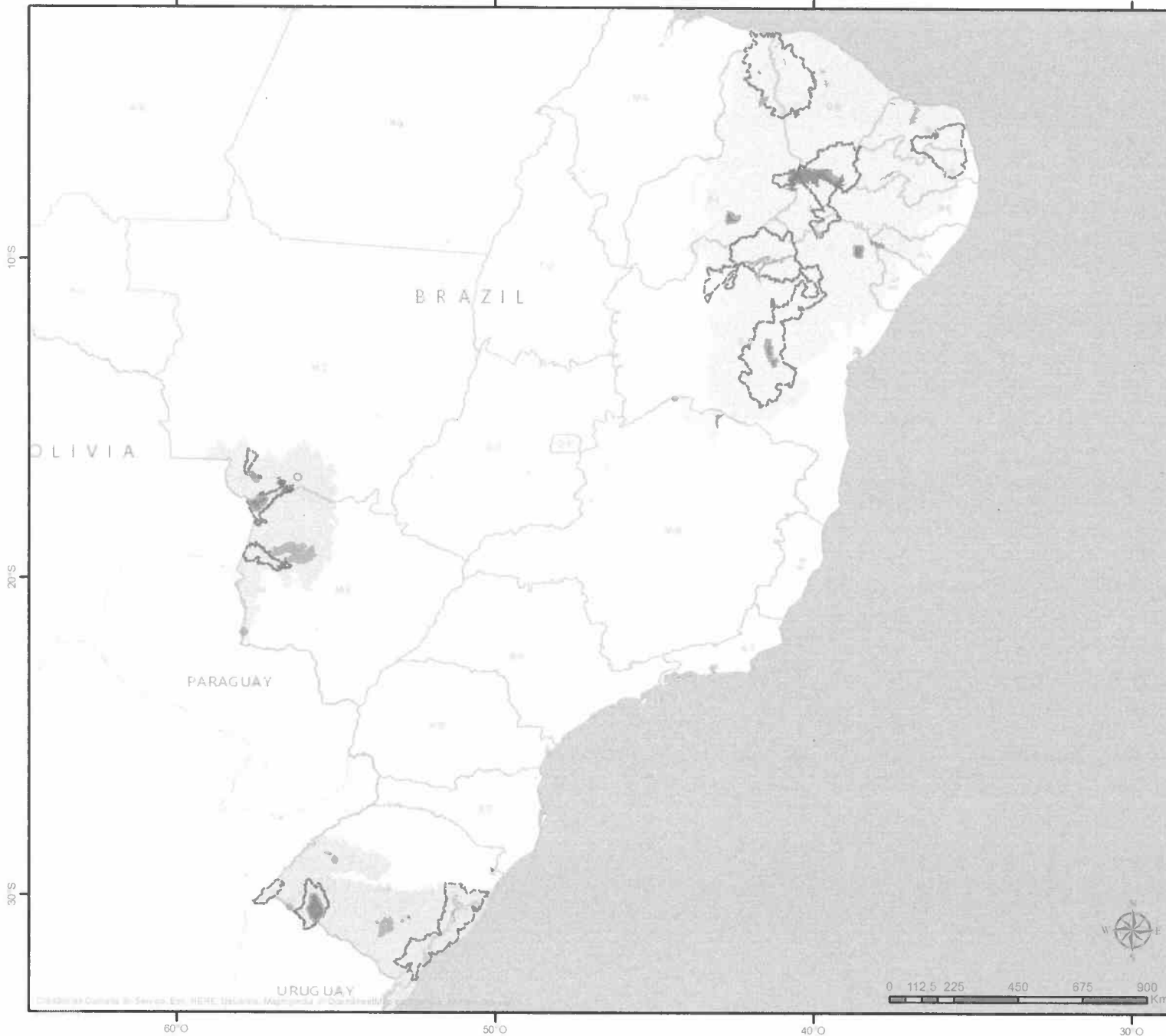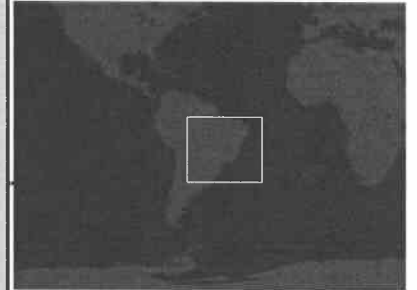
Borders

Caatinga

Pampa

Pantanal

Comp 1 - PA Creation

Comp 2 - PA Management

Comp 3 - Restoration

Comp 4 - PANs

Fonte: IBGE, MMA/CNUC, ICMBio, ESRI

Elaborado por MMA/SBio/DAP
Junho de 2017

Sistema de Coordenadas: GCS SIRGAS 2000
Datum: SIRGAS 2000
Unidades: Degree

1:18 000 000

0 112,5 225   450   675   900
Km

MMA

Ministério do Meio Ambiente

21.   During Project preparation, consultation to PA management institutions brought nearly 70 potentially new protected area processes in 12 states in the three biomes. A technical analysis based on priority areas for conservation and sustainable use and consultation to PA management institutions, aiming an equal distribution among the biomes allowed prioritization of components 1 and 2 intervention sites. For component 1, according to this analysis, the goal of nearly 1,000,000 hectares 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. Due to the uncertainties involved in the process of declaring PAs, the project will support a total of 29 creation processes (totaling 2,610,491 ha), 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 in the three target biomes. In component 2, the process consisted of a stepwise multiple-criteria analysis, that described on paragraph 6that resulted in the preliminary choice of: (i) 1,497,389 ha in the Caatinga Biome; (ii) 335,067 ha in the Pampa Biome; and (iii) 333.521 ha in the Pantanal Biome.

A. 5. Incremental /Additional cost reasoning: describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

22.   The general objective of the project has changed to make a direct association to an impact 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. 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].

23.   In order to demonstrate the economic effectiveness of the project, a cost-benefit study has been conducted (see Optional Annex 7 of the projects Proposal for Operation Development). The economic contribution of the project is estimated considering what would happen in the absence of project-financed measures, considering three counterfactual scenarios. Without the project, ecosystem services would still be provided by the protected and production landscapes, but would likely diminish over time due to land use pressures. The cost-benefit analysis of the project results in a present net value of US$26,222,034,032 (12% discount rate), which would make the project economically viable. A sensitivity analysis of the VAN of the project was conducted for annual discount rates of 10% and 14%, also resulting in significant net benefits. Finally, the analysis determined the incremental benefit - the gains over the three counterfactual scenario, estimating a minimum total benefit over the alternative of over US$243 million (14% discount rate, 20-year time horizon), as the value of additional ecosystem services provided compared to the baseline scenarios that renders the highest level of ecosystem services.

Component 1. Creation of New Protected Areas (USD2,830,265). This component – financed through BD FA resources - 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) environmental, 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 sustainable use provisions or tourism/visitation potential, analyses related to sustainable development of natural capital (financing plans); and (v) basic outreach and information materials. Protected areas created under this component contribute directly to GHG emission abatement by preventing land use conversion in 1.000.000 hectares.

The Component will work with the following long list of areas:

Potential areas to creation of new PAs-Component 1

Biome & Proposed Name	Area	Location	Jurisdiction	Proposed SNUC Category	IUCN Category
Caatinga	**1,428,764**				
Serra da Taborda e Morro do Pilão	1,000	AL	State	ARIE	IV
Boqueirão da Onça	850,000	BA	Federal	PN	II
Mosaico de Curaçá	36,304	BA	State	(TBD)	(TBD)
Ararinha Azul	50,000	BA	Federal	ARIE	II
Itatim	14,087	BA	State	(TBD)	(TBD)
APA Estadual Serras da Caatinga	68,545	CE	State	APA	V
Soldadinho do Araripe	4,269	CE	Federal	RB	I
Parque Estadual Fur na dos Ossos	15,702	CE	State	PE	II
PE das Carnaúbas (extension)	10,005	CE	State	PE	II
Mata Seca norte de MG	30,000	MG	State	PE	II
Serras das Águas Sertanejas	31,500	PB	State	PE	II
Serra do Teixeira	60,248	PB	Federal	PN	II
Serra da Matinha	6,330	PE	State	(TBD)	(TBD)
Serra do Almirante	7,300	PE	State	(TBD)	(TBD)
Mosaico do Cânion do Rio Poty	114,500	PI	State	(TBD)	(TBD)
Sete Cidades (extension)	8,732	PI	Federal	PN	II
APA Carnaúbas	100,111	RN	State	APA	V
APA Dunas do Rosado	16,593	RN	State	APA	V
Cavernas de Martins	3,538	RN	State	MN	III
Pampa	**312,822**				
Pau Ferro I e II	75,000	RS	Federal	(TBD)	(TBD)
Butiazais de Tapes	20,000	RS	Federal	(TBD)	(TBD)
Guarita / Palmas	200,000	RS	Federal	(TBD)	(TBD)
Monumento Natural Cerro do Jarau	17,471	RS	State	MN	III
Reserva Biológica do Ibirapuitã	351	RS	State	RB	I
Pantanal	**868,905**				
Mosaico de Porto Murtinho	190,763	MS	Municipal	(TBD)	(TBD)
Corixo Grande do Rio Paraguai	358,142	MT	State	(TBD)	(TBD)
Taiamã	60,000	MT	Federal	EE	I
Salinas Pantaneiras	200,000	MS	Federal	PN	II
Pantanal Matogrossense	60,000	MT/MS	Federal	PN	II

Component 2. Management of Existing Protected and Adjacent Areas (USD12,736,192). This component – financed through, BD, SFM and CCM FA resources - aims to increase protected area management effectiveness by strengthening planning, monitoring and implementation capacity with PA's; promoting biome-appropriate fire management and the engagement of local communities in management practices in PA and adjacent production landscapes aiming to avoid or reduce negative impacts on biodiversity and ecosystem services. 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 invasive 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 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 Integrated Fire Management which includes fire exclusion, fire control and fire prevention (prescribed burn in tolerant vegetation, other management alternatives to fire use, monitoring, training, research and awareness). It will support the following activities: (i) fire prevention, monitoring and control activities within PA's; (ii) integrated fire management (IFM[12]) researches and workshops; (iii) development of fire management protocols; and (iv) outreach and training to promote collaboration and implementation of fire management protocols in PA and adjacent areas. These activities will be conducted in 20.000, which are reported in SFM and CCM tracking tools, since they contribute to reduce pressure on forest resources and generate sustainable flow of forest ecosystem services such as climate regulation. This will be achieved by avoiding severe wildfires and the consequent releases of large volumes of GHG.

c. **Sustainable Management of Production landscapes**. This sub-component financed through BD-2 aims to regulate natural resources uses and to conciliate economic activities with biodiversity and ecosystem services maintenance on productive areas through the adoption of good management practices. This sub-component will finance the following activities: (i) development of management instruments for PA's resident communities' natural resources uses; and (ii) implementation of good management practices by local communities related to productive activities that contribute to biodiversity and ecosystem services maintenance. In PAs of sustainable use this can be done by a management agreement developed with the local communities that regulates how determined product can be explored to guaranty its sustainable use (called in Portuguese as "Acordo de gestão"). In PA from integral protection group (restricted use), eventually a commitment term ("Termo de compromisso") may be signed between the PA management institution and local communities to avoid conflicts and to guaranty effective management. Other management practices to be conducted under this sub component are related to livestock in native grasslands, extractivism and meliponiculture in the Project's selected territories. Three pre-selected areas to implement good management practices related to these activities comprises 23.000 hectares, as specified at BD-2 and SFM Tracking Tool.

The Component will work with the following protected areas, all of which except for the PN Aparados da Serra will be subject to the sustainable financing analyses included in sub-component 2.a:

Protected Areas - Component 2

Biome & Proposed Name	Area	Location	Jurisdiction	SNUC Category	IUCN Category
Caatinga	**1,497,389**				
PE das Carnaúbas (existing)	9,999	CE	State	PE	II
PN Sete Cidades (existing)	6,304	PI	Federal	PN	II
PN da Serra da Capivara	100,763	PI	Federal	PN	II
PN da Chapada da Diamantina	152,142	BA	Federal	PN	II
PN Ubajara	6,269	CE	Federal	PN	II

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[12] Integrated Fire Management (MIF) is an approach that considers ecological, cultural and management practices to propose the rational use of controlled burning, as well as the prevention and control of fires so as to promote the conservation and sustainable use of ecosystems.

APA Chapada do Araripe/ FN Araripe-Apodi	972,593	CE/PE/PI	Federal	APA/FN	V/VI
ESEC Raso da Catarina	104,842	BA	Federal	EE	I
PE Morro do Chapeu	51,916	BA	State	PE	II
RVS Morros do Carauna e do Padre	1,088	AL	State	RVS	III
MONA do Rio Sao Francisco	26,736	AL/SE/BA	Federal	MN	III
PE Caminho dos Gerais	56,220	MG	State	PE	II
PN de Furna Feia	8,517	RN	Federal	PN	II
Pampa	**335,067**				
APA do Ibirapuitã	316,671	RS	Federal	APA	V
Parque Estadual do Podocarpus	3,639	RS	State	PE	II
Parque Estadual do Espinilho	1,609	RS	State	PE	II
PN Aparados da Serra	13,148	RS/SC	Federal	PN	II
Pantanal	**333,521**				
PN Pantanal Matagrossense	135,923	MT	Federal	PN	II
PE do Pantanal do Rio Negro	77,909	MS	State	PE	II
PE Encontro das Aguas	108,134	MT	State	PE	II
ESEC Taiamã	11,555	MT	Federal	EE	I

Component 3. Restoration of Degraded Areas (USD 6,572,360). This component - financed through both, BD, CCM and SFM FA resources - will contribute to improving carbon sink and 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[13]; (ii) restoration maps for the three target biomes; (iii) restoration implementation, including restoration monitoring and community engagement. Parallel financing will finance restoration activities by private land owners and activities to prevent, control and combat desertification in the Caatinga biome. This component contribute directly to enhance carbon stock in 5000 ha of current degraded areas.

Restoration will prioritize areas within existing PAs. A preliminary survey pointed to more than 1 million hectares in PAs with degraded areas in the project's biomes. The selection process was based on the following criteria: a) existence or forecast of a Management Plan that includes restoration actions; b) size of the area to be restored; c) proximity to remnants of native vegetation; d) existence of actors in the chain of restoration (nurseries, seed collectors, companies or organizations implementing restoration projects); e) existence of knowledge / research and ongoing restoration initiatives in the region; and f) presence of endangered species. Priority will be given to cost-effective and socially viable techniques, such as the conduction of natural regeneration, direct seeding, hay transposition, soil surface transposition and nucleation[14]. The areas selected for restoration will be monitored for identification and isolation of degradation factors (fire, invasive species, erosion, etc.), invasive species control activities, introduction of native species or conduction of natural regeneration, and maintenance (e.g. replanting, weeding, invasive control, ant control, fertilization, erosion control, irrigation).

Component 4. Monitoring of Flora and Fauna Extinction Risks (USD 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

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

[14] Nucleation consists of applying any of the aforementioned restoration technics in scattered areas (biodiversity nuclei) so as to optimize restoration effort.

following activities: (i) development of territorial National Action Plans for the conservation of threatened species (PAN)[15] for the three biomes; (ii) implementation of threatened species guidelines planned in PAN in the three biomes, including technical assistance for forest management, good, best management practices, structuring of biological corridors; (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 the 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 with parallel financing.

Component 5. Integration and Community Relations (USD 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) production and dissemination of communication and outreach materials to improve public awareness and engagement of local communities; and (iv) implementation of participation mechanisms. Potential beneficiaries in terms of number of inhabitants in Project intervention area have been estimated approximately as follows: (i) Pampa 88,000 people; (ii) Pantanal 62,000 people; (iii) Caatinga 114,000 people –counting only those living inside existing PA.

Please find below a comparison between the information on project outputs provided at PIF and CEO Endorsement.

Output PIF	Output CEO Endorsement	Justification
At least 24 new protected areas declared covering 1,000,000 hectares	At least 10 new protected areas declared covering 1,000,000 hectares	Assessment of current studies and PA creation process demonstrates a greater potential of achieving the 1,000,000 hectares based on 10 areas
Financing plans for 10 of the new PAs	Financing plans for 5 of the new Pas	All existing PA financed by sub component 2.1 will have financial plans (19 PA), to maintain PIF output 2 (BD-1), 5 financing plans will be developed for new PAs
Management plans or specific management programs (e.g.fire management, biodiversity monitoring), including sustainable financing plans, prepared for 14 priority PAs	Management plans or specific management programs (e.g. fire management, biodiversity monitoring), including sustainable financing plans, prepared for 19 priority PAs	Higher exchange rate US$ to R$ to increases number of targeted PA from component 2
Business plans focusing on ecosystem services provisions provided by Pas under implementation in 4 selected communities adjacent to PAs	Management agreements and good management practices that conciliate economic activities with biodiversity and ecosystem services maintenance developed and under implementation in 3 production landscapes.	Financial plans will cover business opportunities in selected PA, thus the importance of ecosystem services will be highlighted in productive areas or in PA were sustainable use is allowed.
Assessments to determine most strategic and effective sites for restoration completed	3 planning and monitoring biome-specific restoration instruments	Financial plans will cover business opportunities in selected PA, thus the importance of ecosystem services will

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[15] National Action Plans for the conservation of threatened species, instituted by the do "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.

		be highlighted in productive areas or in PA were sustainable use is allowed.
Land use plans for identified priority sites prepared	Biodiversity and Ecosystem Services based instruments such as management agreements and good management practices under implementation in 3 selected communities associated to PAs or adjacent production landscapes.	The sub component 2.3 was developed to contribute to objective 2 of GEF's Biodiversity strategy.
Assessment of PA effectiveness in meeting conservation goals (incl. status of threatened flora and fauna) completed	Assessment of PA effectiveness in meeting threatened flora and fauna conservation goal completed	Minor changes were made to comply with National Target 12.
Design and management guidelines developed for PAs to meet specific needs of priority species	Territorial Action Plans (T-PANs) elaborated, including guidelines on threatened species and habitat management requirements to meet specific needs of priority species.	Minor changes were made to make clear that Guidelines to meet specific needs of priority species, either inside or outside PA, are the core of the T-PAN conservation strategy.

24.   **Private Sector Participation**: Part of the activities of the project will be executed on private properties, either those areas adjacent to protected areas, or within the protected area that allow private properties, especially in the environmental protection area category ("Area de Proteção Ambiental – APA"). The principal mechanism for conservation on private lands within the SNUC are the private natural heritage reserves (Reservas Patriculares do Patrimonio Natural – RPPN). There are currently 790 RPPNs registered in the National Registry for Protected Area (Cadastro Nacional de Unidades de Conservação-CNUC), although this might underestimate the actual number by about 40%, according to figures from the Association of Private Natural Heritage Reserves Owners – CNRPPN. This association plays an active role in supporting RPPNs, for example through initiatives like the Sustainable Tourism Development Program for RPPNs in Brazil – ProEcotur-RPPN, aimed at promoting ecotourism in RPPNs. In the context of the present project, the partnership with the CNRPPN intends to support the registration of existing RPPNs, as well as the ProEcotur-RPPN, principally within the Pantanal biome. Within the Pantanal biome, the project will also partner with the Serviço Social do Comércio (SESC); the RPPN SESC-Pantanal is a Ramsar site, as well as a core zone of the Pantanal Biosphere Reserve, and as such of critical importance to any conservation measures in this biome.

Global Environment Benefits:

25.   Global Environmental Benefits derived from this Project include: i) protection of globally significant biodiversity, including endemic threatened species, through the creation of 1.000.000 ha of new protected areas, improved management in other 1.000.000 hectares in existing protected areas and adoption of biodiversity friendly practices on 20.000 hectares production landscapes; ii) increased adoption of innovative technologies and management practices for GHG emission reduction (i.e. protected areas creation and fire management) and carbon sequestration (i.e. vegetation restauration, in 20,000 hectares) and sustainable management practices with local communities (in 5,000 hectares); and iv) reduction in forest loss and forest degradation and maintenance of the range of environmental services and products derived from forests.

26.   The project will contribute to the Brazilian government efforts in achieving the Aichi Biodiversity targets. The project approach that consists of creating protected areas, which focus on protecting threatened species while at the same time promoting climate and environmentally friendly land use management practices (in agriculture, cattle ranching and forestry) in a socially inclusive manner, should contribute more specifically to targets: 5 (by 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced); 11 (by 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent

of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes); 12 (by 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained); 14 (by 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable); and 15 (by 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification).

27.   The project shall yield carbon benefits from avoided emissions through protected areas creation, introducing integrated fire management in the target biomes and by promoting vegetation restoration. A carbon model was prepared for the project. It was based on the premises of current deforestation rates in the biomes, measured carbon stocks and on the potential impact of protected areas in averting those rates. According to the model the expected project benefits in curbing GHG are as follows: Under a Business-As-Usual (BAU) scenario stock lost from (2018-2022) would be around 113.3 million tCO_2 and emissions from conversion would amount to 3.61 million tCO_2. Under the Project Scenario there would be stock gains amounting to 75.693 tCO_2 and prevented emissions in Protected Areas of 239.663 tCO_2. Ten years after the project in the BAU scenario stock loss from conversion would be of 287.4 million tCO_2 and emissions from conversion 9.18 million tCO_2. Under the project scenario there would be stock gains resulting from protected areas improved management and/or creation of 57.9 million tCO_2 and emissions prevented would be around 2.16 million tCO_2. In Brazil protected areas have proved to be effective in deterring deforestation and emission from conversion are expect to curb right after protected area creation.

28.   In regard to GEBs generated under CCM and SFM focal areas, this project's additionality focusses on promoting extensive capacity building to control and prevent native vegetation burning while restoring degraded lands. Brazil loses millions of hectares due to uncontrolled fire in federal and state protected areas; this is mainly due to the lack of qualified personnel working on fire control and absence of restoration plans for these affected areas. GEF funds are expected to improve fire management, elaborate restoration plans and effectively restore 5000 hectares in key intervention areas. At the same time, this project was designed and prepared under the determination and regulations of the 2012 revised Forest Code. It is expected that by achieving the expected results in restoration activities, including the definition of decision-making instruments and monitoring protocols for restoration, this project will serve as a model for the restoration of Permanent Protection Areas (PPA) and Legal Reserves (LR) on rural properties. The restoration activities under the project will generate local know-how and capacity that may be upscaled in other government programs and will help to address the drivers of land degradation in the long run and in a larger scale.

A.6. Risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and measures that address these risks:

Risks	Rating	Mitigation measures
Increase in poverty-driven deforestation	Medium	Management agreements focusing on ecosystem services are expected to reduce conflicts and to provide an alternative source of income for the targeted communities and sustainable management practices should help in poverty-driven deforestation.
Low counterpart commitment due to low prioritization	Medium	Commitments letters from participating agencies have been sought and obtained.

and/or political support for conservation measures		
Political changes in the federal government could lead to changes in the technical coordination of the project and cause delays in execution	Medium	The PEA being a private organization (FUNBIO), is not directly affected by transitions in government. The Federal Government, represented by the MMA, has participated actively through its technical and managerial staff; it is expected that personnel at those levels would be less impacted by such transitions than the upper management levels. The Bank is prepared to assist the PEA and project Beneficiary during such transitions, based on legally binding documents (Technical Cooperation Agreement signed by the PEA and the MMA) as well as on execution instruments (results matrix, operations manual) to reduce possible delays in the execution.
Delays due to insufficient coordination among participants	Medium	The "Technical Cooperation Agreement" to be signed by the Federal Government and the Executing Agency, as well as subsidiary agreements with other participating agencies, will effectively establish the commitments of each of the agencies (i.e. financial, technical and other) for the five-year project implementation period. The Operational Manual of the Program (OMP) will contain the specific responsibilities of participating agencies for the timely provision of technical and financial reports for the various programs under their responsibility which form part of the parallel financing structure of the project.
Resistance from local communities to new conservation units	Medium	The Brazilian System of Protected areas comprises 12 PA categories, from which four allow private properties and two are to meet traditional people demands. Social, economic, environmental and land tenure studies are conducted during the creation process in order to identify the most appropriate category and adequate limits considering residents and local situation. The Project's Social Strategy adopts as a main directive, the avoidance of involuntary resettlement for local communities and in general, a minimization of negative social impacts. These directives will be widely publicized, as well as potential benefits for local communities derived from the operation. The project will not support the declaration of new or expanded protected areas that results in access or land use restriction. The Project will support outreach material that will contribute to local communities understanding the PA benefits to their life's. It's worth noting that disputes over land use restriction and resistance from local communities pose a risk to achieving the goal of 1 million hectares of new protected areas.
Limited private participation in some activities of the project	Low	Wide-spread informative actions will be undertaken to disseminate the potential benefits for landholders to be derived from the adoption of sustainable land management practices. This will be part of the project's overall communications and participation strategy (Component 5).
Climate Change increases fire	Medium	Fire management improvement is one of this project's main priorities. Component 2 brings a set of activities that is aimed to control and prevent fire in the biomes.
Climate Change increases biodiversity loss	Medium	Protected areas will be equipped to better monitor Biodiversity loss and its related causes (Component 2). Restoration activities will directly contribute to the mitigation of climate change risks (Component 3). PANs will be implemented in order to reduce biodiversity loss in all PAs (Component 4).

		All planning processes financed by the project – and specifically the revision or elaboration of management plans for protected areas - will incorporate considerations of the ecosystem services provided by the conservation units. Since the mitigation of climate change risks and the provision of ecosystem services are closely linked, such an approach promotes the mitigation of risks of biodiversity loss from climate change.
Fire disturbance in restored forests	*Caatinga biome:* Medium *Pantanal and Pampa* biomes: Medium-low	This risk is naturally lower in the Pantanal and Pampa biomes, because native vegetation is more resilient to fire and hence impacts from fire are less severe and recovery is quicker than in the drought-dominated Caatinga (where climate change could lead to a further intensification of drought events). The principal mitigation measure are prescribed/controlled burns, as well as the work with local communities regarding fire management practices, included in Component 2 of the project.

A.7. Coordination with other relevant GEF financed initiatives:

29.   In addition to what was mentioned in PIF stage, two new GEF projects are being coordinated under MMA. The National Strategy for Conservation of Threatened Species - GEF ID9271, and the Project Reversing Desertification Process in Susceptible Areas of Brazil: Sustainable Agroforestry Practices and Biodiversity Conservation (REDESER) - GEF ID5324. Both initiatives have synergies with GEF-Terrestre and will contribute to similar government policy objective.

30.   It goes without saying that FUNBIO is the executing agency for Brazil's ARPA and GEF MAR projects that are developing important management tools for protected areas and guidance for the protection of threatened species. Since its implementation in 2002, ARPA has undergone three different implementation phases, which reflect lessons learned along its execution. Currently supporting more than 100 PAs in the Amazon, ARPA has developed and adopted planning tools, based on assessments of PA consolidation status and associated cost estimates to achieve progress, that serve as a model for other PA oriented projects. GEF Mar builds upon ARPA's experience to adopt a more integrated approach that considers PAs as part of a wider landscape that suffer pressures from fisheries and other productive activities. In addition, the role of PAs for the conservation of key species is also being explored. The project will also benefit from achievements obtained by the National Biodiversity Mainstreaming and Institutional Consolidation Project (PROBIO II) – notably the experience and refinement of species and threatened species lists as well as National Action Plan strategies for threatened fauna and flora, under the responsibility of ICMBio and JBRJ. The flow of lessons learned between these initiatives and the present project will be facilitated by sharing the same executing agency. FUNBIO has extensive experience working with MMA, ICMBio and State Environmental Agencies.

31.   With respect to implementation of CAR, the project will adopt a strategic integrated approach together with four other GEF projects seeking synergy and complementarity and taking due care to avoid duplication. GEF TER Project will coordinate with the REDESER project (GEF ID 5324) that contributes to the training of staff in State Environment Agencies for implementing CAR and the PRA as one way to comply with the new Forest Code in Caatinga, ensuring compliance with requirements of APP and RL throughout landscapes. The proposed project will also cooperate with the "Sustainable Land Use Management in the Semi-Arid Region of Northeast Brazil (Sergipe)" (GEF ID 5276). This project proposes to stimulate CAR implementation in Alto Sertão (7 municipalities), a region covered by Caatinga, by providing technical assistance to develop a program for institutional strengthening of the state for the use of planning tools (training of Sergipe Environment Agency about CAR will include links to LD and SLM monitoring and oversight, using satellite imagery and equipment provided via the MMA). This project aims to develop inter-institutional coordination of actions regarding the organization of technical procedures for regularization of properties identified as strategic for the enhancement of environmental recovery actions. In this context, it will undertake an in-depth analysis to identify best approaches for implementation of the CAR in the municipalities of Alto Sertão. Finally, the proposed project will also

coordinate, through knowledge exchanges, with GEF funded and IADB implemented, Recovery and Protection of Climate and Biodiversity Services in the Paraiba do Sul Basin of the Atlantic Forest of Brazil, executed by FINATEC and benefiting the states of Minas Gerais, Rio de Janeiro and Sao Paulo and the Brazilian Ministry of Science and Technology.

B. ADDITIONAL INFORMATION NOT ADDRESSED AT PIF STAGE:

B.1 Describe how the stakeholders will be engaged in project implementation

Stakeholders	Description of stakeholders in the project implementation
Ministry of Environment - MMA	The MMA will support the technical coordination and monitoring of the implementation of project components.
Instituto Chico Mendes – ICMBio	The ICMBio is responsible for proposing, implementing, managing, protecting, supervising and monitor the protected areas established by the Union. ICMBio will support the management and implementation of new protected areas as well as the improvement of existing ones. In addition, ICMBio is responsible for the execution of the environmental compensations that represent a significant part of the co-finance presented for this project. ICMBio will also play an important role in implementing restoration activities, monitoring biodiversity (see Annex B for Biodiversity monitoring / REDD+ Project Synergies) and developing and monitoring PANs.
Instituto de Pesquisas Jardim Botânico do Rio de Janeiro - JBRJ	The JBRJ promotes and disseminates scientific research with emphasis on flora focusing on the conservation and valuation of biodiversity. The JBRJ will be supporting the technical coordination and monitoring of the implementation of activities related to flora related to the development and implementation of PANs.
State Governments	The state governments of Rio Grande do Sul, Mato Grosso, Mato Grosso do Sul, Pernambuco, Bahia, Piaui, Paraiba, Ceará and Rio Grande do Norte will be creating and enhancing management effectiveness of protected areas under their jurisdiction and supporting federal government in the creation of new protected areas under their related territories. The states commitment, expertise on the creation of management tools for protected areas as well as guidance for the protection of species will be crucial for the achievement of results under this initiative.
Local Communities	Local communities wil be attending communication and participation programs designed to engage local communities in the creation and effective implementation of conservation activities.
KFW and GIZ	The SNUC-LifeWeb Project finances broad activities that are closely related to this GEF-Terrestre and that improve de PA Systems functioning (capacity building, PA management guidelines, SNUC Communication Program. Thus, the two Projects are complementary.
Al Wabra WildLife Preservation	This is one of MMA partners in the Spix's Macaw Reintroduction Project. AWWP will be responsible to manage captive population, transfer Spix's Macaw individuals, and support the construction of the Reintroduction and Breeding Aviary on Concordia Farm, in Curaçá, Bahia State.
Estância Ecológica SESC-Pantanal	This Comercial-Social Service private and non-profit organization is one of MMA partners that will support restoration, fire management and fauna and flora PAN activities as well as work together in developing communication strategies to strengthen dialogue with society and with Man and Biosphere Program Committee in Pantanal.
Porto Murtinho Municipality	In Mato Grosso do Sul State, Porto Murtinho will plays a special role on the process of creation of new PAs, since some of the expected areas for creation are located in this municipality.
Private Natural Heritage Reserve Association	Private reserves, one of the management categories defined by Protected Areas National Policy (SNUC) plays significant role on biodiversity conservation on Caatinga, Pampa and Pantanal, where the protected areas coverage is reduced, and thus, small protected areas works as stepping stones for landscape connectivity and restoration gene pool.

Institutional Arrangement for the Implementation of the Project

32.   The Executing Agency (EA) for the project is the Fundo Brasileiro para a Biodiversidade – FUNBIO, a not-for-profit entity specialized in the fiduciary and operational management of environmental projects[16.] FUNBIO will be responsible for the technical, financial and fiduciary execution and administration of the Project. 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.

33.   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.
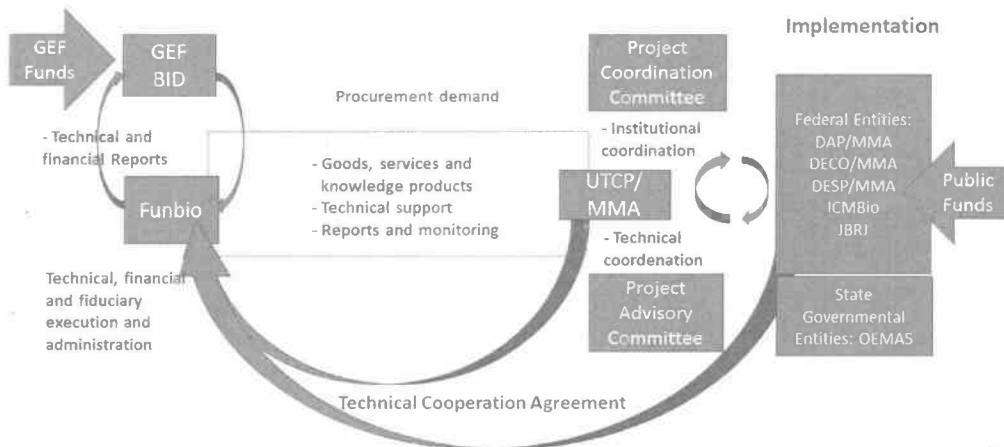
34.   FUNBIO will also coordinate its activities to be carried out within the project's execution scheme with the following Brazilian federal and state governmental entities, which have agreed to participate and support the project's execution in the geographic or technical area corresponding to their respective legal mandates: (i) ICMBio will assist FUNBIO in the implementation of activities contained in Components 1, 2 and 3, particularly those focused on federal conservation areas and surrounding areas; (ii) Botanical Garden of Rio de Janeiro will support FUNBIO in the implementation of Component 4 activities related to threatened 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 support FUNBIO in the implementation of Components 1 and 2 activities focused on their respective state-level protected areas. Each of these entities will act as an operating unit in support of 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; 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.

Project execution scheme.

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[16] 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 U$ 579 million, supporting 245 projects from 170 different organizations (Source: FUNBIO).

Implementation

GEF Funds → GEF BID

Procurement demand

Project Coordination Committee

- Technical and financial Reports

- Goods, services and knowledge products
- Technical support
- Reports and monitoring

- Institutional coordination

Federal Entities: DAP/MMA DECO/MMA DESP/MMA ICMBio JBRJ

Public Funds

Funbio

UTCP/ MMA

- Technical coordenation

Technical, financial and fiduciary execution and administration

Project Advisory Committee

State Governmental Entities: OEMAS

Technical Cooperation Agreement

B.2 Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF):

35.   At a global and national level population will be, for the most part, positively affected by the Project's activities. The increase in biodiversity conservation effectiveness and its association to ecosystem services (climate regulation, goods provision, water quality, soil protection and cultural and leisure services) will bring better life quality to society in general. At the local level, protected areas may generate employment and income opportunities associated to protected area management (e.g. jobs in protected areas– e.g. fire brigades and ecotourism). . Furthermore, landowners may have access to improved management practices, through technical assistance and extension, and the opportunity to improve their potential economic returns . The involvement of communities in PA creation and management, restoration activities, conservation of threatened species may elicit their collaboration in biodiversity conservation and to eventually benefit from the potential opportunities brought by the Project.

36.   As mentioned above, such opportunities may relate to jobs in protect areas management, opportunities created because of the existence of protected areas. One potential source of economic opportunities for communities living around protected areas related to jobs and businesses in vegetation restoration. A community based initiative to restore native vegetation and to develop agroforestry systems with high biodiversity within and around PAs may strength relations with the management of the PA, raise awareness in the community through environmental education, and encourage the environmental regularization of the rural properties, in accordance with the Law of Native Vegetation Protection. The participation of community nurseries producing native seedlings and seeds and local labor in the project activities may strengthen the local productive chain, leaving a permanent legacy that will assist in the implementation of the PRA and PRADAs at a regional level.

37.   The proposed project is also consistent with the mandate established under OP-761, on Gender Equality in Development, as activities included in the project will seek to contribute to empowering women in project intervention areas. While the project does not include any activities specifically targeted at promoting the participation of women in conservation efforts, the activities financed through the project will enable equal access, regardless of gender. Additionally, the following project activities may 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

the PA Consultative Committees established to support decision-making in PA; (iii) fire control benefits will impact positively on women, as fire events limit the availability of firewood for household consumption, which is a woman's responsibility; iv) management and public awareness about biodiversity sustainable uses, such as carnaúbas (Copernicia prunifera), a native palm tree from Northeast Brasil (Ceará and Rio Grande do Norte State) used by women for art and craft production. Women participation will be monitored and reported under Component 5.

B.3. Explain how cost-effectiveness is reflected in the project design:

38.   In the Caatinga, Pantanal and Pampa the clear majority of land lies under private property. This makes the creation of protected areas and their management more complex when compared, for example, to the Amazon biome were vast tracts of land still lie in control of the State. From a social, political and financial standpoint the eventual need for involuntary resettlement and access restriction lead invariably to conflicts and increase costs in litigation, compensations payments, etc. Therefore, the proposed project implementation strategy seeks to avoid those costs by articulating the PA creation and management areas with interventions in the production landscapes surrounding those areas aiming at establishing partnerships for the adoption of biodiversity and ecosystem services friendly production practices. The GEF resources will help to coordinate and catalyze actions with other governmental and non-governmental entities   for strengthening environmentally friendly economic activities ranging from environmental restoration to culturally adapted silvopasture agroforestry systems, to tourism where natural resources uses are restricted.

39.   Approaches that focus on the restoration of degraded landscapes within and around PAs also constitute an important strategy that contributes to the achievement of the desired impacts associated with promoting connectivity and thus enhancing the contribution of PAs to biodiversity conservation and the maintenance of ecosystem services and functions. The creation and consolidation of protected areas is one of the most cost effective ways to promote biodiversity conservation, to reduce and control deforestation and to offset GHG emissions[17]. Initiatives such as the ARPA Program, GEF Mar, and GEF Cerrado, which together created and supported PAs in the Amazon, Cerrado and marine biomes, achieve results that have impacts at the local, national and global scales.

40.   Finally, based on the current scenario of biodiversity conservation in Brazil, it is expected that without effective improvements in mitigation actions that consider the current governance model, the parties involved will not sufficiently articulate, information will be poorly disseminated and, consequently, communication will be deficient and inconsistent. The inefficiency in the articulation between actors results in fragmented information and insufficient data analysis, generating knowledge gaps and often duplicates work.

41.   Restoration plans will prioritize the use of lower cost techniques of restoration in order to be cost-effective. Among the cheapest existing restoration techniques are the conduction of natural regeneration, direct seeding, transposition of soil surface layer and nucleation. Also, the use of local labor and the involvement of community nurseries producing seedlings and seeds will reduce the costs of restoration and can bring socioeconomic benefits for the local population.

42.   In this way, a cost of USD 1,094 per hectare is estimated for the field restoration activities of the project. In a scenario where commercial restoration was used without the involvement of the local community, considering more expensive restoration techniques such as total planting of seedlings, costs per hectare can reach up to USD 6,300. Therefore, the project will maximize the cost-effectiveness of restoration activities to achieve the proposed goal of restoring 5,000 hectares within and around PAs.

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[17] Britaldo Soares-Filho *et al.* (2010) Role of Brazilian Amazon protected areas in climate change mitigation. *PNAS Early Edition*, www.pnas.org/cgi/doi/10.1073/pnas.0913048107.

43.   Especially in grassland and savanna formations it's common to identify areas where natural succession process does not occur or stop in one intermediate step due the lack of sources of seeds or presence of invasive species. In a scenario without the project activities, the natural regeneration wouldn't happen on these areas.

44.   For component 4, species-oriented approaches, especially those focused on threatened species, help identify priority areas and species-specific as well as broader actions to foster habitat and biodiversity conservation, thus optimizing the allocation of resources by channeling them to areas and activities with the potentially greater impact. Brazil has been implementing PANs (National Action Plans) since 2004 and adopted different methodological approaches. First method used was centered on individual species and a total of 17 PANs adopted this approach. In order to increase number of species and to optimize planning, implementation and monitoring efforts, a group-focused approach has been proposed, adopting a taxonomic approach, which was used in 17 other PANs.

45.   Since 2009 the development and implementation of PANs has evolved to a broader approach (by taxonomic group per biomes, river basins or ecosystems) with local partner's cooperation, but maintaining the taxonomic division. There are currently 17 PANs in this format. The territorial level focused on the elaboration of new PANs under this Project is an innovative approach that addresses all threatened species from fauna and flora within the same territory. and optimizes efforts and resources. It also comprises species with insufficient scientific knowledge, or even those that are unknown by science yet. In addition, the territorial approach allows to consider socioeconomic aspects of the target region, which results in a planning of actions that are more feasible and compatible with local reality.

46.   By integrating these three approaches, with the engagement of local communities and stakeholders, the project maximizes the cost effectiveness of its interventions through complementary activities that strengthen one another. In addition, the target biomes – Caatinga, Pampa and Pantanal – have historically not received much investment for conservation activities, so that the potential conservation gains are likely to be enhanced. Additionally, the project strategy and activities supported by the Project are focused on leaving a legacy (institutional and human capital, management tool) for the biodiversity conservation of the target biomes.

C. DESCRIBE THE BUDGETED M &E PLAN:

Monitoring of project implementation

47.   The Annual Operation Plan (AOP) will be used to monitor progress in physical implementation according to planned schedules, and observations derived from this will constitute an input to the periodic evaluations, as well as to regular follow-up supervision missions to be undertaken by the project team during project implementation.

48.   Progress in the attainment of physical and financial targets will be reported by FUNBIO and consigned by IDB project team in the Project Monitoring Report (PMR). This information will be used in the periodic and final project evaluation reports.

49.   FUNBIO will also monitor progress in the delivery of product outputs financed by co – finance contributed by several sources as outlined in project documents. In collecting and reviewing information on progress towards the completion of these outputs, FUNBIO will have the assistance of the MMA, which will act as technical and institutional coordinator for the project; in that capacity, the MMA will ensure that each participating agency will comply with the co-finance program and, with those or other resources, will ensure that those products are indeed made available to the project.

50.   In coordination with MMA, FUNBIO will be responsible for collecting the information for different output and outcome indicators included in the RM, establishing administrative control mechanisms that allow semiannually reporting

on physical and financial progress of the products financed by GEF resources as well as to collect relevant information on indicators and implementation plans.

Monitoring Budget

Monitoring Activities	Responsible	Calendar	Cost (Currency US$)	Funding
Field Monitoring	FUNBIO, MMA	Years 1 and 5/ first semesters Years 2,3 and 4/ first and second semesters	40,000.00	GEF
Monitoring Workshop	FUNBIO, MMA, ICMBio, JBRJ and others	Years 2,3,4 and 5 /first semesters	40,000.00	GEF
Total Cost			US$ 80,000.00	

Evaluations

51.   Six evaluations events are planned for the project: two initial evaluation workshops at project commencement, a mid-term evaluation, a final evaluation, and two evaluation workshops associated with the mid-term and final evaluations.

52.   The evaluation methodology will focus on two main aspects: project management (including financial monitoring, institutional arrangement and disclosure and transparency of the project) and implementation of the technical components of the project (Component 1: Creation of New Protected Areas; Component 2: Management of Existing Protected and Adjacent Areas; Component 3: Restoration of Degraded Landscapes in Priority Areas and Component; Component 4: Monitoring of Flora and Fauna Extinction Risks and 5: Integration and Community Relations). The methodology for evaluation of the implementation of the technical components of the project is based on a sequential process that is initiated with the definition and estimation of a baseline for each project indicator and the assessment of changes in such baseline as a result of project interventions.

53.   The mid-term evaluation and impact assessment will be carried out by an independent consultant or consultants financed with program resources. The Bank will support FUNBIO in defining the terms of reference, and in analyzing the implications derived from the results of the evaluations.

Evaluation Budget

Evaluation Activities	Responsible	Calendar	Cost(Currency US$)	Funding
Initial Evaluation workshops (2)	FUNBIO	Year 1/first semester	30.000	GEF
Mid-term Evaluation	FUNBIO	Year 3/second semester	35.000	GEF
Final Evaluation	FUNBIO	Year 5/ second semester	35.000	GEF
Mid-Term and Final Evaluation workshops (2)	FUNBIO	Year 3/second semester and Year 5 /second semester	30.000	GEF
		Total Cost	US$ 130.000	

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PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT(S) ON BEHALF OF THE GOVERNMENT(S):):

(Please attach the Operational Focal Point endorsement letter(s) with this form. For SGP, use this OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Rodrigo Martins Vieira	General Coordinator for External Financing	Ministry of Planning, Budget and Management – Secretariat for International Affairs	03/30/2012

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for CEO endorsement/approval of project.

Agency Coordinator, Agency Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Juan Pablo Bonilla IDB-GEF Executive Coordinator		August 4, 2017	Michael Collins	+1-202-623-2158	michaelc@iadb.org

ANNEX A: PROJECT RESULTS FRAMEWORK

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 3 Brazilian biomes. The specific objectives are: (i) expand coverage and effectiveness of the protected areas system in those biomes [components 1 & 2]; (ii) improve management of priority habitats and priority species [components 3 & 4]; and (iii) foster community-driven sustainable use practices in productive areas associated with the PA system [component 5].

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							
• Caatinga:						MMA Red List	
Cyanopsitta spixii (Wagler, 1832) - Ararinha-azul	Individuals	0	2016	10	2026		Spix's Macaw
Anodorhynchus leari Bonaparte, 1856 - Arara-azul-de-lear		1360	2016	1500	2026	Biodiversity in situ Monitoring Reports	Lear's Macaw
• Pampa:							
Leopardus colocolo (Molina, 1782) - Gato-dos-pampas	Individuals	407	2016	600	2026	*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.*	Pampa's Cat
Gubernatrix cristata (Vieillot, 1817) - Cardeal-amarelo	Individuals	53	2016	100	2026		Yellow Cardinal
• Pantanal:							
Blastocerus dichotomus (Illiger, 1815) - Cervo-do-pantanal	Individuals	40 ,000	2016	44,000	2026		Marsh Deer
Panthera onca (Linnaeus, 1758) - Onça-pintada	Individuals	1000	2016	1200	2026		Jaguar
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							

Indicators	Unit	Baseline		Goals		Means of verification	Observations
		Value	Year	Value	Year		
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[18]

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[18] 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.									
Indicators: 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/cadas tro_uc	The baseline uses the value corrected for potential overlap between integrated protection" and "sustainable use" areas, as presented by the CNUC.
PA where Integrated Fire Management is under implementation in the target biomes	Protected Areas	0	2016	2	2019	3	2021		
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.									
Indicators: Management effectiveness scores (as measured by BD-TT) for priority PAs	Mean Score	41	2016	≥50	2019	≥60	2021	TT Annual Reports	
PA subsystems that conduct periodic measurements of funding gap.	PA subsystems	0	2016	11	2019	11	2021	Financial Sustainability Scorecards	
Integrated Fire Management under implementation in PA in the target biomes	Number of PA	0	2016	1	2019	3	2021	Project Progress Report	

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									
T-PANs under implementation in priority territories (at least one per biome)	T-PAN	0	2016	3	2019	6	2021	PANs Monitoring and Management Reports	
Result 4: Participatory landscape management adopted in selected areas									
Protocols addressed to local communities developed	Number of protocols	0	2016	3	2019	9	2021	Project progress Reports	Protocols include fire management, restoration, biodiversity monitoring and good management practices protocols to be adopted by locals actors
Number of families adopting good management practices in productive areas	Families	0	2016	50	2019	200	2021	Project Semiannual Progress Reports	

Products	Estimated Cost (US$)	Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Final Goal	Means of verification & Notes
Component I: Creation of New Protected Areas (USD 2.830.265)									
1.1. Number of PAs for which all required analyses, consultations and legal documents have been prepared and submitted to competent agencies for legal declaration as a PA[19].	USD 2.330.265	Proposed Protected Areas			3	3	8	14	Project progress reports
1.2. 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.	USD 500.000	Sustainable Financing Planning			5			5	
Component II: Management of Existing Protected and Adjacent Areas (USD 12.736.192)									
2.1. Priority PAs that have an up-to-date Management Plan & adequate Monitoring Program approved.	USD 3.000.000	Protected Areas			3	6	10	19 ([20])	
2.2. Sustainable Financing Plan developed, as part of planning instruments, for same priority PAs as Product 2.1.	USD 500.000	Sustainable Financing Planning			3	6	10	19	
2.3 PA with financed actions to implement its management plan..	USD 4.009.692	Protected Areas entered in the Project	11	8				19	Progress Report
2.4. Biodiversity Monitoring Protocols developed and tested in priority PAs	USD 1.100.000	PAs with protocol testing initiated			5	3	3	11	(Protocols will be implemented in the 11 federal UCs; and may be extended to some state PA depending on

[19] 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.

[20] For list of proposed protected areas, see table from Component 2 .

Products	Estimated Cost (US$)	Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Final Goal	Means of verification & Notes
									partnership with ICMBio)
2.5. PAs in which biome-specific fire management actions have been implemented.	USD 1.500.000	Protected Areas				1	2	3 ([21])	(Incl. prevention, monitoring & education; equipment & activities)
2.6. New area adjacent to PAs in which communities are applying biome-appropriate protocols to avoid carbon emissions.	USD 1.500.000	Hectares			5,000	9,000	6,000	20,000	CCM-5 (Enhancement of carbon stocks in forest and non-forest lands, including peatland
2.7 Area covered by management agreements	USD 1.126.500	Hectares			7,000	8,000	10,000	25,000	Project Progress Report

Component III: Restoration of Degraded Landscapes (USD 6.572.360)

Products	Estimated Cost (US$)	Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Final Goal	Means of verification & Notes
3.1. Biome-specific[22] decision trees, monitoring protocols and priority-area maps for restoration developed.	USD 750,000	Planning & Monitoring Instruments		9				9	
3.2. Assessments of degraded areas and Restoration Plans for selected UCs completed.	USD 350,000	Restoration Plans		2	2			4	
3.3. Area of degraded landscapes restored within selected UCs according to Restoration Plans and managed sustainably.	USD 5.472.360	Hectares				1250	2,250	1,500 ([23])	GEF FOCAL AREA OUTPUT – SFM-1

Component IV: Monitoring of Flora and Fauna Extinction Risks (USD 5.660.530)

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[21] At least on 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.

[22] 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 11 decision-making instruments.

[23] 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
4.1. Assessment of PA effectiveness in meeting priority species conservation goals completed	USD 525,000	Annual Assess-ments				1		1	Assessment based on biodiversity monitoring data
4.2. Territories for which PANs (T-PANs) are elaborated and published for 3 biomes.	USD 1,794,000	T-PANs			5	6		11	Progress Reports
4.3. PANs implemented in prioritized territories.	USD 2.741.530,14	Prioritized territories				5	6	11	Progress Reports
4.4. Existing datasets and systems integrated, up-dated with new data and published.	USD 260,000	Web Portal				1		1	Progress Reports
4.5. Updated analyses of extinction risks and threats to species.	USD 340,000	Number of species		500	500	500	500	2000	Species Assessment Forms
Component V: Integration and Community Relations (USD 1.086.651,)									
5.1 Technical training workshops conducted for beneficiary communities and key partners	USD 656.652	Workshops	3	5	5	5	4	22	Progress Reports
5.2. Communication strategy developed and implemented to support project engagement at the local level.	USD 430.000	People engaged on project actions	2,500	5,300	5,300	8,000	5,200	26,400	i.e. 10% of people living inside PAs

Products	Estimated Cost (US$)	Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Final Goal	Means of verification & Notes
Component I: Creation of New Protected Areas									
PFP 1. Proposed protected areas that have advanced at least one formal stage in the process towards creation compared to 2016 baseline[24].	9,129,480.46	Proposed Protected Areas	1	2	3	4	2	12	
Component II: Management of Existing Protected and Adjacent Areas									
PFP 2. PAs that received infrastructure, equipment and other services, according to actions prioritized on the basis of planning instruments & financing plan (Products 2.1 & 2.2).	80,969,501.66	Protected Areas	2	4	4	5	4	19	
PFP 3. Remote sensing data that supplement biodiversity monitoring programs for priority PAs provided by project partners.	17,343,267.72	Datasets	5	6	3	3	3	20	Environmental Monitoring of Brazilian Biomes Program (MMA)
PFP 4. Area where local communities are adopting good management practices.	14,343,212.78	Hectares		5,000	5,000	5,000	10,000	25,000	GEF FOCAL AREA OUTPUT – BD-2
Component III: Restoration of Degraded Landscapes									
PFP 5. Mapping data that supplement priority-area maps for restoration provided by project partners.	5,505,099.48	Datasets	3					3	
PFP 6. Area of degraded landscapes restored within selected PAs according to Restoration Plans.	4,875,249.74	Hectares				2,500	2,500	5,000([25])	GEF FOCAL AREA OUTPUT – SFM-1
Component IV: Monitoring of Flora and Fauna Extinction Risks									

[24] For definition of 2016 baseline, see Component 1 Design document, Table 3. For definition of formal process stages, see same document, Table 2.

[25] At project approval, the total estimated areas per biome (Product 3.3 & PFP 5) are: Caatinga 3,800ha, Pampa 600ha and Pantanal 600ha.

PFP 7. Analyses identifying extinction risks and threats to species have been up-dated.	5,474,455.52	Analyses		500	500	500	500	2000	Species Assessment Forms
PFP 8. Territories in which priority actions from PANs are under implementation and monitored.	14,524,193.21	Territories				4	4	8	
Component V: Integration and Community Relations									
PFP 9. Local communities adopting environmental friendly practices (Bolsa Verde beneficiaries)	6,990,211.11	Beneficiaries	2,731	2,731	2,731	2,731	2,731	2,731	Potential of 2.731 Bolsa Verde Program beneficiaries on Caatinga. Income transfer to selected beneficiaries are continuous

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

STAP Comments	IDB responses
While this is clearly a multi-faceted and multi-focal initiative, with funding proposed from BD, SFM and CC, the title does not reflect that accurately, mentioning only the consolidation of the SNUC and species protection. The objective, while being more indicative of the different elements of this proposal, could nevertheless be more streamlined in its wording.	The Project title was changed to comply with STAP request. The Project objective has changed to make direct association to the project´s impacts indicators, although it keeps the focus on the three conservation strategies to achieve them: Protected Area System, Restoration and PANs.
While the global environmental benefits to be derived are mentioned, this is done only in rather general terms. The GEBs are more implied than presented explicitly. Whilte this is perhaps understandable since much definition of the specific benefits still lies ahead (and they should better defined through further assessment and project development)	Global Environmental Benefits derived from this Project include: i) protection of globally significant biodiversity, including endemic threatened species, through the creation of 1.000.000 ha of new protected areas, improved management in other 2.165.977 hectares in existing protected areas; ii) increased adoption of innovative technologies and management

the Panel believes that an effort to review existing data would have been useful at this stage to help guide decision making.	practices for GHG emission reduction (i.e. protected areas creation and fire management) and carbon sequestration (i.e. vegetation restoration, in 5,000 hectares) and adoption of biodiversity friendly practices on 25.000 hectares production landscapes and iv) reduction in forest loss and forest degradation and maintenance of the range of environmental services and products derived from forests.
Following from the above, the threats are described adequately for this stage in the process but are also presented in general biome terms, and are not location specific. This will also need to be far better defined during future project preparation.	During Project preparation it was possible to identify main threats in each biome and consult states about priority PA and sites for project intervention.
As presented, the baseline for protected areas, species, land use etc. is generally weak and this again is an important component of this undertaking that will need to be addressed during further development of the proposal.	Specific baseline information was included as result of project preparation in topic A.4
With regard to Component 1, it is mentioned that further assessment of protected area management effectiveness and the conservation status of endangered species will provide a foundation for designing or defining new protected areas. This is to be expected but at the same time, the expected outputs for this are already presented i.e. "At least 24 new protected areas declared covering approximately 1,000,000 hectares". It would be useful to see the assessment which was used to arrive at these figures.	During Project preparation, consultation to PA management institutions brought nearly 70 potentially new protected area process. Thus, a species-based analyses and consultation to specialists and attention to the creation phase helped to prioritize areas for component 1. According to this analysis, the goal of 1,000,000 hectares corresponds to 14 new protected areas: 6 in the Caatinga, equivalent to 386,053ha; 5 in the Pampa, equivalent to 312, 833ha; 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 in the three target biomes
Considering the complexity of the proposed project, concerning scope, extent, and the diversity of stakeholders and the funding levels, the description of the executing mechanism (the success of which would appear to be central to overall project success) is rather light.	The detailed executing mechanism is now described in topic B.1
The definition of risks is reasonably thorough although not enough consideration is given to the potential impacts of	Risk assessment includes climate change in topic A.6

climate change. While the links to drought and fire are made, these are not presented in the assessment of risks. In
addition, it would be advisable as well to assess the level of risk individually, along with proposed mitigation measures.

Comments from Germany	IDB responses
Germany suggests incorporating in the final project design, within Component 5 a stronger focus on incentives and benefits for the local population and communities to achieve strong community support for conservation objectives in areas with new PAs in implementation. The potential for economic initiatives within biotrade, sustainable tourism etc. should be explored. Therefore, cooperation with the private sector should be explored and potentially enforced. Methodologically, the TEEB approach could provide appropriate guiding in this context. In terms of cooperation with German Development Cooperation, synergies with the ongoing project on Biodiversity monitoring / REDD+ (GIZ, MMA, ICMBIO) should be explored:	In order to achieve strong community support for conservation objectives this project will finance: (i) seminars to foster institutional collaboration; (ii) technical guidance and workshops for participatory communication with affected communities; (iii) production and dissemination of communication and outreach materials to improve public awareness and engagement of local communities; and (iv) implementation of participation mechanisms.

Private stakeholders already engaged are listed in section B1.
Biodiversity monitoring / REDD+ Project (GIZ, MMA, ICMBIO) fostered the Biodiversity Monitoring National Program and its implementation in Brazilian federal PAs mainly in Amazon, Atlantic Forest and Cerrado biomes. The main objectives of the program are: evaluation of effectiveness the protected area system support to management decisions at many scales and relevant information available for decision-making in the field of climate change mitigation. The "Monitoring climate-relevant biodiversity" allowed the development of protocols for biodiversity in situ monitoring in forest ecosystems. These protocols are characterized by simple sampling at low costs and by the engagement of local communities in collecting data and a similar process will be conducted to implement biodiversity monitoring in open vegetation in mosaic patterns (predominant in Caatinga, Pampa and Pantanal biomes). ICMBio started promoting workshops with researchers in 2015 for the selection of grassland and savanna indicators and development of protocols that will be tested in PA selected for component 2 of GEF-Terrestre Project.

In addition, BES-based policies and regulatory instruments will offer opportunities to local communities to benefit from biodiversity conservation in productive areas. |

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS[26]

A. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES FINANCING STATUS IN THE TABLE BELOW: **NA**

ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/NPIF Trust Fund or to your Agency (and/or revolving fund that will be set up) **NA**

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[26] If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities.