PROGRAM INFORMATION DOCUMENT (PID) APPRAISAL STAGE

Report No.: 49326

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	Sustainable Cerrado Initiative	
Program Name		
Region	LATIN AMERICA AND CARIBBEAN	
Sector	General agriculture, fishing and forestry sector (100%)	
Project ID	P091827	
GEF Focal Area	Biodiversity	
Major Beneficiary	FEDERATIVE REPUBLIC OF BRAZIL	
Executing Agency	Multi-executing agencies (Ministry of Environment, State of	
	Goiás, State of Tocantins, and ICMBio)	
Environment Category	[] A [X] B [] C [] FI [] TBD (to be determined)	
Date PID Prepared	February 12, 2008	
Date of Appraisal	February 27, 2008 (Initiative Program; MMA Project and Goiás	
Authorization	Project)	
	June 01, 2009 (Tocantins project and ICMBio project)	
Date of Board Approval	August 25, 2009	

1. Country and Sector Background

Brazil's economic management remains strong, despite the global economic crisis. The country continues to maintain fiscal balance, inflation targeting, and very limited exchange rate intervention that it has been using since January 1999, when the Real was allowed to float. There is no sign that the commitment to this strategy will decrease.

Agriculture is one of the main sectors behind the current economic growth. Together with agribusiness, it represents 33% of GNP and 42% of total annual exports, which have reached over US\$ 100 billion per year. Brazil is now the leading exporter of soybeans and beef and their processed products. However, this economic growth needs be accompanied by the strengthening of environmental policies and greater poverty alleviation.

Until the late 1950s, the contribution of the *Cerrado¹* to Brazil's agricultural output was still low, at less than 10% of the national total. However, the construction of Brasília- fostered an intense flow of migrants to the *Cerrado* region to work on infrastructure projects and colonization programs. The development of agricultural technologies in the 70s solved problems of soil fertility deficiencies. Thus productivity of soybean, maize and cotton in the *Cerrado* is among the highest in the world, turning the *Cerrado* into Brazil's new agricultural frontier.

There are now about 50 million head of cattle in the *Cerrado*, representing 33% of the national herd, with pastures being the most important form of land use in the region covering over 60 million ha². The *Cerrado* is also responsible for over half of Brazil's soybean production, most of it being for export.

¹ *Cerrado* is the name given to the Brazilian savannas.

²Vilela et al. 2005 Pasture Degradation and Long-Term Sustainability of Beef Cattle Systems in the Brazilian *Cerrado*.

This economic growth based on agriculture has had a high environmental cost. This ranges from the loss of biodiversity, biological invasion, soil erosion, land degradation, sedimentation water imbalance and changes in the carbon cycle and stocks. These problems are caused by two major issues: (i) poor agriculture practices and (ii) non-compliance by farmers with the requirements of the Forest Code.

The most common agriculture practice in the region relies heavily on soil mechanization of large tracts of land with substantial use of fertilizers and lime to correct soil fertility and acidity. The use of crop rotation is limited and the adoption of less costly and more sustainable practices, such as no tillage systems, has started over the past 15 years. Pasture management is often inadequate. It is estimated that 50% to 60% of the pasture area shows some degree of degradation.

The Forest Code provides for the maintenance of natural vegetation cover in each private rural property as a "legal reserve" (RL). Cerrado properties located in the states of Mato Grosso and Tocantins³ must maintain 35% in RL. Properties in all other states in the *Cerrado* region must maintain 20% in RL. In addition, properties must maintain areas of permanent protection (APPs) that include riverbanks, headwaters, and steep slopes. The property owner may sustainably manage the natural resources of the RL but not those of the APPs. Until 2006, enforcement of these RL and APP requirements was under the responsibility of the federal government and results varied in different areas of the *Cerrado* region, but most properties are still not in full compliance with the Forest Code. This caused deforestation and isolation of *Cerrado* fragments which otherwise would have been linked by biological corridors created by RL and APPs. As responsibility for enforcing the Forest Code was decentralized to the states in 2006, several of them, including Goiás and Tocantins, began developing systems to monitor compliance, issue permits for clearing, and fine those in non-compliance.

Agriculture will continue to increase in the region for some time. The adoption of sustainable agricultural practices and compliance with RL and APPs should slow down the need to expand of the agricultural frontier. New technologies have been developed for tropical agriculture which allow significant productivity gains, enabling a twofold increase of production without expanding into new *Cerrado* areas. The challenges are to: (i) promote a broader adoption of such practices, and develop/test other practices focusing on maintaining biodiversity in the productive landscape; and, (ii) develop state-level policies which enable full implementation of the Forest Code and its complementary system of land easements trading mechanisms, and strengthen the state agencies responsible for enforcing those policies.

A great variety of *Cerrado* plants are used by the population. Around 220 plant species have medicinal uses, and over 416 species are used to rehabilitate degraded soils, as wind barriers, protection against erosion or to create habitats for the natural predators of pest species. Local but intensive unsustainable harvesting of native vegetation is threatening several species. On the other hand, studies have shown that the sustainable use of native species regularly consumed by the local population and sold in the urban centers, such as the fruits from the pequi (*Caryocar brasiliensis*), buriti (*Mauritia flexuosa*), mangaba (*Hancornia speciosa*), and baru (*Dypteryx alata*) may provide as much as US\$ 250.00/ha/year. The availability of such resources from the Cerrado biome's natural biodiversity could represent a viable alternative income for traditional

³ For legal purposes Brazil defined an area known as the Legal Amazon which includes all states which have even a small portion of the Amazon Forest in their territory. Mato Grosso and Tocantins are included in the Legal Amazon.

communities, with food processing industries and other sectors contributing to the region's sustainable social and environmental development. The challenge is to promote technologies and institutional arrangements that enable the sustainable use of natural resources to reach a broader economic scale.

Global Environmental Issues The *Cerrado*, a unique type of tropical savanna, covers 25% (200 million ha) of Brazil. It is the most biodiverse savanna in the world, with 23 types of vegetation consisting mostly of tropical savannas, grasslands, forests and dry forests. The *Cerrado* is considered one of the world's 34 biodiversity hotspots by Conservation International (CI). The World Wide Fund for Nature (WWF) considers it one of the most biologically outstanding ecoregions. Home to over 12,000 species of plants (44% endemic), it also contains 195 species of mammals, 605 species of birds and 800 species of freshwater fish (25% endemic). According to a recent estimate, the *Cerrado* harbors 13% of the butterflies, 35% of the bees, and 23% of the termites of the Neotropics, making it the world's richest tropical savanna. However, 112 terrestrial animal species are threatened with extinction⁴ as well numerous plants. Estimates are that at least 20% of the threatened and endemic species of the Cerrado biome do not occur in protected areas, increasing their risk of extinction.

Studies have shown that this biome is now severely threatened. The rate of deforestation has been extremely high over the last decades. Current estimates are that *Cerrado's* annual deforestation varies between 2.2 to 3.0 million hectares or 1% to 1.4% year. It is estimated⁵ that about 60% of the *Cerrado* has already been lost, with only 22% of the original *Cerrado* vegetation cover remaining in its original state. Today, of all the world's hotspots, the *Cerrado* has the lowest percentage of areas under "full protection" (2.7%) with many of them still being "paper parks". If this combination of high deforestation and low protection continues unchecked, the biome will disappear by the year 2030.

In addition to the Forest Code, Brazilian environmental legislation includes several other laws and regulations such as the Environmental Crimes Bill and the National Protected Areas System Bill (SNUC). These legal instruments, however, are directed at the entire country. Given Brazil's huge dimension, it is necessary to further develop such legal instruments and policies to regionalize them considering, among other factors, the diversity of biomes, regional economic inequalities, and states' legal frameworks. The *Cerrado* needs state and federal instruments and policies to promote, on the one hand, the involvement of the business and agricultural sectors in conservation and sustainable use actions and, on the other hand, to reduce the continuous expansion of the agricultural frontier.

In 2003, the Ministry of Environment created the *Cerrado* Working Group to contribute to the design of a national strategy for the *Cerrado* biome in order to prepare a national program for its conservation and sustainable development. The Working Group was composed of federal, state and municipal governments, CSOs and the private sector. The goal was to design a long-term program for the region and to facilitate the coordination of federal and state government initiatives aimed at the protection and sustainable use of the biome's natural resources.

In 2004, the Working Group delivered the first draft of the National Program for the Conservation and Sustainable Use of the *Cerrado* Biome to the Minister of Environment

⁴ See *Fundação Biodiversitas* at their website: <u>www.biodiversitas.org.br</u> or IUNC's red-list at <u>www.redlist.org</u>.

⁵ See: Jesus & Sano, 2002, *Simpósio de Ecologia e Biodiversidade*, UnB and EMBRAPA.

(National *Cerrado* Program). This Program was submitted to a participatory consultation process and formally created by a Presidential Decree in 2005. The National *Cerrado* Program (see box 1) represents a comprehensive framework, with a set of principles and guidelines that aims to achieve environmental and social sustainability for the entire biome.

The coordination fostered by this National *Cerrado* Program is important because environmental management in Brazil is the responsibility of the federal, state and municipal levels of government, as part of the SISNAMA (National Environmental System). The federal government establishes the general guidelines and norms and provides enforcement through the national environmental agency (IBAMA). The states' responsibilities are concurrent. They include the implementation of federal legislation, the formulation and implementation of their own policies, which are more stringent than the national standards, and the licensing and control of most resource-use activities.

Country Eligibility and Country Drivenness Brazil ratified the key convention for this Sustainable *Cerrado* Initiative, the UN Convention on Biological Diversity, on June 13th, 1994. The inhabitants of the *Cerrado* have become increasingly concerned about the ecological health of their ecosystem. For the first time since the ratification of the Convention on Biological Diversity, the Government of Brazil officially expressed its commitment to a biome-level management concept, and included the *Cerrado* Biome Conservation and Protection Program (National *Cerrado* Program) in its 2003-2007 Multi-Year Plan. This National *Cerrado* Program was maintained in the Federal Budget2008-2012 Multi-Year Plan.

2. Objectives

The Sustainable *Cerrado* Initiative Program development objective is to promote the increase of biodiversity conservation and improve the environmental and natural resource management of the *Cerrado* biome through support for appropriate policies and practices. The Sustainable Cerrado Initiative aims to achieve two specific goals:

- ③ Action Plan of the National Program for the Conservation and Sustainable Use of the *Cerrado* Biome and, at least two public policies are adopted by state or federal agencies and contributing to biodiversity conservation in over 20% ⁶ of the *Cerrado* biome; and
- ³ Biodiversity conservation increased in four priority regions⁷ of the *Cerrado*.

The GEF Sustainable *Cerrado* Initiative will help strengthen the sustainability of the protected areas systems (SP1) and bolster the integration of biodiversity conservation into production systems (SP2) as expressed by the increase in:

- ^③ Brazil's concrete improvement in the effective management of its protected area systems;
- ^③ The percentage of supported protected areas effectively preserved;
- ^③ The number of pilot activities reported and verified that apply incentive measures and instruments;
- ^③ The number of sector policies and plans that include measures which promote sustainable use or conservation of biodiversity; and,
- ^③ Production systems that contribute to conservation or sustainable use of biodiversity.

⁶ This will be measured by considering the total *Cerrado* area of each state where the policy is adopted.

⁷ Priority regions mean a polygon (or cluster of polygons) identified by PROBIO as having high conservation value.

Each of the two phases of the Sustainable *Cerrado* Initiative will have its own set of targets for the same indicators and will contribute to the same goals presented above.

3. Rationale for Bank Involvement

Brazil's long-term vision calls for greater equity, sustainability, and competitiveness. These are the three pillars of the World Bank's CPS for the 2008-2011 Multi-Year Plan. The sustainability pillar aims at the increased support for federal and state policies and programs that seek to sustainably manage natural resources and conserve biodiversity, with a geographic focus on areas with critical biodiversity value, crucial environmental services, cultural heritage and that improve living conditions. The equity pillar aims at increasing the income of the rural poor, especially in the consolidated agricultural frontier.

The bulk of the Bank's work on the environment has been focused on finding growth options for Brazil that simultaneously lead to improved environmental and social outcomes – the so-called win-win options. This has been done using different types of tools, from specific investment projects to Development Policy Loans and sector work, as well as incorporating international experiences into government policies and programs.

While the Bank has been active in the *Cerrado* for over 15 years, the biome has not received much attention from other multilateral and bilateral agencies. In fact, no other major agency has a strategy for the region, which covers about 25% of the country.

The Sustainable *Cerrado* Initiative Program will also build on the World Bank's successfully implemented GEF-PROBIO project which, among other achievements, led to the definition of priority areas for conservation in the *Cerrado* biome. The proposed Sustainable *Cerrado* Initiative will draw upon the results of the GEF-PROBIO project and will coordinate with the other World Bank GEF full-size projects - the *Aquabio*, signed in 2006, and the *Biodiversity Mainstreaming and Institutional Consolidation Project* signed in 2008, thus ensuring complementarities and avoiding overlaps.

The World Bank has begun a decentralized approach to its investment operations at sub-national levels. For example, one of the key states of the *Cerrado* region, Goiás, completed a large investment operation financed by IBRD, the *Goiás Regional Sustainable Development Project*. The Bank also concluded preparation of a second loan to the state with the same goal. In Tocantins State, IBRD is financing the US\$ 60.0 million *Tocantins Regional Sustainable Development Project* (PDRS). These operations focus on sustainable development as well as on the states' conservation areas. The Sustainable *Cerrado* Initiative will enable the leveraging of these investment operations through projects established directly with the state executing agencies, providing a comprehensive conservation package for each state.

The policy work (analysis and implementation) proposed in this Sustainable *Cerrado* Initiative Program will also benefit from strong synergy with the *Environmental Sustainability Agenda Technical Assistance Project (P090041)*, and the *First Programmatic Development Policy Loan for Sustainable Environmental Management (P095205)*. These should also provide a technical assistance envelope from the Bank for environmental sustainability policy reforms in the region.

4. Description

The rationale of the GEF Sustainable *Cerrado* Initiative design is to balance two sets of actions: (i) to get the policy framework and coordination in place, thereby helping to guide future investments from both public and private sectors towards a more sustainable use of the agricultural landscape; and, (ii) to facilitate the implementation of immediate actions that will decrease or halt the loss of biodiversity through support to protected areas and the sustainable management of the productive landscape. The four projects under the Sustainable *Cerrado* Initiative Program target results which combined will fulfill the overall goal of the Program.

Each individual project contributes significantly to the targets, and the entire set of projects should achieve the overall goals set forth for the Sustainable *Cerrado* Initiative Program. This Sustainable *Cerrado* Initiative Program has four components that closely follow the key thematic and cross-cutting activities proposed under the National *Cerrado* Program and are consistent with GEF Strategic Objectives.

Component 1: Conservation of the *Cerrado* **Biodiversity** aims at increasing biodiversity conservation in the *Cerrado* region by strengthening the mosaic of legally protected areas (PAs) of unique biodiversity. This component has the following result indicators:

- ③ An additional 2.0 million hectares of the *Cerrado* biome protected through the creation/expansion of Protected Areas (PAs).
- ③ 30% of the *Cerrado* PAs targeted by the Sustainable *Cerrado* Initiative with their basic protection measures in place⁸.

Conservation of <i>Cerrado</i> Biodiversity Component	GEF US\$ million	Counterpart US\$ million	Total US\$ million
Project 1: MMA	0.70	5.77	6.47
Project 2: Goiás	1.40	5.24	6.64
Project 3: Tocantins	1.10	4.04	5.14
Project 4: ICMBio	2.50	6.58	9.08
Total	5.70	21.63	27.33

The overall budget of each of the projects for this Component is presented below:

Component 2: Sustainable Use of the *Cerrado's* **Natural Resources** aims at promoting the management of the rural productive landscape including the adoption of sustainable agricultural practices by medium and large farmers and the sustainable use of native species by small farmers and local communities, so as to improve the use of available resources and biodiversity conservation while reducing environmental impacts. This component has the following result indicators:

⁽³⁾ Twelve initiatives of traditional know-how and current best practices for the sustainable management of the *Cerrado's* natural resources documented and disseminated. The focus will be on practices that significantly contribute to conserving key biodiversity and their habitats.

⁸ The specific PAs to be targeted by the Sustainable *Cerrado* Initiative would be defined in each project. The monitoring of each PA will done using the GEF Tracking Tool SP1

③ An increase of 10% of rural properties⁹ in project-supported areas regularly using some form of natural resource, land or agricultural management or biodiversity conservation practice, and/or "sustainable management" production¹⁰ (e.g., protection of the riparian forests, managing fires, location of the Legal Reserve, management of species).

③ Fifteen initiatives for adding value and improving the commercialization of native products originating from sustainably managed production developed. These initiatives will be carried out directly by the local communities or will have their strong involvement in order to ensure adequate access and benefit sharing, in accordance with the Bonn Guidelines.

Sustainable Use of the <i>Cerrado</i> 's Natural Resources Component	GEF US\$ million	Counterpart US\$ million	Total US\$ million
Project 1: MMA	0.20	1.12	1.32
Project 2: Goiás	0.90	1.08	1.98
Project 3: Tocantins	1.15	0.00	1.15
Project 4: ICMBio	0.11	0.05	0.16
Total	2.36	2.25	4.61

The overall budget of each of the projects for this Component is presented below:

Component 3: Institutional Strengthening and Public Policies aims at formulating new public policies for the conservation and sustainable use of the *Cerrado*, and strengthening government agencies to manage natural resources. It also intends to enable the private sector, civil society organizations and local communities to actively participate in environmental management and formulation of new public policies related to the conservation and sustainable use of the *Cerrado's* natural resources. This component has the following result indicators:

- ⁽³⁾ Formulation of Action Plan of the National Program for the Conservation and Sustainable Use of the *Cerrado* Biome concluded, publicly launched and under implementation.
- ⁽³⁾ Four new public policies (state or federal), related to the conservation and sustainable use of the *Cerrado*'s natural resources developed.
- ^③ Geo-referenced systems for environmental monitoring, licensing of rural properties, and enforcement, developed at federal and state levels.
- ^③ Six selected institutions working on matters related to the use of natural resources strengthened through staff training in specific environmental management processes and associated tools.
- ^③ Three civil society networks and/or organizations¹¹ strengthened to keep their affiliates informed about public policies and to communicate and represent civil society's opinions and aspirations in the national arena.

⁹ Rural properties refers to entire sector, including medium and large farmers.

¹⁰ In this context, "sustainable management" is used in the broad sense, covering concepts such as "agro-extractivism", "conservation agriculture" and "agro-ecology".

¹¹ The networks supported must specifically mention the mission/objective of promoting the conservation and/or the sustainable use of the *Cerrado's* natural resources in their bylaws.

Institutional Strengthening and New Public Policies Component	GEF US\$ million	Counterpart US\$ million	Total US\$ million
Project 1: MMA	2.20	0.56	2.76
Project 2: Goiás	0.60	2.53	3.13
Project 3: Tocantins	0.74	1.37	2.11
Project 4: ICMBio	0.31	0.05	0.36
То	tal 3.85	4.51	8.36

The overall budget of each of the projects for this Component is presented below:

Component 4: Coordination and Monitoring of the Biome aims at ensuring the effective and efficient implementation of this GEF Sustainable *Cerrado* Initiative Program. It also intends to support the implementation of a publicly accessible database containing current geo-referenced, social and environmental information on the *Cerrado* biome. This component has the following result indicators:

- ③ All the projects of the GEF Sustainable *Cerrado* Initiative being coordinated, monitored, and annually evaluated, with the results fully publicized.
- ③ Information on biodiversity, vegetation cover, and land use of the *Cerrado* biome updated periodically and made freely available.

The overall budget of each of the projects for this Component t is presented below:

Coordination and Monitoring of the Biome Component	GEF US\$ million	Counterpart US\$ million	Total US\$ million
Project 1: MMA	0.90	0.55	1.45
Project 2: Goiás	0.10	0.15	0.25
Project 3: Tocantins	0.02	0.59	0.61
Project 4: ICMBio	0.07	0.01	0.08
Total	1.09	1.30	2.39

5. Financing

The US\$ 42.7 million GEF Sustainable *Cerrado* Initiative (Phase 1) will be financed by a GEF grant of US\$ 13 million over a period of four years, starting on September 30, 2009. The resources from this grant will be used to support four projects each with separate grant agreements, to be given to state and federal agencies selected according to pre-established criteria and process. The application of the GEF and counterpart funds will always be subject to a specific grant agreement between the Bank and the executing agency.

The total amount of the grant and the estimate for the GEF funding of each component is based on requests received from several states and institutions in the *Cerrado* biome. Total demand from these institutions alone exceeds the US\$ 27 million of the intended GEF *Cerrado* Initiative (Phases 1 and 2).

The estimated costs by component distributed by each of the four projects is as follows:

Costs by Component and project	GEF US\$ million	Counterpart US\$ million	Total US million
Component 1: Conservation of Cerrado Biodiversity	5.70	21.63	27.33
Project 1: MMA	0.70	5.77	6.47
Project 2: Goiás	1.40	5.24	6.64
Project 3: Tocantins	1.10	4.04	5.14
Project 4: ICMBio	2.50	6.58	9.08
Component 2: Sustainable Use of the Cerrado	2.36	2.25	4.61
Project 1: MMA	0.20	1.12	1.32
Project 2: Goiás	0.90	1.08	1.98
Project 3: Tocantins	1.15	00	1.15
Project 4: ICMBio	0.11	0.05	0.16
Component 3: Institutional Strengthening	3.85	4.51	8.36
Project 1: MMA	2.20	0.56	2.76
Project 2: Goiás	0.60	2.53	3.13
Project 3: Tocantins	0.74	1.37	2.11
Project 4: ICMBio	0.31	0.05	0.36
Component 4: Coordination	1.09	1.30	2.39
Project 1: MMA	0.90	0.55	1.45
Project 2: Goiás	0.10	0.15	0.25
Project 3: Tocantins	0.02	0.59	0.61
Project 4: ICMBio	0.07	0.01	0.08
Total Cost	13.00	29.69	42.69

The estimated costs distributed among the four projects are as follows:

Project/Grantee	GEF Financing (US\$ millions)	Co-financing (US\$ millions)	Total amount (US\$ millions)
Project 1: MMA (FUNBIO)	4.00	8.00	12.00
Project 2: Goiás (SEMARH)	3.00	9.00	12.00
Project 3: Tocantins (SRHMA)	3.00	6.00	9.0
Project 4: ICMBio (ICMBio)	3.00	6.69	9.69
Total	13.00	69	42.69

The counterpart funds consist of resources from the federal and state governments. This also includes co-financing through IBRD loans¹², which must be strictly applied to activities that contribute to the present Sustainable *Cerrado* Initiative's components. The application of the GEF and counterpart funds will always be subject to a specific grant agreement between the

¹²The IBRD loan to Tocantins will close in less than 24 months, although an extension will be considered in due time. The second loan to Goiás project has not been negotiated yet. In order to ensure adequate co-financing during the life time of the projects, both states agreed to increase the amount of co-financing to be provided from there fiscal resources and/or environmental compensation funds, in the event that IBRD funds do not become available to the states. Thus, the table indicates states resources as the current sources of co-financing. Nevertheless, the implementing agencies of the IBRD projects will collaborate with the GEF grants ensuring the complementary of the conservation activities and the cost-effectiveness of projects' administration.

Bank and the executing agency (proponent). The table below presents the counterpart funds by each project:

Name of co-financier (source).	Classification	Type	US\$ million	%
Grant 1: MMA project				
Hydrographic Basin Revitalization Program	Project Govt contribution	Federal Fiscal Resources	1.60	5.4
Federal Environmental Compensation Fund	Project Govt contribution	Federal Fiscal Resources	2.86	9.6
Brazilian Biomes Conservation and Recuperation Program	Project Govt contribution	Federal Fiscal Resources	3.54	12.0
Grant 2: Goiás project				
Goiás State Government	Project Govt contribution	State Fiscal Resources	4.59	15.4
State Environmental Compensation Fund	Project Govt contribution	State Fiscal Resources	4.41	14.9
Grant 3: Tocantins project				
Tocantins State allocation of funds not directly managed by the Environmental Agency but in support of project- related activities	Project Govt contribution	State Fiscal Resources	4.89	16.5
Tocantins State annual allocation for the Environmental Agency	Project Govt contribution	State Fiscal Resources	1.11	3.7
Grant 4 : ICMBio project				
Federal Environmental Compensation Fund	Project Govt contribution	Federal Fiscal Resources	6.69	22.5
		Total:	29.69	100

6. Implementation

The Program is designed to foster partnership around the different projects, and small initiatives of natural resources management. The projects will foster the involvement of different stakeholders, ranging from governments agencies, private sector, and community organizations. The projects will also be coordinated with other biodiversity projects in Brazil.

The Sustainable *Cerrado* Initiative's major beneficiary will be the Federal Republic of Brazil. It will be under the general coordination of the Biodiversity and Forest Secretariat (SBF) of the Ministry of Environment, which will be responsible for: (i) conducting the dialogue with the Bank on the implementation policies for the Sustainable *Cerrado* Initiative; (ii) evaluating and monitoring the Sustainable *Cerrado* Initiative's implementation, including consolidating the information on its implementation progress; (iii) appointing the chair of and coordinating the Sustainable *Cerrado* Initiative; and, (iv) preparing the proposal for Phase 2 of the Sustainable *Cerrado* Initiative.

The Sustainable *Cerrado* Initiative Committee is responsible for: (i) establishing strategic guidelines for the Sustainable Cerrado Initiative; (ii) approving the proposals submitted and ensuring that the criteria and guidelines of the Sustainable *Cerrado* Initiative are observed; and, (iii) and facilitating the Sustainable *Cerrado* Initiative as a whole. This Committee is chaired by the MMA/SBF and composed of representatives from the Government (state and federal),

academia, NGOs and the production sector. Other institutions may be invited by the Committee during the Sustainable *Cerrado* Initiative's implementation.

As a decentralized Program, the GEF Sustainable *Cerrado* Initiative Program establishes a framework for the planning, implementation and evaluation of its four distinct projects. The Program will be implemented through four different grants with different executing agencies which are already successfully implementing IBRD loans or grants. The executing agencies and grant recipient of the four selected projects are presented below:

Project/ Grant	Executing Agency	Grant Recipient
Project 1: MMA	Ministry of Environment (MMA)	Brazilian Fund for Biodiversity (FUNBIO)
Project 2: Goiás	State Secretariat for the Environment and Water Resources (SEMARH)	State Transport and Public Works Agency (AGETOP)
Project 3: Tocantins	State Water Resources and Environmental Secretariat (SRHMA)	State Infrastructure Secretariat (SEINF)
Project 4: ICMBio	Chico Mendes Institute for Biodiversity Conservation (ICMBio)	ICMBio

A team of staff from the Nucleus *Cerrado* and Pantanal (NCP), Secretariat of Biodiversity and Forests (SBF) of MMA, will be responsible for managing the Sustainable *Cerrado* Initiative Program. The use of MMA staff for the NCP is primarily intended to optimize the Ministry's existing structure, to train the staff to execute externally funded projects and to mainstream MMA's activities within its internal staff. The NCP acts as the Executive Secretariat for the National Commission of the *Cerrado* Program, responsible for the Program's coordination, operational framework, and the specialized teams that execute its functions. Thematic and crosscutting actions of the National Cerrado Program are addressed by the Sustainable *Cerrado* Initiative Program components and are consistent with the GEF's strategic objectives. The NCP will be the link between the SBF, the Sustainable *Cerrado* Initiative's executive management. Specialists may be sought to address thematic particularities and to provide inputs for the Sustainable *Cerrado* Initiative Committee's decisions whenever required by NCP.

7. Sustainability

The Government of Brazil (GoB) views this Sustainable *Cerrado* Initiative as a major step forward in coordinating a biome-wide approach for protecting the remaining threatened biodiversity. The goal is to have the policy framework and coordination in place, thereby helping to steer future investments from both public and private sectors towards a more sustainable use of the agricultural landscape. Additionally, the GoB has allocated substantial resources from its budget to support its National *Cerrado* Program.

The Sustainable *Cerrado* Initiative Program is designed to facilitate the pursuit of long-term objectives for biodiversity conservation and sustainable use, especially through the formulation of an Action Plan for the National Program for the Conservation and Sustainable Use of the *Cerrado* Biome (National *Cerrado* Program). It will also contribute to the functioning of the National Commission for the *Cerrado* (CONACER), composed by representatives of governmental sectors, private sector, NGOs, social movements, academia and indigenous

peoples of the *Cerrado*, and which coordinates, monitors and evaluates the implementation of the National *Cerrado* Program's activities. CONACER was created during the early stages of preparation of this Sustainable *Cerrado* Initiative Program, reinforcing the commitment of the Brazilian Government to the goals of the National *Cerrado* Program and this Sustainable *Cerrado* Initiative. The work of the CONACER is essential for ensuring that the Program is implemented through a participatory process, and adequately budgeted in the Federal Government Multi-Year Plan (*Plano Pluri-Anual*) to ensure the sustainability of this Program.

This Initiative will also support studies that analyze the need for new public policies and/or regulatory standards for the conservation, sustainable use and development of the *Cerrado*'s natural resources; and the design, development and implementation of systems for the environmental monitoring and licensing of rural properties on a statewide basis in the *Cerrado*.

The Secretariat of Biodiversity and Forests of the Ministry of the Environment also established the Nucleus for the *Cerrado* and *Pantanal* (NCP) to facilitate the integration of the Ministry's actions to conserve those biomes, to support the elaboration of an Action Plan for the *Cerrado* Program, and to support the work of CONACER. NCP is composed by technical staff and will be strengthened through training provided by the MMA Project.

The Government of Brazil's expectation is that this Sustainable *Cerrado* Initiative will be the first phase of a larger, more comprehensive and multi-year program to conserve the *Cerrado*. It is envisaged that other states will eventually apply for similar projects. Individual projects or activities will be replicated as a result of the spread of information, the assessment of successful activities implemented in some states to be used in other regions, and the exchange of information between the states.

Some of the activities identified that are to be supported by the Sustainable *Cerrado* Initiative will aim at ensuring replicability. These are, among others, the following: (i) the development of specific field studies to register, compile, check and test techniques and best practices, based on the sustainable use of the *Cerrado*'s natural resources and their systematization, and the dissemination of this information through publications, seminars, workshops, community radio programs, etc.; (ii) the development of special multidisciplinary studies designed to identify the currently endangered *Cerrado* species and the best methods for their protection and recovery; and, (iii) the organization of public-awareness and capacity-building events aimed at supporting and improving the quality of information related to the preservation, rehabilitation and sustainable use of the *Cerrado*'s natural resources.

8. Lessons Learned from Past Operations in the Country/Sector

Past experiences from PPG7 projects (e.g., NRPP and Ecological Corridors) of concentrating all funding in one federal organization that would establish projects with other independent agencies have not generated the best results. Any institutional or budgeting issue faced by the main agency reflected directly on project management and on the implementation of all projects. A decentralized approach to contract each project directly is therefore recommended. The decentralized yet integrated operations tend to have a higher likelihood of success at mainstreaming environmental policy and are financially more efficient than stand-alone operations.

An overall results framework for the Sustainable *Cerrado* Initiative, associated with the existence of the Sustainable *Cerrado* Initiative Committee will ensure the necessary synergy (i) among proponent agencies, minimizing unproductive competition; and, (ii) among projects and the Sustainable *Cerrado* Initiative's goals and strategies, optimizing the cost-benefit efficiency of results. The process aims at guaranteeing that the selected projects represent the best possible combination of efforts to achieve the Sustainable *Cerrado* Initiative's goals efficiently.

Past projects which were developed with contracts signed with the state and other implementing agencies have demonstrated the advantages of implementing most proposed activities through the state governments and other agencies directly. This eliminates the need and cost of further layers of supervision and bureaucracy for project implementation. In addition, some proposed projects will collaborate with ongoing Bank projects, facilitating Bank and government monitoring and evaluation, ensuring more efficient use of GEF grants and more effective investment in the generation of global benefits.

Experience also shows that partnerships must be established with all relevant stakeholders (local communities, governments and the private sector). The Prodeagro and Planafloro projects indicated the crucial importance of developing ownership not only among beneficiaries but among all relevant stakeholders, the vital role of local institutional capacity and the clear priority of these efforts in the overall programs of the government and the Bank. Increased participation of civil society in project and program activities may raise financial costs in some cases. However, these costs are modest and are outweighed by the benefits in terms of improved capacity and institutional strengthening.

Valuable knowledge from past and current experiences is not passed on to those who could use it owing to a lack of networks and channels of communication. There is also a shortage of trained professionals and entities that can provide advice and assistance to others. Capacity building for disseminating lessons and replicating models is therefore a priority that has been considered in project design.

Failure to promote conservation and sustainable development in the past was mostly due to: (i) a lack of opportunities for those perceived as being part of the problem (e.g., ranchers) to become part of the solution, and (ii) a lack of inter-institutional coordination between different executing agencies and beneficiaries. When fostering ownership, it is important to include all agencies and relevant sectors and their representatives at the state level early in project preparation and stakeholder consultations. This also means that institutional strengthening should be readily supported with investments in human and material resources.

Technical aspects are frequently overemphasized. This can overshadow and obscure the policy aspects. In Rondônia, for instance, a zoning policy was adopted to address World Bank requirements included in the Planafloro project, but did not respond to the population's needs. Likewise, economic incentives to promote sustainable use should be considered. The project should therefore seek a balance between technical work on the ground and the need for technically and practically sound policies.

Protected areas (PAs) should consider a mosaic of different categories, not only that of "full protection", and also contribute to establishing biological corridors. This mosaic concept was also applied in the ARPA project resulting on the creation of sustainable use PAs next to full protections PAs and without overlap with Indigenous Lands. In addition, to the increased

biodiversity conservation this approach resulted that no significant adverse social impacts occurred under the Project. Thus, mosaics and corridors should be created in this project according to GEF PROBIO's recommendations and Bank safeguard policies.

The time and cost associated with fully consolidating existing PAs are frequently underestimated. The ICR of the ARPA project indicated the difficulty in reaching consolidation status of PAS was based on meeting the number and thresholds of criteria established in the typical 3 to 5 year period of a project. This project, therefore, has a more modest goal of have basic protection measures and the management plans in place as solid step towards achieving the full consolidation of the PAs.

The Brazilian legislative framework establishes that federal and state responsibilities are concurrent. States are therefore responsible for implementing federal legislation in addition to formulating and implementing their own policies. The federal government can, however, implement its own policies if it deems necessary. Support to uncoordinated policy work at different levels (federal and state) has therefore led to conflicting policies and overlaps as well as policy gaps. The Program has addressed this issue through the definition of a general results framework, along with the Sustainable *Cerrado* Initiative's necessary policy work coordination.

Safeguard Policies Triggered by the Program	Yes	No
Environmental Assessment (OP/BP/GP 4.01)	[X]	[]
Natural Habitats (<u>OP/BP</u> 4.04)	[X]	[]
Pest Management (<u>OP 4.09</u>)	[X]	[]
Cultural Property (OPN 11.03, being revised as OP 4.11)	[X]	[]
Involuntary Resettlement (<u>OP/BP</u> 4.12)	[X]	[]
Indigenous Peoples (OD 4.20, being revised as OP 4.10)	[X]	[]
Forests (<u>OP/BP</u> 4.36)	[X]	[]
Safety of Dams (<u>OP/BP</u> 4.37)	[]	[X]
Projects in Disputed Areas (<u>OP/BP/GP</u> 7.60) [*]	[]	[X]
Projects on International Waterways (OP/BP/GP 7.50)	[]	[X]

9. Safeguard Policies (including public consultation)

The draft Environmental Assessment and EMP report was submitted to the Bank on May 8, 2007. The final EA/EMP report was disseminated in Brazil through the MMA website (http://www.mma.gov.br), and contains a more detailed description of possible positive and negative environmental impacts of Sustainable *Cerrado* Initiative-supported activities, as well as a framework of identified preventive/corrective measures as a guideline for project EAs and EMPs. The document was also sent to the representatives of government and non-governmental organizations and civil society, who participated in the consultations during preparation of the Sustainable *Cerrado* Initiative, and addressed all comments received.

The analysis, based on the components of the Sustainable *Cerrado* Initiative Program and the typical social and environmental situation in the *Cerrado*, indicates that several safeguard

^{*} By supporting the proposed project, the Bank does not intend to influence the final determination of the parties' claims on the disputed areas.

policies could be triggered by each project. The list below indicates those safeguards triggered for the entire Sustainable *Cerrado* Initiative Program (i.e., whole set of projects).

The Sustainable *Cerrado* Initiative has been considered a category B project, where one or more safeguard policies could be triggered, but effects are limited in their impacts, are technically and institutionally manageable, and considered within the context of a program which aims at achieving positive environmental outcomes.

A safeguard framework was developed for the design of this Sustainable *Cerrado* Initiative Program with all safeguards that could possibly be triggered by the projects. When triggered, the safeguards were analyzed following the frameworks defined for each project with its own safeguard policy assessment.

A specific training process is available to any agency that is unfamiliar with the safeguard policies. Additionally, the safeguard framework will be monitored and related studies, plans, or mitigation procedures will be conducted with support from MMA and close assistance/supervision from the Bank.

Natural Habitats. Activities under some Sustainable *Cerrado* Initiative Program projects should lead to positive impacts on natural habitats, such as their conservation and recuperation. Nevertheless, OP 4.04 is triggered and therefore all projects' planning activities that may affect natural habitats must follow World Bank policies, identifying monitoring and management activities to prevent or mitigate any possible negative impact. Local and national legislation concerning natural habitats must be followed and habitat recuperation and sustainable use activities should give priority to the use of appropriate combinations of native species.

Pest Management. The need to use pesticides or herbicides should be indicated in each project, as well as the measures for Integrated Pest Management (IPM) to be adopted. When the use of pesticides or herbicides is justified, an analysis of potential negative impacts resulting from the use of these chemicals and the risks associated to the inappropriate handling or storing of their containers should be conducted. The projects should also include measures to reduce those risks, in compliance with Law No. 7802/89. The Operating Manual determines that for all projects, the use of these substances, whenever needed, should be limited to low toxicity products according to Class IV of Decree 98816/90, which correspond to Class "U" products in the World Health Organization's classification. Or, if appropriate Class "U" products are not available, each project coordination unit may authorize the limited use of WHO Class III products.

Physical Cultural Resources. Under Brazilian legislation provisions for the protection of cultural property are part of the environmental licensing procedures. The National Institute for Historical and Cultural Heritage (IPHAN) is the Brazilian institution responsible for handling archeological and cultural property issues. Whenever "chance findings" occur it is mandatory, by federal and state law, for Brazilian government agencies to seek IPHAN's support to address "chance finding" issues.

Involuntary Resettlement. The creation of new and the consolidation of existing protected areas will be consistent with (i) the Brazilian legislation on protected areas (SNUC - Law 9985/00, Decree 4340/02 and Decree 5758/06); (ii) the CBD Work Programme on Protected Areas; (iii) the list of priority areas for conservation, sustainable use and benefit-sharing in the *Cerrado* biome, as approved by CONABIO (National Biodiversity Commission) in December

2006 and amended by MMA Administrative Ruling no 9 of January 23, 2007; and, (iv) the principle of avoiding the need for resettlement as a result of the creation of protected areas. Under this principle, if local communities exist in areas identified as important for the establishment of protected areas, those community areas would be created as RESEXs. However, when unavoidable, involuntary resettlement must conform to Brazilian legislation, World Bank policies and the Sustainable *Cerrado* Initiative Resettlement Framework, and will involve extensive public consultation for all areas.

Indigenous Peoples. Many indigenous peoples live in the *Cerrado* region and this Program will not create any protected area on Indigenous Lands. While no activity under the Sustainable *Cerrado* Initiative may negatively impact indigenous lands or cultural properties, indigenous communities that express an interest in participating in project activities will be welcome to do so. An Indigenous Peoples Plan Framework was developed for the Sustainable *Cerrado* Initiative, containing criteria for the development and disclosure of an Indigenous Peoples Plan by any project involving indigenous communities.

Forests. Typical activities should support mainly conservation and restoration activities, and sustainable forestry activities by traditional communities and small-scale rural producers, and should be planned and executed in such a way as to minimize or prevent negative impacts on forest areas. Activities resulting in deforestation and loss of native vegetation cover will not be allowed. No large-scale timber activities will be supported by the Program. The management of any non-timber or timber (in limited scope) products will follow management plans approved by the Sustainable *Cerrado* Initiative and fully compatible with the World Bank's OP4.36.

10. List of Factual Technical Documents

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(INCP/SBF/MMA, "*Templates and Guidelines for the Preparation of a Sub-project Proposal*" (only in Portuguese), Brasília, July 2005.

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Sustainable *Cerrado* Initiative - Resettlement Framework, December 2008

Sustainable *Cerrado* **Initiative - Indigenous Peoples Framework,** April 2008, updated: April 2009.

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Inicitativa GEF Cerrado Sustentável – Avaliação Ambiental do Projeto e plano de gestão ambiental. Maio, 2007. Document: E1810.

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- **CONABIO**, "Deliberations of the CONABIO regarding the types of projects to be submitted to the GEF as financial mechanism for the Biological Biodiversity Convention" (only in Portuguese), Brasília, 2004.
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- **③Klink C & Machado R. B.**, "*Conservation of the Brazilian Cerrado*", Conservation Biology, p.707-713, Vol. 19, N° 3, June 2005.
- **GT** Cerrado, proposal for "Brazil's National Program for the Conservation and Sustainable Use of the Cerrado Biome" (only in Portuguese), MMA, Brasília, September 2004.
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- **③IBGE**, "Brazilian Biome Map" (only in Portuguese), Brasília, 2004.
- **Machado** et al. at Conservation International (CI) www.conservation.org.br.
- 3Jesus & Sano, 2002, Simpósio de Ecologia e Biodiversidade, UnB and EMBRAPA.
- **Mittermeier, R. A. et al.** 2004 "Earth's Biologically Richest and Most Endangered Terrestrial Ecoregions". CEMEX books on Nature, 2004.
- **③Vilela et al.** 2005. "*Pasture* Degradation and Long-Term Sustainability of Beef Cattle Systems In The Brazilian *Cerrado*".
- **(BHass, Braz and Cavalcanti**, 2005. *"Fragmentation And The Role Of Conservation Units In Biodiversity Conservation"*.

Relevant Legislation (all only in Portuguese)

- **Presidential Decree Nº. 5.092**, dated 21 May 2004, which defines priority areas for the conservation of biodiversity.
- **Presidential Decree Nº. 5.577**, dated 8 November 2005, which institutes the National Commission of the *Cerrado* Program (CONACER).
- **③MMA Decree** (*Portaria*) N° . 126, dated 27 May 2004, which defines the methodologies for the identification of priority areas for conservation, sustainable use and partition of the Brazilian biodiversity benefits.
- **MMA Decree** (*Portaria*) N°. 327, dated 14 June 2007, which institutes the GEF Sustainable *Cerrado* Initiative Committee.
- **Presidential Decree N°. 2.741**, dated 20 August 1998, which promulgates the National Policy for the Control of Desertification.
- **©CONAMA Resolution Nº. 238**, dated 22 November 1997, which approves the National Policy for the Control of Desertification.

- **③Presidential Decree N°. 3.420**, dated 20 April 2000, which creates the National Forestry Program (PNF).
- **Presidential Decree Nº. 4.339**, dated 22 August 2002, which institutes the National Policy on Biodiversity.
- **Presidential Decree Nº. 4.703**, dated 21 May 2003, which alters the National Program on Biological Diversity (PRONABIO) and the National Biodiversity Commission (CONABIO).
- **③Federal Law N°. 4.771**, dated 15 September 1965, which institutes the National Forestry Code.
- **③Federal Law N°. 6.938**, dated 31 August 1981, which institutes the National Policy for the Environment and the National Environment System (SISNAMA).
- **③Federal Law N°. 9.433**, dated 08 January 1997, which institutes the National Water Resource Policy.
- **③Federal Law N°. 9.985**, dated 18 July 2000, which institutes the National Protected Areas System (SNUC).
- **Presidential Decree Nº. 4.340**, dated 22 August 2002, which organizes the implementation of the SNUC law.
- **Presidential Provisional Decree N°. 2.166-67**, dated 24 August 2001, which alters sever key environmental laws.
- **MMA Decree** (*Portaria*) N°. 361, dated 12 September 2003, which institutes the *Cerrado* Working Group (*GT Cerrado*).

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