Report No. 14523-BRA

# BRAZIL

## National Biodiversity Project
## Brazilian Biodiversity Fund Project

Project Document
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Natural Resources, Environment and Rural Poverty Operations Division
Country Department I
Latin America and the Caribbean Region

**BRAZIL**

**GLOBAL ENVIRONMENT FACILITY**
**BIODIVERSITY PROJECTS**

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IBRD Map No. 27334

# PART I: PROJECTS SUMMARY

# BRAZIL
# GLOBAL ENVIRONMENT FACILITY

## GRANTS AND PROJECTS SUMMARY

**Source of Grant:** Global Environment Facility Trust Fund (GEF Trust Fund)

**Terms:** Grant

### PROJECT I: NATIONAL BIODIVERSITY PROJECT

**Recipient:** Federative Republic of Brazil

**Beneficiaries:** Ministry of Environment, Water Resources and the Legal Amazon, and public and non-profit private entities engaged in biodiversity conservation and sustainable use

**Amount:** SDR 6.7 million (US$10 million equivalent)

**Total Project Costs:** US$20 million (US$10 million from GEF Trust Fund and US$10 million from GOB)

**Financing Plan:**

| Source | TOTAL (US$ million) |
|---|---|
| GEF Trust Fund (grant) | 10 |
| Government Counterpart | 10 |
| Total: | 20 |

**Project Duration:** 5 years

### PROJECT II: BRAZILIAN BIODIVERSITY FUND PROJECT

**Recipient:** Getúlio Vargas Foundation

**Beneficiaries:** Brazilian Biodiversity Fund and public and private entities engaged in biodiversity conservation and sustainable use

**Amount:** SDR 13.4 million (US$20 million equivalent)

**Total Project Costs:** US$25 million (US$20 million from GEF Trust Fund and US$5 million from other sources) [1]

**Financing Plan:**

| Source | TOTAL (US$ million) |
|---|---|
| GEF Trust Fund (grant) | 20 |
| Other sources | 5 |
| Total | 25 |

**Project Duration:** 15 years, minimum

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[1] This amount represents the capital of the Brazilian Biodiversity Fund. However, the predicted income from investment of the US$20 million GEF Trust Fund grant and US$5 million from other sources over a 15-year period (US$9.5 million) will also be available for Project II activities (See Annex 9 for details).

| | |
|---|---|
| **Economic Rate of Return:** | N/A |
| **Map:** | IBRD No. 27334 |

# BRAZIL

## GLOBAL ENVIRONMENT FACILITY
## BIODIVERSITY PROJECTS

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### Country/Sector Background

1. Occupying nearly half the South American Continent, Brazil has a wide range of climate zones, from humid tropics to semi-arid and temperate areas, that contribute to several ecologically differentiated biogeographical zones (biomes). These include the world's largest standing tropical rain forest (Amazonian and Atlantic forests), the world's largest inland wetland (Pantanal), expanses of semi-arid thorn forests (*caatinga*), vast tree and scrub woodlands (*cerrado*), and more than 7,000 linear km of coastal and marine ecosystems. The country's vast size and diversity of biomes contribute to a wide diversification of fauna and flora. Many Brazilian species are unique in the world (endemic). In recent years, intervention in previously stable habitats has increased, leading to significant loss of biodiversity. Biomes are being occupied and developed at different speed and scale. Much larger areas of native vegetation have been devastated in the *cerrado* of central Brazil, the *caatinga* and the Atlantic forests. Clearly, it is necessary to take stock of the various natural and modified habitats that exist in Brazil and to develop a balanced approach to conservation and sustainable use of biodiversity, taking into account the livelihood of local inhabitants.

2. The Brazilian Government has addressed the issue of the loss of biodiversity through the following initiatives: (i) in 1988, a new constitution included a section on the environment and an emergency program which removed fiscal incentives for ranching in primary forest areas of the Amazon and intensified federal efforts to control forest burning; (ii) the National Environmental Project (NEP) financed by a World Bank loan (3173-BR), KfW loan and grant, and counterpart funds, was approved in early 1990 to strengthen the federal environmental protection agency (IBAMA), 30 conservation units, the conservation of several threatened ecosystems, and state and local environmental management; (iii) in late 1990, the Government requested GEF assistance to expand the coverage of the NEP program to additional conservation units and support a long-term financing mechanism (para. 6-7); (iv) in 1991, the G-7 Pilot Program to Conserve the Brazilian Rain Forest was established to support integrated projects to reduce deforestation in the Amazon and Atlantic forest; and (v) in 1992, the Government of Brazil was the first to officially endorse the United Nations Convention on Biological Diversity.

3. Outside the public sector, important institutions devoted to biodiversity conservation have evolved as well. By 1988, more than 300 NGOs were active at the national and local level. To catalyze NGO efforts, the Government created the National Environment Fund (FNMA) in 1988 to support communities and local governments carrying out conservation or sustainable development projects. State governments and private landowners in the Southeast have become active in biodiversity protection. Brazilian corporations have begun to take greater responsibility in the environmental area, mitigating negative impacts on biodiversity and requesting that government and private groups develop standard methodologies that could assist them in the certification of their products as environmentally sound. A few private firms are already marketing sustainably produced products. As part of the Government effort, a workshop was held in June 1994 to define strategies to

increase public-private partnerships in biodiversity conservation and sustainable use of resources. The Government has recently launched two additional efforts to work closely with NGOs and local-level governments in environmental protection, namely the Decentralized Environmental Projects under the National Environmental Project (NEP) financed under World Bank Loan 3173-BR, and the Demonstration Projects under the G-7 Pilot Program to Conserve the Brazilian Rain Forest.

4. Nevertheless, these public and private efforts do not constitute a coordinated national biodiversity strategy for the country. Several problems remain to be addressed: (i) uneven conservation efforts among Brazil's main biomes and within these biomes; (ii) limited access to biodiversity information; (iii) lack of participation in government projects by local communities and NGOs; and (iv) limited public-private partnerships to sustain biodiversity. To address these needs and in accordance with the Convention on Biological Diversity, the government established the National Program for Biological Diversity (PRONABIO) in 1994 to promote partnerships between the public and private sectors to support the conservation and sustainable use of biodiversity. PRONABIO develops policies; promotes research, information networks, and international cooperation; assists in the standardization of instruments and methodologies; and supports training and institutional strengthening. It also provides technical input to the Interministerial Commission on Sustainable Development (CIDES). One of the goals of the National Biodiversity Project is to strengthen the activities of PRONABIO (para. 19-20).

5. In order to maximize biodiversity conservation efforts in Brazil, some additional steps need to be taken. Biodiversity conservation efforts in Brazil to date have suffered from serious financial difficulties, including the following: (i) an emphasis on short-term funding has created a lack of continuity and has frequently caused termination of projects before their intended results could be realized; (ii) project funding has rarely been geared to the absorptive capacity of implementing agencies and organizations, and has been hampered by the Government's administrative constraints; (iii) the Government has only limited ability to channel funds to private organizations at a time when these have become key players in biodiversity conservation; and (iv) the leveraging of additional funds for biodiversity from domestic private sources has been limited, despite the recognition by the Government and NGOs that the potential is there. In light of the above, a trust fund could be an effective mechanism for guaranteeing a long-term financial commitment and for overcoming government and donor agency budget fluctuations, as well as a mechanism to match financial flows to absorptive capacity and leverage new funds from a broader array of sources. Reliable funding improves program stability, long-range planning, training and recruitment of personnel, and the overall impact of a conservation program. Consequently, a major goal of the Brazilian Biodiversity Fund Project is the creation of a trust fund to serve as a stable financial resource base for ensuring the continuity of key biodiversity activities (para. 32-36).

6. The proposed GEF Biodiversity Project was conceived in late 1990, as a complement to the National Environment Project (NEP) which had been approved and signed earlier in the year (para. 2). The NEP, while covering significant parks and reserves in the national system of conservation units, could not address all of the conservation needs related to Brazil's unique ecosystems and biological diversity. Consequently, the Brazilian government requested that GEF assistance be provided to expand the NEP program to a larger number of conservation units. This request was approved by the GEF Participants in May 1991, when they endorsed the first ever GEF Work Program (Tranche 1). The project objectives as endorsed by the Participants were to: (i) decentralize management and

administration of selected conservation units; (ii) broaden public involvement in conservation unit protection; and (iii) create a stable financial resource base for ensuring continuity of key management activities and scientific research. The approval of the G-7 Pilot Program to Conserve the Brazilian Rain Forest at roughly the same time as the GEF funding for the Biodiversity Project provoked a re-focussing of the GEF project concept to avoid duplication of effort and enhance cost-effectiveness of donor resources devoted to conservation activities in Brazil. Based on consultations between the Brazilian Government, the GEF Chairman, and the G-7 donors, it was agreed that proposed activities under the GEF project would be reviewed to ensure that they do not duplicate the G-7 Rain Forest Trust Fund Program activities. It was also agreed that the GEF supported project would focus on testing innovative private-public sector partnerships to conserve and use biodiversity sustainably (including mobilization of new funding sources). This reinforced the Government's and the Bank's desire to search for new approaches to conserving Brazil's rich biological heritage, that did not rely exclusively on public sector conservation units and that could be partially insulated from the restrictive public sector budgetary cycle and procedures.

7. With the broad framework and goals agreed, the Brazilian/Bank project teams proceeded to prepare in detail the specific components that would address the constraints to effective biodiversity conservation identified above and that could ensure broad participation in and reliable funding for such endeavors. In the course of preparation, several options were analyzed. The option of using an existing Government fund such as the FNMA was discarded due to the perception that the funds belong to the government and are therefore fungible with other government revenue, possibly making some donors (especially the private sector) hesitant to contribute. The lack of specific legislation in Brazil for creating a trust fund, a mechanism used successfully in several other GEF projects, and the need for a flexible administrative structure that would operate independently, transparently, and sustainably justified the use of a private non-profit foundation under the Brazilian civil code. It was decided at appraisal and post-appraisal that the most effective way to remain true to the spirit of the project concept endorsed by the GEF participants was to use a private foundation. Following a series of consultations among Bank staff, Government representatives, scientists, NGOs, and private sector representatives, the Getúlio Vargas Foundation was chosen to house an independent fund, the Brazilian Biodiversity Fund (see para. 33-35 and Annex 8-A). Agreement on the use of the private foundation had implications for project/grant structuring, however, since there are legal restrictions on the transfer of funds by the Brazilian Treasury to private entities (even non-profit foundations). The original comprehensive project was divided into two complementary projects with separate grant agreements (one for US$10 million to the Federative Republic of Brazil and one for US$20 million to FUNBIO). In this manner, GEF funds could be disbursed directly into the trust fund account without transitting via the Brazilian Treasury. The new project model remains consistent with the original project objectives, with the added bonus that there has been a shift in emphasis from a narrow focus on support for conservation units toward a sector-wide, national, and biome-level approach to biodiversity conservation.

**Project Objectives and Description**

8. The overall goal of the two projects is to promote and support partnerships among government, non-profit organizations, academic institutions, and the private business sector in support of PRONABIO and CIDES efforts to improve Brazil's conservation and sustainable use of biodiversity. The goal would be pursued through a two-pronged strategy. The main objective of **Project I** is to

assist the Government to undertake a nation-wide program for the conservation and sustainable use of biodiversity by identifying priority actions; stimulating the development of sub-projects through the facilitation of partnerships between the public and private sectors; and disseminating biodiversity information. A detailed description of Project I is presented in paragraphs 20-30. The main objective of **Project II** is to support the creation of a financing mechanism for providing long-term and sustainable support for conservation and sustainable use of biological diversity. This goal would be pursued by supporting the establishment and development of a Brazilian Biodiversity Fund (FUNBIO) within the Getúlio Vargas Foundation that would administer a long-term grants program to promote conservation and sustainable use of biodiversity in Brazil. A detailed description of Project II is presented in paragraphs 33-51. The goals of the two projects are complementary. In order to ensure maximum efficiency during implementation, the following linkages between the two projects are expected: (i) FUNBIO would use for their planning process the national priorities defined by the biome-level assessments and workshops, and follow the recommendations on biodiversity issues proposed by the Coordinating Commission of PRONABIO; (ii) PRONABIO would issue its calls for sub-project proposals through FUNBIO, and rely on FUNBIO to evaluate and recommend sub-projects for funding under the National Biodiversity Project; and (iii) to promote coordination between the two projects, the Ministry of Environment would be represented on both FUNBIO's Board of Directors and PRONABIO's Coordinating Commission, and a memorandum of agreement (*protocolo de entendimento*) would be signed between FGV and MMA.

**Rationale for GEF Funding**

9. Brazil is acknowledged as probably the most biodiversity-rich country in the world. It is noted both for species richness and endemism. With more than 50,000 species of vascular plants (one fifth of the world total), Brazil is the most plant-rich country, and areas such as the Atlantic forests and western Amazon have been designated as biodiversity "hot spots" because of their floral diversity. One in eleven of all world mammals (394 species) are found in Brazil, together with one in six of all world birds (1576), one in fifteen of all reptiles (468), and one in eight of all amphibians (502). Many of these species are unique to Brazil, with 68 endemic mammals, 191 endemic birds, 172 endemic reptiles, and 294 endemic amphibians. The Government of Brazil has shown its commitment to conserve this biological diversity since it was the first country to officially endorse the United Nations Convention on Biological Diversity in 1992. With its broad range of tropical habitats and extensive areas of tropical forest, including vast tracts of the Amazon basin, Brazil is important for conservation of biological diversity at the ecosystem, species, and genetic levels. The two projects address program priorities identified by the first Conference of the Parties of the Convention on Biological Diversity. They will strengthen conservation, management, and sustainable use of ecosystems and habitats; promote conservation of endemic species; strengthen local and indigenous people's involvement in conservation and sustainable use of biological diversity; support projects that promote sustainability and serve as demonstration projects; and build capacity and promote innovative measures, through a trust fund, to engage major actors in biodiversity conservation.

**Associated Bank/IDA Project**

10. The two proposed GEF projects are associated with the National Environmental Project (NEP, Loan 3173-BR) co-financed by Germany's KfW and counterpart funds. The projects have complementary objectives, namely to: (i) strengthen Brazil's institutional framework and capacity to

protect the environment; (ii) support protection of specific endangered ecosystems, in particular the Atlantic Forest, the Coastal Zone, and the Pantanal wetlands; and (iii) strengthen the regulatory framework of the environmental sector. The NEP is implemented by IBAMA and MMA, with state government involvement in implementation of the ecosystems component. Since project effectiveness in 1990, NEP's implementation performance has been uneven. Initial delays in implementation caused by institutional inexperience with project management, the low absorptive capacity of the implementing institutions, the low availability of counterpart financing, and a subsequent underutilization of disbursed funds eventually resulted in a mid-term reduction of project financing and restructuring of the project. By the end of 1994, however, project implementation was back on track, with significant progress reported towards the goal of strengthening the national institutional framework for environmental protection and management.

**Lessons from Bankwide Operations**

11. A 1994 GEF report, "Independent Evaluation of the Pilot Phase," found that (i) more consideration needs to be given to the involvement of local people, their expertise, and their priorities; (ii) projects need to build more on existing data on biodiversity and conservation priorities; (iii) more meaningful involvement of NGOs is needed throughout the project cycle, to locate "hot spots" and to establish global biodiversity networks; (iv) more creative cooperation among implementing agencies and other global organizations working in the field of biodiversity should be promoted; and (v) the degree of innovation displayed by past projects is questionable. Experience with biodiversity projects also indicates the importance of facilitating "direct" biodiversity conservation activities by communities or groups of people who have a vital interest in conservation, either because their livelihoods depend directly on biological resources, or because their quality of life depends significantly on use and existence values of biodiversity.

12. Experience with the Brazilian project portfolio, particularly the National Environmental Project (NEP, Loan 3173-BR), which aimed at improving natural resource management and biodiversity conservation, has shown several constraints in implementation: (i) projects are too complex; (ii) projects overlap in their goals; and (iii) disbursement performance has been poor. The present projects address each of these constraints. Instead of having one complex project implemented by only one organization, two projects were devised, each with a simple design to be implemented by different agencies (MMA and a private foundation). The goals of the two projects are complementary and do not overlap. The first project addresses the need for the development of a policy framework for biodiversity conservation and to support testing and dissemination of the policy. The second project supports an agile grants program adjusted to the real capacity of conservation institutions to use the funds effectively, since funding in the past has often been too much and too fast.

13. Lessons Learned in the Design of Biodiversity Trust Funds. A recent Bank paper, "Issues and Options in the Design of GEF-Supported Trust Funds for Biodiversity Conservation" (Global Environment Coordination Division, Environment Department, May 1994) offers a detailed analysis of lessons to be learned about the advantages, disadvantages, and risks associated with different structural and management options. The paper emphasizes the necessity of competent legal guidance and analysis in: the design of the trust instrument; the nomination of trustees; selection and function of the board of directors; by-laws; inclusion of essential features in operations manuals; appointment of an asset manager; appointment of advisory committees; and the structure and function of the executive

secretariat. With regard to the effective disbursement of trust fund moneys, the report notes that other funds have had difficulty disbursing relatively small amounts of funding in a timely fashion, and recommends that this problem be resolved by: creating partnerships; disseminating information about trust fund procedures and training local groups in the design and presentation of proposals; and emphasizing transparency in the fund's rules of management, so that procedures will be clear and frustrations avoided. This trust fund would adopt the first recommendation (partnerships) as a basic mode of operation, and would address the other two in its operational guidelines.

14. In designing the proposed operations, the above lessons have been taken into account by: (i) pursuing a participatory and objectives-oriented approach in overall project design and management; (ii) reviewing and expanding existing knowledge and data in biome-level workshops (Annexes 1-A and 1-B); (iii) eliciting financial contributions and implementation capacity from government, academic, NGO, and for-profit private sector organizations; (iv) making innovation a standard eligibility criterion (Annex 11); (v) adjusting grant funds to in-country implementation capacity; (vi) requiring co-financing from the Government and other sources; and (vii) developing a program of trust funds for the long-term sustainability of investments. Project sustainability would be enhanced by the fund design, which links disbursement of project funds to absorptive capacity and counterpart investments in selected sub-projects (see Annex 9).

**Project Sustainability**

15. The projects are designed to make it possible to pursue long-term objectives for biodiversity protection and sustainable use of biodiversity projects and programs in Brazil through: (i) the testing of methods for improving financial viability and sustainability of biodiversity projects through pilot sub-projects addressing the issues of cost recovery and charges for biodiversity services (e.g. ecotourism and sustainably harvested products) or of marketing products from natural ecosystems; (ii) the establishment of a sinking fund to secure long-term funding that would not be subject to unstable macroeconomic conditions and government budget constraints; and (iii) the promotion of financial and other contributions for biodiversity conservation and sustainable use by the private sector.

**Environmental Aspects**

16. Due to their innovative nature, sub-projects funded under the projects may have some environmental and social impacts, and therefore the projects have been given a "B" rating. However, the main objective of the projects is to support only sub-projects with a neutral or a net positive environmental and social impact. Funding for approved sub-projects is intended to demonstrate the viability of less damaging alternatives to existing practices. The sub-project review process would include specific attention to the environmental sustainability and social impact of the activities financed. Eligibility criteria would include, among others: (i) respect for sound environmental practices (for example, taking care in the design of new tourist facilities and ensuring that any sub-project-supported harvesting of wild species is sustainable); and (ii) proper treatment of any sensitive social issues that would include: (a) ensuring that any involuntary resettlement (if unavoidable) would follow Bank policy and (b) promoting adequate participation by local stakeholders in the design and implementation of sub-projects. These eligibility criteria would be included in the Operational Manual (see Annex 11). Sub-projects would be monitored during implementation for their social and environmental impacts.

**Project Benefits**

17. The major benefits of **Project I** would be to: (i) consolidate a national biodiversity strategy to increase the efficiency of biodiversity conservation efforts; and (ii) test new models of biodiversity conservation that could be replicated and disseminated in other contexts. Many models have been developed to create conservation alliances among rural, local groups, and governments, but few have been tested. In order to test some of these models, project continuity and strong monitoring programs are needed to learn lessons quickly and adopt changes rapidly. **Project II** would serve to (i) create an efficient and transparent mechanism for funding biodiversity priority projects; (ii) stabilize the flow of resources to meet recurrent costs of conservation initiatives; and (iii) promote long-term strategic planning for the protection of biodiversity in Brazil. Ultimately, the long-term survival of Brazilian biodiversity will be enhanced as a result of activities carried out under both projects.

**Project Risks**

18. The uneven performance of the Ministry of the Environment, Water Resources and the Legal Amazon (MMA) in past years due to its being a relatively young institution represents a potential risk for **Project I**. There are signs, however, that MMA is consolidating itself, with improved project implementation performance. Furthermore, the decentralized implementation of this project, whereby MMA would delegate implementation activities to a large array of private, academic, and local government agencies, would greatly reduce any exposure to such a risk. This risk would be further diminished by clear and rigorous guidelines for project administration and monitoring to be agreed for the Operational Manual (see Annex 12 for a presentation of the current draft guidelines). Another risk is the possible lack of institutional or technical expertise for biodiversity conservation worldwide, although Brazil is unusually well endowed with technical expertise compared to most other developing countries. The institutional capacity of the sub-project grant recipients would be carefully evaluated as one of the selection criteria. Whenever appropriate, institutional linkages would be facilitated to build additional capacity in Brazil. The potential risks associated with **Project II** include the possibility that the administrative structure of the Fundação Getúlio Vargas (FGV) could overshadow the independent development of FUNBIO. This risk is counterbalanced by safeguards built into FUNBIO's Internal Regulations, which establish FUNBIO's full institutional, financial, and operational autonomy from FGV, and the ultimate administrative authority of FUNBIO's Board of Directors. Furthermore, the transparent participation process in designing FUNBIO and the broad composition of its Board of Directors would allay any perceptions of bias or favoritism that may arise in relation to FUNBIO. Other risks for Project II are related to uncertainties about future economic and investment trends (e.g., exchange and inflation rates, and the earning capacity of capital), and the fund's long-term sustainability, which will depend somewhat on the initial investment performance of the sinking fund, but more so on provisions which will allow re-investment of income and FUNBIO's ability to draw upon other sources of financing.

## PROJECT I: NATIONAL BIODIVERSITY PROJECT

### Project I: Objectives

19. The main objective of Project I is to assist the Government to undertake a nation-wide program for the conservation and sustainable use of biodiversity by identifying priority actions; stimulating the development of sub-projects through the facilitation of partnerships between the public and private sectors; and disseminating biodiversity information.

### Project I: Description

20. Project I would include the following components:

(a) Biodiversity Assessments and Dissemination (19% of total project costs)

*(i) Biome-Level Assessments* would be done through the organization of workshops bringing together experts from various fields to consolidate available information on biodiversity and conservation status, and to identify and evaluate options for conservation and sustainable use. Based on lessons learned from the Manaus-90 workshop, maps with biodiversity data would be prepared before the actual workshop, conservation priorities would be ranked, and analysis would go beyond species distribution to review ecosystems and habitat protection, economic trends, and public policies. For each major biome, priorities would be identified and strategies for conservation and resource use developed. NGOs, academic institutions, public entities, and consortia of the above would submit proposals to organize the biome-level assessments and would be selected according to established criteria. Each workshop would establish the parameters for biodiversity monitoring and identify institutions to carry out such monitoring and disseminate the results (see Annex 1-A and Annex 12).

Terms of reference to select the organizers for each biome-level assessment were reviewed during the appraisal mission (see Annex 1-A) and would be finalized in the Operational Manual. Detailed activities and costs for one model assessment satisfactory to the Bank during the appraisal mission would be used as a model for the rest of the assessments (see Annex 1-B). The activities would be divided into three stages: (1) preparation of information base for workshop; (2) workshop event, integration of results, definition of priorities; (3) follow-up activities, including the development of a priority action plan, the definition of monitoring and consultation programs to revise priorities, and the establishment of a permanent working group in charge of follow-up activities. The assessments would be held on a staggered basis so that all of them would be completed during the first two years of the project (see the implementation plan for biome-level assessments in Annex 1-C). Workshop results would be disseminated in the form of maps and books and through electronic and other media. Participants in each biome-level assessment would designate a small number of participants to serve as a liaison and consultative group between the Government and the different constituencies represented to ensure that the recommendations of the assessments are carried out. The results and recommendations of each workshop would contribute to the National Strategy for Biodiversity Conservation and Sustainable Use to be promoted by

PRONABIO. They would also be used in the preparation of the calls for proposals for new sub-projects under Project I (para.20 (b) (ii)), as well in the definition of funding priorities for the grants program under Project II (para. 36). The steps and timetable for developing the National Strategy for Biodiversity Conservation and Sustainable Use were agreed during appraisal and are detailed in Annex 2.

(ii) A *Biodiversity Information Network - Brazil* would be established for the purpose of storing, updating, and linking information generated in the workshops, and for providing an efficient means of communication about biodiversity both nationally and internationally. It would build on existing data in the Tropical Data Base (BDT) and would connect BDT and other data bases, including IBAMA-NET, the National Environmental Electronic Network financed by the NEP loan from the Bank (see paras. 2, 10), and the National Research Network (RNP). The Biodiversity Information Network - Brazil would be accessible to government, scientific, conservation, and private-sector actors. The André Tosello Foundation for Tropical Research and Techology (FAT) would coordinate the implementation of this component. FAT was chosen because of its established leadership in developing Brazil's biodiversity information systems and facilitating its access to such systems worldwide. This private non-profit foundation has played an important role in several international forums sponsored by the United Nations Environment Programme (UNEP) and the Brazilian Government on establishment of the international Biodiversity Information Network (BIN21), which was designed to link information relevant to biodiversity and make it widely available by electronic and other means, in support of the Convention on Biological Diversity and Agenda 21. BIN21, which is already functioning, has its secretariat at FAT. The Tropical Data Base node (Brazil) is maintained by FAT. At present, there are ten international nodes in the BIN21 network. The contract between CNPq and FAT for the Biodiversity Information Network would be signed prior to effectiveness (para. 31). See Annex 3 for more details.

(iii) *Additional Biodiversity Assessments and Dissemination Activities* identified by PRONABIO and to be agreed with the Bank would be financed to support and update the Biodiversity Strategy and Action Plans, and add new subscribers to the Information Network.

(b) Model Biodiversity Sub-Projects (72% of total project costs) would be financed under this component to initiate local pilot activities that would: (1) contribute significantly to conservation of biodiversity in a specific region or biome; (2) explore innovative forms of biodiversity protection and management; (3) test a wide variety of arrangements involving public-sector and non-profit private-sector actors, and a range of conservation goals.

*(i) First-Round Model Sub-Projects* (18% of total project costs). In 1993, MMA requested proposals from a variety of public, academic, and non-profit conservation organizations in order to identify a pipeline of eligible sub-projects that would be ready to begin implementation upon grant effectiveness. Sub-projects for the first round of funding were chosen on the basis of the degree to which they address high conservation priorities, and the potential for success in achieving stated sub-project goals. Proposed sub-projects were also expected to incorporate the following basic elements into their design: (1) multi-institutional involvement with partners representing government, non-government, and academic research

institutions; (2) participation of institutions or collaborating groups with technical, financial, or operational capabilities relevant to biodiversity conservation, whose involvement would represent a broadening of the community of stakeholders in biodiversity conservation; and (3) involvement of organizations with a clear institutional mandate and well-established performance record, which through collaboration with other institutional actors could enhance the relevance of their work to biodiversity conservation. Furthermore, the following criteria were used to prioritize proposals and to make a final selection:

- Potential for replicability of project methods and approaches;
- Demonstration value of new techniques and approaches and potential sustainability of results;
- Cost effectiveness and incrementality of project-financed activities and evidence of institutional commitments reflected by counterpart funds, facilities, or in-kind services contributed by the implementors.

MMA evaluated sub-project proposals against these basic elements and criteria, and selected five sub-projects for first-round funding in 1993. One sub-project is national in scope and four are of local or regional interest:

a. National sub-project: Conservation of Plant Genetic Resources. This sub-project would conserve plant genetic resources by developing and implementing a program for the sustainable management of selected wild plant species with high conservation priority value and potential for sustainable economic use.

b. Local sub-projects. (i) Conservation and Restoration of Biodiversity in Gallery Forests of the *Cerrado*. This sub-project would assist in the restoration of gallery forests destroyed by agricultural expansion in the Federal District and adjacent regions of Minas Gerais and Goiás states; (ii) Management of Conservation Units in the Guaraqueçaba, Paraná Region. This sub-project would contribute to the conservation of the largest of the Atlantic Forest remnants by expanding conservation units in a unique 310,000-hectare coastal area in northeastern Paraná state; (iii) Conservation and Restoration of Atlantic Forest in Tablelands of Linhares, Espirito Santo. This sub-project would develop a technical and scientific model for biodiversity conservation in important remnants of Atlantic Forest in northern Espirito Santo state; (iv) Restoration and Management of the Natural Ecosystems of *Brejos de Altitude* in Pernambuco and Paraíba. This sub-project would contribute to the conservation of the threatened ecosystems of the Eastern Escarpment (*Borborema*) in Pernambuco and Paraíba states.

More details on each sub-project and implementation arrangements are presented in Annex 4. In order to start implementation as quickly as possible since these sub-projects were selected two years ago, contracts between CNPq and implementing entities for first-round model sub-projects would be signed prior to grant effectiveness (para.31).

*(ii) Second-Round Model Sub-Projects* (54% of total project costs). Requests for second-round proposals would be prepared for additional model sub-projects that would involve regions, problems, and organizations not included in the first round. These requests,

approved by PRONABIO's Coordinating Commission, would be based on the priorities set by the biome-level assessments. Requests would be submitted to the Bank for review and approval before being issued. In order to increase the cost-effectiveness of project activities and to enhance coordination between Projects I and II, the calls would be issued through FUNBIO, the Brazilian Biodiversity Fund established to carry out Project II (para. 36). FUNBIO would conduct a technical evaluation of the proposals received against criteria agreed with MMA/PRONABIO (see Annex 11). Guidelines for selection should ensure, among other things, that sub-projects will (i) follow good environmental practices, (ii) properly address any sensitive social issues, and (iii) mobilize matching funding from grant recipients. Recommendations on sub-project selection would be reviewed by FUNBIO and subsequently transmitted to PRONABIO's Coordinating Commission for review and action. For the first set of approved second-round sub-projects, the Bank will review and approve the funding decisions. Eligible entities would include public environmental institutions, research institutions, NGOs, the private sector, and consortia of the above. Sub-project proposals would average US$500,000 with an initial implementation period of three years, to be extended to five years and total funding up to US$700,000 as appropriate and conditioned upon satisfactory initial performance. A draft Operational Manual sets down procedures for processing and approving proposals, evaluation reviews, the Technical Secretariat, the Administrative Agent, and for implementing, supervising, monitoring, and evaluating sub-projects (see Annexes 6, 11,12). During negotiations, the Draft Operational Manual Draft would be discussed (para. 31). The final version of the Operational Manual would be approved by the Bank prior to effectiveness (para. 31).

(c) Project Administration (9% of total project costs). The objectives of this component include the supervision of biome-level assessments; the evaluation and integration of biome-level assessment and workshop results; the formulation of a draft Biodiversity Strategy; monitoring and supervision of sub-projects and workshops; and the dissemination of results for the whole project. (See Annex 5)

**Project I: Costs and Financing**

21. Project I activities are estimated at US$20 million, including physical and price contingencies amounting to approximately 7% of total project costs. The estimated costs are summarized in Schedule A-1, Project I . Cost estimates are based on the following considerations: (i) workshops were estimated on the basis of previous workshops (see Annex 1-B); and (ii) for first-round model sub-projects and the National Biodiversity Network, budget limits, including contingencies, were agreed with each beneficiary. Workshops would be financed 40% by the Government and 60% by GEF Trust Fund and subprojects (including the National Biodiversity Network) would be financed 50% by the GEF Trust Fund and 50% by the Government . Project administration would be financed 100% by Government. GEF Trust Fund financing would cover eligible sub-project foreign and local expenditures net of local taxes. Sub-project implementing entities would also contribute financially to the costs of sub-projects. The mechanism for these matching requirements would be agreed during negotiations and will be spelled out in the Operational Manual (para. 31).

**Project I: Implementation, Organization, and Management**

22. Institutional Arrangements. The project would be coordinated by the Ministry of Environment, Water Resources and the Legal Amazon (MMA) and would be implemented by: (i) the Coordinating Commission of PRONABIO assisted by a small Technical Secretariat and CNPq, affiliated with the Ministry of Science and Technology, as its Administrative Agent; and (ii) the implementing entities selected to carry out project activities (Annex 5). The Coordinating Commission, appointed by the Minister of the Environment, Water Resources and the Legal Amazon, and including individuals renowned in the field of biodiversity conservation and with qualifications and experience acceptable to the Bank. Those individuals would be selected from the public, academic, private, and non-profit sectors and would set policies and make decisions regarding the project. The Technical Secretariat would be responsible for project management and implementation, and monitoring and evaluation of project activities. Prior to effectiveness, the Technical Secretariat of PRONABIO would be fully operational (para. 31). MMA would engage CNPq as its Administrative Agent to enter into contractual arrangements with the project implementing entities and to assist the Technical Secretariat in disbursing and accounting for project funds (para. 26). During the post-appraisal mission, CNPq's capacity to be the Administrative Agent for the project was assessed. In a follow-up letter from the president of CNPq to the Bank, certain critical issues, such as the possibility to finance NGOs, ability to issue contracts and disburse funds in a short period of time, and capacity to monitor financial execution were answered to the Bank's satisfaction. During negotiations, the contract between MMA and CNPq and the draft model contract for implementing entities would be discussed (para. 31). Prior to effectiveness, the contract between MMA and CNPq and contracts with implementing entities for the First-Round Sub-Projects and for the Biodiversity Information Network would be signed (para. 31).

23. Procurement Arrangements. The proposed procurement arrangements are summarized in Schedule B, Project I. Based on an analysis of the pre-approved sub-projects, expenditures would include minimal civil works, varied equipment (computers, boats, cars, scientific equipment), materials, travel expenses, and consultant services. Purchases would be dispersed in time and space over the period of the project (three to five years) and would be implemented by different environmental agencies (such as universities, institutes, and NGOs). For these reasons, packaging of procurement across sub-projects would be difficult. Also, because of the dispersed nature of expenditures under Project I, it is expected that there would be no international competitive bidding. Most purchases would be expected to be made in accordance with shopping procedures acceptable to the Bank, following the January 1995 *Guidelines for Procurement under IBRD Loans and IDA Credits*. In order to ensure that Bank procedures are fully followed, the Technical Secretariat of PRONABIO would prepare for Bank review a specific procurement program in the context of its annual operating plan, based on the guidelines described below (para. 24-25, 28).

24. Small Civil Works under the project would be geographically scattered. Since the largest contract is not expected to exceed US$300,000, it is unlikely that foreign contractors would be interested. Small works would be procured under lump-sum fixed-price contracts awarded on the basis of quotations obtained from three qualified contractors in response to a written invitation. Contracts for goods are not expected to exceed US$100,000 per project beneficiary, and would be awarded through national or international shopping. If expenditures exceed US$300,000 for small works and US$100,000 for goods, contracts would be procured on the basis of National Competitive Bidding

procedures acceptable to the Bank. Recurrent costs needed in the executions of sub-projects would include materials and supplies and travel expenses and would be procured through direct purchase. Procurement under sub-projects which are implemented by private sector entities would be undertaken in accordance with established commercial practices in the sector, provided that these are acceptable to the Bank. The threshold contract values indicated above for purchases of civil works and goods, respectively, would also apply to procurement using commercial practices.

25. The selection and appointment of consultants would follow the August 1981 *Guidelines for the Use of Consultants by World Bank Borrowers and by the World Bank as Executing Agency*. Contracts with consulting firms valued at US$50,000 or more would be subject to prior Bank review (terms of reference, letter of invitation, recommendation for award, and proposed contract). For individual consultants, prior Bank review (terms of reference, qualifications, and conditions of employment) would be required for contracts valued at US$30,000 or more. Below these limits, the Bank's prior review would apply only to the terms of reference. The use of standard documentation for the employment of consultants (letters of invitation and forms of contract) would be agreed with the Bank. *Ex-post* review would be carried out by World Bank supervision missions, at which time Bank staff would review in detail the procurement procedures used.

26. Disbursements. CNPq would manage on behalf of the Treasury a Special Account in a commercial bank acceptable to the Bank, in which GEF Trust Fund funds (a total of US$10 million, with an initial allocation of US$500,000) would be deposited and subsequently disbursed to grant recipients after notification by the Technical Secretariat. CNPq would review and prepare appropriate documentation in support of disbursement requests, sign contracts with implementing entities, disburse funds, review and prepare appropriate documentation in support of disbursement requests, manage financial records, and have PRONABIO accounts audited annually. CNPq would receive no fees for these services. Disbursement schedules for each project component are presented in Schedule B-1, Project I. Grant funds would be disbursed against SOEs for consultant services for firms whose contract value is below US$50,000; consultant services for individuals whose contract value is below US$30,000; contracts for goods and civil works, and for recurrent costs (materials and supplies and travel expenses). Supporting documentation for such expenditures would not be submitted to the Bank but would be made available for inspection by Bank supervision missions. The closing date for Project I would be five years after signing the Grant Agreement.

27. Auditing. The Government would maintain a separate account for the project and would keep adequate records to reflect its execution in accordance with consistently applied sound accounting principles. The Special Account and all project accounts would be subject to an annual audit by independent auditors acceptable to the Bank. The terms of reference for the auditors would include, *inter alia,* provision of a Management Letter, a separate opinion on the use of the Special Account, and SOEs for the project accounts and Special Accounts. Copies of the auditor's report would be sent to the Bank within four months of the end of each fiscal year.

28. Annual Operating Plans and Progress Reports. The Technical Secretariat of PRONABIO would prepare Annual Operating Plans that would be submitted to the Bank for approval. The Annual Operating Plans would include a statement of specific objectives to be pursued during the year and a description of the activities to be undertaken in order to achieve those objectives, as well as estimated budgets. Prior to effectiveness, the first-year Annual Operating Plan would be approved by the Bank

(para. 31). The Technical Secretariat would track information on all project activities provided by the implementing entities and financial transactions provided by CNPq. The Technical Secretariat would submit to the Bank bi-annual progress reports tracking physical and financial performance targets by March 31 and September 30 of each year. Twice a year after receipt of the progress reports, the Bank and the Technical Secretariat would jointly carry out a supervision mission to review progress made against objectives and monitoring targets (para. 29).

29. Program Monitoring and Evaluation. The Technical Secretariat would be responsible for ensuring that project results and impacts are monitored throughtout the life of the project. PRONABIO has established general monitoring and evaluation guidelines for sub-projects and for the program as a whole (see Annex 12). In addition, the Technical Secretariat would enlist the assistance of an Advisory Committee composed of eight members drawn from a range of institutions. This Committee would meet during the Mid-Term Review and by project completion to review progress in biodiversity assessments, individual sub-projects, and in the overall program and to draw lessons learned. Terms of reference for this review would be sent to the Bank for comment and approval. In addition, each sub-project would set specific, objective performance indicators and would periodically provide data on fulfillment of performance indicators. Independent consultants specializing in biodiversity and conservation would visit sub-project sites annually to review sub-project implementation, and to make suggestions on how to improve project performance.

30. Mid-Term Review. The Technical Secretariat of PRONABIO and the Bank would conduct a Mid-Term Review at the end of the third year to evaluate the project's implementation arrangements and its on-the-ground effectiveness in implementing sub-projects (see Annex 12).

**Project I: Issues and Actions**

31. During negotiations, the mechanism for matching fund contributions for sub-projects (para. 21), final inputs on the Operational Manual (para 20), the draft contract with CNPq (para. 22), and the model contract for implementing entities would be discussed (para. 22). Prior to effectiveness: (i) the final version of the Operational Manual would be approved by the Bank (para. 20); (ii) the Technical Secretariat of PRONABIO would be operational to the satisfaction of the Bank (para. 22); (iii) the contract between MMA and CNPq would be signed (para. 22); (iv) the first-year Annual Operating Plan would be approved by the Bank (para. 28); and (v) the contract with implementing entities for First-Round Sub-projects and for the Biodiversity Information Network would be signed (para. 20).

## PROJECT II: THE BRAZILIAN BIODIVERSITY FUND

### Project II: Objectives

32. The main objective of Project II is to provide long-term and sustainable support for conservation and sustainable use of biological diversity in Brazil. This goal would be pursued by supporting the establishment and development of a Brazilian Biodiversity Fund (FUNBIO) within the Getúlio Vargas Foundation that would administer a long-term grants program to promote conservation and sustainable use of biodiversity in Brazil.

### Project II: Description

33. During project preparation, the Brazilian Government and the Bank examined all the options available to create a trust fund in Brazil. The option to create a trust fund abroad was not pursued due to difficulties such as taxation and/or investment restrictions. The option of using an existing Government fund such as the FNMA was discarded due to the perception that the funds belong to the government and are therefore fungible with other government revenue, possibly making some donors (especially the private sector) hesitant to contribute. The lack of specific legislation in Brazil for creating a trust fund, a mechanism used successfully in several other GEF projects, and the need for a flexible administrative structure that would operate independently, transparently, and sustainably justified the use of a private non-profit foundation under the Brazilian civil code. The proposed foundation would administer a fund in an off-shore investment account, and administer a long-term program to promote the conservation and sustainable use of biodiversity in Brazil.

34. Following a series of extensive consultations (both formal and informal) among Government representatives, members of the scientific sector, NGOs, and private sector representatives, a foundation profile and terms of reference were developed. According to the profile, the foundation chosen to administer the fund would ultimately be expected to serve as an active, independent, sustainable and innovative catalyst for the conservation and sustainable use of biological diversity in Brazil. The foundation would function as a (i) grant maker; (ii) fundraiser; (iii) manager; and (iv) catalyst for public-private cooperation. The foundation should also be characterized by financial and administrative transparency; the avoidance of conflicts of interest; a clear mission; the ability to manage a fund in the form of a 15-year sinking fund; clear criteria for the selection of projects; and the ability to monitor project impact on biodiversity conservation. In April 1995, MMA established a Steering Committee with members from the NGO, academic, business, and government sectors to select the foundation that would administer the fund. The Steering Committee found two options acceptable. One option involved the creation of a new foundation, and the other option would be to use an existing foundation, the Getúlio Vargas Foundation (FGV). The Environment Minister decided on the option to create an independent fund, the Brazilian Biodiversity Fund (FUNBIO) housed in the Getúlio Vargas Foundation. A Bank post-appraisal mission evaluated FGV and the internal regulations for FUNBIO and found this arrangement satisfactory.

35. The internal regulations of FUNBIO and the membership of its Board of Directors have been approved by to the Bank (see Annexes 8-B and 8-C). FUNBIO was established by the Getúlio Vargas Foundation on September 28, 1995, and the first meeting of the FUNBIO Board took place on October

9, 1995. The President and Vice-President of the Board were selected during the first meeting of the Board. With the installation of the Board, all the conditions for negotiations have been met.

**Project II: Components**

36. This project would have two major components:

(a) Strengthening and Operational Support of FUNBIO (22% of total project costs), including operational costs, development of a cost-recovery and fund-raising program, and special studies to strengthen FUNBIO (e.g., of incentives to involve the private sector in biodiversity protection).

(b) Grants Program (78% of total project costs) that would finance FUNBIO sub-projects responding to priorities that take into account the results of biome-level assessment workshops under Project I, national government policies in biodiversity protection, and international commitments, such as the Convention on Biological Diversity, Agenda 21, CIDES policies, and actions recommended by other policy units and studies. Sub-projects would be selected on a competitive basis according to established criteria. The following preliminary four broad areas have been considered: (i) Biodiversity conservation: activities that support long-term biodiversity conservation management initiatives; (ii) Sustainable use of Biodiversity: activities that build synergies and strengthen inter-relationship between biodiversity conservation and sustainable use and development practices in main productive sectors of the economy; (iii) Policy Analysis: studies to define the policy framework for biodiversity conservation and sustainable use; and (iv) Applied research and technology development: research to support increased knowledge and technology development in biodiversity conservation and sustainable. These thematic areas would be revised and agreed during negotiations (para. 52). Eligible entities would include: (i) state and municipal businesses and agencies; (ii) private businesses, either for-profit (with certain restrictions) or non-profit; (iii) environmental NGOs; (iv) research institutions; and (v) consortia of the above. The types of project, size and procedures to call, select, contract, and monitor the sub-projects would be spelled out in FUNBIO's Operational Manual (see para. 41-42).

**Project II: Costs and Financing**

37. Project activities would be financed by a GEF Trust Fund Grant (US$20 million) and funds raised by FUNBIO (US$5 million) that would be deposited into a sinking fund organized for a 15-year horizon and managed by an internationally qualified asset manager in accordance with established selection criteria. These figures represent the minimum required by the Bank. Additional funds would be sought to help the fund grow. After Grant Effectiveness, the GEF Trust Fund would deposit an initial amount equivalent to US$10 million into the sinking fund account. The additional GEF Trust Fund deposits into the fund would be triggered by donations to the fund raised by FUNBIO at a ratio of two (GEF Trust Fund) to one (non-GEF Trust Fund). The overall program budget revenues and costs are presented in Schedule A-2, Project II. In addition to these estimated costs, the sinking fund is expected to generate an approximate net investment of US$9.5 million (see Annex 9), which would be made available to the program. Sub-project grant recipients under the grants program would also

contribute financially to the costs of sub-projects. Mechanisms for these matching contributions would be agreed during negotiations and would be spelled out in the Operational Manual (see paras 42, 52).

**Project II: Implementation, Organization, and Management**

38. The project would be implemented by: (i) FUNBIO, established by the Getúlio Vargas Foundation and assisted by an Asset Manager (para. 45); and (ii) the implementing entities designated to carry out approved sub-projects.

39. FUNBIO Board of Directors. The governing board of FUNBIO would consist of about 16 individuals informally representing the interests of: FGV (2); the public sector (2 from MMA); private non-profit organizations (4); private for-profit enterprises (4); and academic institutions (4). The Board members would be individuals outstanding in fields relevant to the objectives of FUNBIO. Consideration regarding geographic and gender representation have been taken into account, although primary emphasis has been placed upon the capacity of the individuals to contribute significantly to the objectives of FUNBIO. The Board was selected by MMA and FGV after consultation with the different sectors represented (NGOs, academic, business) and its membership is satisfactory to the Bank (see Annex 8-C). The Board would be autonomously responsible for overall management and direction of FUNBIO, including: setting policy; establishing goals and priorities; selecting the President and Vice-President; selecting the Executive Director; approving the Operational Manual; selecting an asset manager; making investment decisions; approving calls for proposals for funding; approving sub-projects to be financed; and monitoring sub-project implementation (Annex 8-B). Advisors of recognized expertise forming Technical Committees would advise the Board, on an *ad hoc* basis, on the suitability of sub-projects from the perspective of biodiversity conservation and sustainable use. During the inaugural meeting of FUNBIO's Board, on October 9, 1995, the Board appointed Roberto Bornhausen as President and Gustavo Fonseca as Vice-President of the Board. The Board also created four working groups to finalize the last requirements before effectiveness: (1) develop procedures to select the Executive Director; (2) review the report on the asset managers; (3) assess independent firms to do the auditing; and (4) prepare the draft Operational Manual. In order to ensure full coordination between FUNBIO and PRONABIO (Project I), an agreement (*protocolo de entendimento*) would be signed between FGV and MMA.

40. Administration. The day-to-day administration of FUNBIO would be entrusted to an Executive Director and a small operating unit. Given the importance of the Executive Director's role, it is vital that the selection process be well-advertised and openly competitive. Lessons learned from previous similar projects show that basic prerequisites for successful executive performance include: a clear job description approved by the Board, a position widely and strategically advertised, a small search committee from the Board to carry out the interview process and a final selection to be made by the Board. The process for selecting the Executive Director and job description would be spelled out in the Operational Manual. Prior to effectiveness, the Executive Director would be hired and FUNBIO would be fully operational (para.52). A program assistant specializing in fund-raising would be contracted and remunerated at least partially on a performance basis. Administrative costs would be held to an average of about 15-20%, depending upon accounting procedures for program and overhead costs. This value is generally in line with other similar GEF projects and internationally accepted practice. The percentage would also decline as additional funds are raised. This is expected, but no estimated values are included in the project cost analysis. FUNBIO would contract an internationally

qualified asset manager to administer funds efficiently (see para. 45). Commissions and fees paid to the asset manager would be in accordance with standard practice (e.g., 1-1.5%), and would be paid out of the fund's investment proceeds (see Annex 9).

41. Criteria for Grants. Eligible entities for funding would include: (i) state and municipal businesses and agencies; (ii) private businesses, for-profit (with certain restrictions) or non-profit; (iii) environmental NGOs; (iv) research institutions; and (v) consortia of the above. FUNBIO would issue calls for proposals, as defined by the results of the biome-level workshops, and open to a wide range of institutions. Calls for proposals would be submitted to the Bank for review and approval. The broad programming area would cover activities supporting the conservation and sustainable use of biodiversity (see para. 36 (b)). In principle, they would include: demonstration projects; tests of new models and methodologies; replication of successful projects; policy and applied research studies; development of technologies; and training and environmental education activities. Sub-projects would be evaluated by technical reviewers according to selection criteria under discussion with the Bank (see Annex 11). Different criteria would apply to public and private non-profit versus private for-profit sector sub-projects. Guidelines to evaluate the environmental impact and social assessments of the sub-projects will also be applied. These guidelines should ensure that sub-projects will (i) follow good environmental practices, (ii) properly address any sensitive social issues, and (iii) mobilize matching funding from grant recipients. Grants would only be provided for sub-projects which demonstrate clearly defined environmental and public benefits. The Board of Directors would make the final decision on proposal funding. For the first set of approved sub-projects, the Bank will review and approve the funding decisions. The detailed programming areas and selection criteria, matching contributions from implementing entities and procedures for the grants program would be spelled out in the Operational Manual.

42. Operational Manual. An Operational Manual for the project would lay out all the operational, financial and administrative rules and procedures for FUNBIO. The content of the Operational Manual has been discussed in previous missions and several Trust Fund Manuals from other similar projects have been shared to facilitate its preparation. During negotiations in Washington, the main content and process to finalize this Manual would be discussed (para. 52). Final approval of the Manual by the Bank would be a condition of Grant Effectiveness (para. 52). The final version of the Operational Manual would be consistent with FUNBIO's internal regulations and address at least the following issues: (a) FUNBIO's objectives; (b) organizational structure (including operational procedures of the Board, profile of main positions, process to select Executive Director and other staff); (c) funding sources (including mechanisms to attract private sector participation, planned fund-raising activities); (d) detailed spending and investment rules, including acceptable levels of risk for investments, limits on capital invasion, mechanisms for re-investment of unspent income (e.g., in years with high investment performance), and mechanisms for incorporating and managing additional grants and assets provided by sources other than the GEF Trust Fund; (e) operating procedures for grant making, including how to define priorities and invite proposals, eligibility and selection criteria (differentiating among non-profit and for-profit grant recipients), level of counterpart contributions from grant recipients, procedures to evaluate proposals (technical reviewers), guidelines to ensure that sub-projects will follow good environmental practices and properly address any sensitive social issue: (f) guidelines for setting administrative costs of FUNBIO, and for financing fund-raising programs and other FUNBIO activities; (g) financial management arrangements, including procurement and disbursement guidelines, guidelines for contracting an asset manager, detailed investment guidelines for the asset manager,

auditing, and financial recording and reporting; and (h) monitoring and evaluation of FUNBIO performance (see Annex 12).

43. Procurement Arrangements. A Brazilian Biodiversity Fund would be established and the proceeds of the GEF Trust Fund would be applied over a 15-year period, as shown in Schedule A-2 Project . The selection of the Fund asset manager would be carried out in accordance with the August 1981 *Guidelines for the Use of Consultants by World Bank Borrowers and by the World Bank as Executing Agency*. Only the interest and a portion of the capital of the fund would be used (approximately US$2.5 million would be available per year) to finance sub-project contracts and recurrent costs of FUNBIO that would be endowed with the sinking fund. Financial management fees (1-1.5% of capital) would also be used to pay the asset manager for services. Consequently, given the unique nature of this project, the standard procurement arrangements may not be meaningfully applied since the amounts of each expenditure cannot be predicted beforehand.

44. Procurement concerns would involve: (i) expenditures of about US$500,000 per year to FUNBIO for salaries, maintenance, materials, minor equipment, travel expenses, and consultant services; and (ii) expenditures of US$500,000 per year (maximum) for individual sub-project contracts throughout Brazil. These expenditures would involve minor equipment, materials, travel expenses, and consultant services. Purchases would be dispersed in time and space over the period of the project (three to five years) and would be implemented by different environmental agencies (such as universities, institutes, and NGOs). For these reasons, packaging of procurement across sub-projects would be difficult. Also, because of the dispersed nature of expenditures under Project II, it is estimated that there would be no international competitive bidding. Most purchases would be expected to be made in accordance with shopping procedures acceptable to the Bank. In order to ensure that Bank procedures are followed, FUNBIO would prepare for Bank review a specific procurement program in the context of its annual operating plan, based on the guidelines described in Schedule B, Project II.

45. Asset Manager. The funds deposited in the Brazilian Biodiversity Fund for investment (from the GEF Trust Fund and other sources) would be managed by an off-shore asset manager. Terms of reference and selection criteria to choose the asset manager have been agreed between Bank, FGV and MMA (Annex 9, Attachment 1). A financial consultant selected by FGV and appointed by the Bank is developing a long list of potential candidates for asset managers. FGV and FUNBIO's Board representatives will invite a short list of firms, evaluate proposals and select the asset manager. Prior to Bank Board approval, the asset manager selected would be submitted to the Bank for approval (para. 52). Funds from the GEF Trust Fund would be managed by the selected asset manager in accordance with investment objectives and guidelines defined by FUNBIO's Board of Directors and specified in the contract between FGV and the asset manager, which is subject to Bank approval (Annex 9). Between negotiations and effectiveness, the Bank would review and approve the draft contract between FGV and the asset manager, as well as the detailed investment guidelines for the asset manager. Prior to Bank Board Approval, detailed investment guidelines for the asset manager would be approved by the Bank (para. 52). Prior to effectiveness, FGV would sign a contract with the asset manager satisfactory to the Bank (para. 52).

46. Disbursements: The GEF Trust Fund grant would be disbursed in several tranches, as indicated in Schedule B-2, Project II. The Bank would deposit an initial amount equivalent to US$10

million into the sinking fund account after FGV signs a contract with the asset manager satisfactory to the Bank, and after the Grant Agreement with FGV becomes effective. Additional deposits into the fund would be triggered by demonstrated donations to FUNBIO in the ratio of two (GEF Trust Fund) to one (other sources) (US$5 million). The funds could be raised in tranches, US$250,000 at a time, each tranche triggering a new release of funds from GEF Trust Fund until all GEF funding is committed. Contracts with donors and bank statements showing deposits from these donations to FUNBIO's asset manager account would serve as means of verification. To ensure adequate capital preservation and reasonable earning of the GEF Trust Fund proceed, a specific rule limiting overall annual fund expenditures and capital invasion would be necessary and would be agreed during negotiations (para. 52). Although the sinking fund would be operational for at least 15 years with the US$20 million from the GEF Trust Fund proceeds and with the US$5 million required from FUNBIO's fund raising efforts, the ultimate goal of the fund would be to grow and continue beyond this time frame and this amount. The 15 years time frame was adopted to ensure that an adequate amount of funds to operate FUNBIO and run a grants program would be available every year (US$2.5 to 3 million). It is expected that aside from the required US$5 million in cash (see above), FUNBIO would seek additional resources (not linked to GEF Trust Fund disbursements) for its own operations and for support of biodiversity sub-projects, through donations from national and international corporations, foundations, possible in-kind donations and licensing or royalty agreements, agencies, and bilateral donors. It is expected that the fund would grow through fund-raising activities, and last well beyond the 15-year horizon. FUNBIO's Board of Directors would determine the best mechanism to raise contributions, including matching funds from approved sub-project implementing entities.

47. Auditing. Independent auditors acceptable to the Bank would be contracted to carry out annual external audits of FGV and FUNBIO's accounts and activities in accordance with generally accepted accounting principles. The audit report for FGV and FUNBIO would provide a separate opinion regarding its project accounts, SOEs, and financial statements, as well as a management report analyzing overall financial management, control, and effectiveness. The audit report for the asset manager would be similar, but would not include an opinion regarding SOEs and project accounts. Within four months following the close of each fiscal year, the results of both financial audits would be made available to FUNBIO's Board of Directors, founders, donors, and members, as well as the Government and the Bank.

48. Annual Operating Plans and Progress Reports. The Executive Director of FUNBIO would prepare Annual Operating Plans (POA) to be submitted to the Bank for comments prior to final approval by the Board of Directors of FUNBIO. The Annual Operating Plans would include a statement of specific objectives to be pursued during the year and a description of the activities to be undertaken in order to achieve those objectives. The Executive Director of FUNBIO would track FUNBIO's activities, including administration of the fund and sub-project information provided by the grant recipients and independent evaluations. The Executive Director would submit quarterly progress reports to the Bank, tracking physical and financial performance targets, by March 31 and September 30 of each year.

49. Monitoring and Evaluation. Drawing on the procedures developed for Project I, FUNBIO would establish monitoring and evaluation guidelines for sub-projects and for fund-raising activities, and would engage independent evaluators as necessary to monitor and evaluate its own overall performance (see Annex 12). These guidelines would be spelled out in the Operational Manual.

50. Project Supervision. Given the open-ended nature of the proposed project, and the practical difficulty of continuing supervision for 15 years (the lifetime of the fund), it is expected that supervision would take place for five years. The decision concerning the termination or extension of supervision beyond five years would be based on the Bank's examination of project performance, specifically, by evaluating whether the project has met its objectives. The Bank would carry out supervision of the project twice a year.

51. Mid-Term Review. The Executive Director of FUNBIO and the Bank would conduct a Mid-Term Review at the end of the third year to assess the project's implementation arrangements, its on-the-ground effectiveness in implementing sub-projects, and the performance of the asset manager. This review would serve three functions: (i) fine-tune the project and determine any needed modifications; (ii) evaluate investment performance; and (iii) serve as the launching point for the concerted fund-raising effort to increase FUNBIO's capital.

**Project II: Issues and Actions**

52. During negotiations: (i) the major areas for grant making would be agreed; (ii) a specific rule limiting overall annual fund expenditures and capital invasion would agreed; (iii) mechanisms for matching fund contributions for sub-projects from sponsors would be agreed (para. 37); and (iv) the main content of the Operational Manual and the process to finalize it would be reviewed (para. 42). Prior to Board Approval: (i) the asset manager selected would be approved by the Bank (para. 45); and (ii) detailed investment guidelines for the asset manager would be approved by the Bank (para. 45). Prior to effectiveness: (i) a contract with the asset manager satisfactory to the Bank would be signed (para. 45); (ii) the final version of the Operational Manual would be approved by the Bank (para. 42); and (iii) FUNBIO would be operational to the satisfaction of the Bank, with the Executive Director selected by FUNBIO's Board and hired (para. 40).

Schedule A
PROJECT I

# BRAZIL

## GLOBAL ENVIRONMENT FACILITY
## BIODIVERSITY PROJECTS

### Estimated Project Costs by Components

| PROJECT I | US $ '000 equivalent | | | % | % |
|---|---|---|---|---|---|
| COMPONENTS | Local | Foreign | Total | Foreign Exchange | Base Cost |
| **A. PRIORITY SETTING & DISSEMINATION** | | | | | |
| **1. Biome-level Workshops** | | | | | |
| Amazonia | 252 | 28 | 280 | 10 | |
| Cerrado & Pantanal | 234 | 26 | 260 | 10 | |
| Caatinga | 270 | 30 | 300 | 10 | |
| Atlantic Forest | 234 | 26 | 260 | 10 | |
| Continental Shelf | 270 | 30 | 300 | 10 | |
| Sub-total | 1,260 | 140 | 1,400 | | |
| **2. National Biodiversity Network 1** | 574 | 826 | 1,400 | 59 | |
| **3. Other Diagnostic and Dissemination Activities** | 688 | 121 | 809 | 15 | |
| **Sub-total** | **2,522** | **1,087** | **3,609** | | 18 |
| **B. MODEL BIODIVERSITY SUB-PROJECTS** | | | | | |
| **1. First-round Sub-projects 1** | | | | | |
| a. Genetic Resources | 558 | 42 | 600 | 7 | |
| b. Local Sub-projects | | | | | |
| i. Cerrado Gallery Forests | 776 | 24 | 800 | 3 | |
| ii. Atlantic Forest Guaraquecaba | 631 | 78 | 709 | 11 | |
| iii. Atlantic Forest Linhares & Soreta | 637 | 63 | 700 | 9 | |
| iv. Caatinga Brejos de Altitude | 636 | 95 | 731 | 13 | |
| Sub-total | 3,238 | 302 | 3,540 | | 18 |
| **2. Second-round Sub-projects** | 5,738 | 3,825 | 9,563 | 40 | 48 |
| **Sub-total** | **8,976** | **4,127** | **13,103** | | |
| **C. PROJECT ADMINISTRATION (MMA & CNPq)** | **1,711** | - | **1,850** | 0 | 9 |
| PROJECT I - BASELINE COSTS | **13,208** | **5,215** | **18,562** | | |
| **Contingencies *** | 1,208 | 230 | **1,438** | 16 | 7 |
| PROJECT I - TOTAL | 14,416 | 5,445 | 20,000 | | 100 |

* Physical and price contingencies were averaged to 7%
1- Budget limits, including contingencies, were agreed with each beneficiary

**Schedule A**
**PROJECT II**

**BRAZIL**
**GLOBAL ENVIRONMENT FACILITY**
**BIODIVERSITY PROJECTS**

**PROJECT BUDGET**

**US$ 000 equivalent**
For Years 1-15

| | | | |
|---|---|---|---|
| **REVENUES** | | | |
| GEF Sinking Fund (1) | 34,507 | | |
| **TOTAL** | **34,507** | | |
| **COMPONENT COSTS** | | **% Foreign** | |
| Sub Grants | 26,837 | 30% | 78% |
| Administration (2) | 7,670 | 20% | 22% |
| **TOTAL** | **34,507** | 28% | 100% |

**DETAILED ADMINISTRATION COSTS**

| | Years (3) 1-5 | Years 6-15 | Total | Annual Average |
|---|---|---|---|---|
| **Salaries** | **1,615** | **3,400** | **5,015** | **340** |
| Executive Director | 380 | 800 | 1,180 | 80 |
| Program Assistant | 190 | 400 | 590 | 40 |
| Secretary | 119 | 250 | 369 | 25 |
| Technical Assistant | 119 | 250 | 369 | 25 |
| Benefits (4) | 808 | 1,700 | 2,508 | 170 |
| **Office Expenses** | **95** | **200** | **295** | **20** |
| Printing and services | 24 | 50 | 74 | 5 |
| Equipment/Supplies | 71 | 150 | 221 | 15 |
| **Travel and Representation** | **190** | **400** | **590** | **40** |
| **Other Services** | **380** | **800** | **1,180** | **80** |
| FGV services (5) | 238 | 500 | 738 | 50 |
| Consultants | 143 | 300 | 443 | 30 |
| **Contingencies** | **190** | **400** | **590** | **40** |
| **TOTAL ADMINISTRATION** | **2,470** | **5,200** | **7,670** | **520** |

1. Generated by GEF Trust Fund and made **available to the program** for sub-project activities. See investment analysis for details( Annex 9).
2. As a percentage of total costs, this is generally in line with other GEF Trust Fund projects. Also, the percentage will decline as additional private contributions are raised in years 6-15.
3. Assumes that costs in Year 1 of the project are only 75 percent of annual average costs.
4. Benefits are currently under negotiation.
5. FGV will provide full office support to the project.

BRAZIL

# GLOBAL ENVIRONMENT FACILITY
# BIODIVERSITY PROJECTS
## Summary of Procurement Arrangements

| | (US$ '000) equivalent | | | | TOTAL |
|---|---|---|---|---|---|
| EXPENDITURE CATEGORY | ICB 1 | NCB 2 | Other | | Amount |
| **Workshops Part A-1 and A-3** | | | | | |
| – *Goods* | | | *531* | 3 | *531* |
| | | | *(325)* | | *(325)* |
| – *Consulting Services* | | | *1,817* | 4 | *1,817* |
| | | | *(1124)* | | *(1124)* |
| **National Biodiversity Network Part A-2** | | | | | |
| – *Civil Works* | | | *62* | 3 | *62* |
| | | | *(31)* | | *(31)* |
| – *Goods* | | | *572* | 3 | *572* |
| | | | *(286)* | | *(286)* |
| – *Consulting Services* | | | *652* | 4 | *652* |
| | | | *(326)* | | *(326)* |
| – *Recurrent Costs* * | | | *114* | 5 | *114* |
| | | | *(57)* | | *(57)* |
| **First Round Sub-Projects Contracts** | - | | | | |
| – *Civil Works* | | | *78* | 3 | *78* |
| | | | *(39)* | | *(39)* |
| – *Goods* | | | *878* | 3 | *878* |
| | | | *(439)* | | *(439)* |
| – *Consulting Services* | | | *1,724* | 4 | *1,724* |
| | | | *(862)* | | *(862)* |
| – *Recurrent Costs* | | | *858* | 5 | *858* |
| | | | *(429)* | | *(429)* |
| **Second Round Sub-Projects Contract** | - | - | | | |
| – *Civil Works* | | | *220* | 3 | *220* |
| | | | *(125)* | | *(125)* |
| – *Goods* | | | *3,400* | 3 | *3,400* |
| | | | *(1933)* | | *(1933)* |
| – *Consulting Services* | | | *5,920* | 4 | *5,920* |
| | | | *(3283)* | | *(3283)* |
| – *Recurrent costs* | | | *1,324* | 5 | *1,324* |
| | | | *(741)* | | *(741)* |
| **Project Administration** | | | | | |
| – *Consulting Services* | | | *1576* | 4 | *1576* |
| | | | *(0)* | | *(0)* |
| – *Recurrent Costs* | | | 274 | 5 | 274 |
| | | | *(0)* | | *(0)* |
| TOTAL ESTIMATED COSTS | | | 20,000 | | 20,000 |
| | | | (10,000) | | (10,000) |

1. ICB = International Competitive Bidding
2. NCB = National Competitive Bidding
3. Shopping procedures
4. Procurement of consultants and training services
5. Direct purchase

(Numbers in parenthesis reflect GEF Trust Fund financing)

* Recurrent costs include small materials and supplies and travel expenses

**Schedule B**
**PROJECT II**

**BRAZIL**

**GLOBAL ENVIRONMENT FACILITY**
**BIODIVERSITY PROJECTS**

**SUMMARY OF PROCUREMENT ARRANGEMENTS**

Small Civil Works under the project would be geographically scattered. Since the largest contract is not expected to exceed US$300,000, it is unlikely that foreign contractors would be interested. Small works would be procured under lump sum fixed price contracts awarded on the basis of quotations obtained from three qualified contractors in response to a written invitation. Contracts for goods are not expected to exceed US$100,000 per project beneficiary, and would be awarded through national or international shopping. If expenditures exceed US$300,000 for small works and US$100,000 for goods, contracts would be procured on the basis of National Competitive Bidding procedures acceptable to the Bank. Recurrent costs needed in the executions of sub-projects would include materials and supplies and travel expenses and would be procured through direct purchase. Procurement under sub-projects which are implemented by private sector entities would be undertaken in accordance with established commercial practices in the sector, provided that these are acceptable to the Bank. The threshold contract values indicated above for purchases of civil works and goods, respectively, would also apply to procurement using commercial practices. The selection and appointment of consultants would follow the August 1981 *Guidelines for the Use of Consultants by World Bank Borrowers and by the World Bank as Executing Agency*. Contracts with consulting firms valued at US$50,000 or more would be subject to prior Bank review (terms of reference, letter of invitation, recommendation for award and proposed contract). For individual consultants, prior Bank review (terms of reference, qualifications and conditions of employment) would be required for contracts valued at US$30,000 or more. Below these limits, the Bank's prior review would apply only to the terms of reference. The use of standard documentation for the employment of consultants (letters of invitation and forms of contract) would be agreed with the Bank. *Ex-post* review would be carried out by Bank supervision missions, at which time Bank staff would review in detail the procurement procedures used.

# BRAZIL

## GLOBAL ENVIRONMENT FACILITY
## BIODIVERSITY PROJECTS

### Summary of Disbursement Arrangements

| Category | Amount from GEF Trust Fund (US$'000) | % of Expenditures |
|---|---|---|
| Part A1 and A3 (see Schedule A-I) | | 60% |
| goods | 301 | |
| services | 1,009 | |
| Part A2 - Information Network | | 50% |
| works | 31 | |
| goods | 286 | |
| services | 326 | |
| recurrent costs* | 57 | |
| Part B1- First Round Sub-projects | | 50% |
| works | 39 | |
| goods | 439 | |
| services | 862 | |
| recurrent costs | 429 | |
| Part B2 - Second Round Sub-projects | | 50% |
| works | 95 | |
| goods | 1,466 | |
| services | 2,638 | |
| recurrent costs | 584 | |
| Unallocated | 1438 | |
| TOTAL | 10,000 | |

* recurrent costs include materials and supplies and travel expenses

# BRAZIL

## GLOBAL ENVIRONMENT FACILITY
## BIODIVERSITY PROJECT

### Summary of Disbursement Arrangements

**GEF Trust Fund Disbursement Schedule**
(US$'000)

| World Bank Fiscal Year | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|
| Annual | 2,350 | 3,100 | 2,150 | 1,200 | 1,200 |
| Cumulative | 2,350 | 5,450 | 7,600 | 8,800 | 10,000 |

**External Funds Disbursement Schedule ***
(US$'000)

| World Bank Fiscal Year | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|
| Annual | 4,700 | 6,200 | 4,300 | 2,400 | 2,400 |
| Cumulative | 4,700 | 10,900 | 15,200 | 17,600 | 20,000 |

* Includes funds from the GEF Trust Fund and Government counterpart

# BRAZIL

## GLOBAL ENVIRONMENT FACILITY
## BIODIVERSITY PROJECTS

### Summary of Disbursement Arrangements

US$10.0 million would be disbursed to the sinking fund upon effectiveness of the Grant Agreement and additional disbursements to the sinking fund would be made in the ratio of 2 (GEF Trust Fund) to 1 (private matching contributions). The funds would be raised by FUNBIO in tranches, US$250,000 at a time, each tranche triggering a new release of funds from the GEF Trust Fund. Contracts with donors and bank statements showing deposits from these donations to FUNBIO's asset manager account would serve as means of verification.

**Estimated GEF Trust Fund Disbursement Schedule**
(US$'000)

| World Bank Fiscal Year | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|
| Annual | 10,000 | 2,500 | 2,500 | 2,500 | 2,500 |
| Cumulative | 10,000 | 12,500 | 15,000 | 17,500 | 20,000 |

**Schedule C**

**BRAZIL**

**GLOBAL ENVIRONMENT FACILITY**
**BIODIVERSITY PROJECTS**

**TIMETABLE OF KEY PROCESSING EVENTS**

| | |
|---|---|
| Time taken to prepare: | 50 months (January 1991 to March 1995) |
| Prepared by: | Ministry of the Environment, Water Resources and the Legal Amazon<br>Non-Governmental Organizations, academic insitutions and business companies<br>World Bank: Claudia Sobrevila (LA1RF) & Daniel Gross (LA1ER) |
| Peer reviewers: | Susan Shen (EA1AE) & Michele de Nevers (LA2EU)<br>Thomas Lovejoy (Smithsonian) & Jorge Soberón (CONABIO) |
| First Bank Mission: | March 1991 |
| Appraisal Mission: | March 1995 |
| Planned Date of Negotiations: | October 1995 |
| Planned Date of Effectiveness: | January 1996 |
| Supervision Plan:<br>Project I | Missions are planned for 4-6 months intervals to supervise progress. Three years after effectiveness, a Mid-Term Review is planned, during which project implementation and monitoring and evaluation procedures will be assessed and changes introduced as necessary. Technical expertise: biodiversity specialist, ecologist, community development specialist, and natural resources economist. |
| Project II | Given the open-ended nature of the proposed project, and the practical difficulty of continuing supervision for 15 years (the lifetime of the fund), it is expected that supervision would take place for five years. The decision concerning the termination or extension of supervision beyond five years would be based on the Bank's examination of project performance, specifically, by evaluating whether the project has met its objectives. The project would be supervised twice a year. Technical expertise: institutional development specialist, biodiversity and environmental specialists, social scientist, and financial analyst. |

# PART II: TECHNICAL ANNEXES

# BRAZIL

## GLOBAL ENVIRONMENT FACILITY
## PROJECT I

## BIOME-LEVEL ASSESSMENTS

# BRAZIL

## GLOBAL ENVIRONMENT FACILITY
## PROJECT I

## TERMS OF REFERENCE FOR BIOME-LEVEL ASSESSMENTS

### Background

Priority Setting and Integration of Biodiversity Conservation Efforts. Brazil's enormous size and diversity of biomes create special difficulties for the conservation and management of biological diversity. National institutions are not well equipped to allocate resources effectively to the different biomes. Each is unique and has its particular needs. There is a lack of scientific information to determine the location and condition of the rare and threatened species and habitats, and to set priorities for investments in their conservation. Despite five and a half decades of investments in protected areas systems, despite substantial *ex situ* conservation efforts, and despite recent adoption of policies and creation of a national environment fund for NGOs and municipalities (FNMA), native habitats and biodiversity continue to be at risk.

In part, this is due to the difficulty for national and state institutions to analyze the effectiveness of the various conservation efforts to date, learn lessons from them, build on those that have been successful, and add new practices such as sustainable use and tourism to the traditional array of protected area management techniques. There is no single program that would fit the needs of all the different biomes. Although several recent workshops and studies have made progress in this effort, there is as yet no ongoing process or entity responsible for identifying urgent actions, responding to the needs of the distinct regions, allocating resources in such a way as to meet the most urgent needs of each region, or monitoring the effectiveness of various types of investments.

### Workshop Objectives

a. Establish georeferenced regional data bases containing information on the distribution of species and ecosystems, land use patterns, and socioeconomic trends.

b. Consolidate information on regional biodiversity, including endemic, threatened, and vulnerable species.

c. Prepare analysis of current and potential efforts for the conservation and sustainable use of biological resources.

d. Identify the causes of habitat degradation, including economic trends and government policies, and their respective influence on biodiversity.

e. Identify priority activities for the conservation of biodiversity in each Brazilian biome.

f. Identify opportunities and options for the sustainable use of biological resources.

g. Evaluate the costs of biodiversity protection.

h. Disseminate the findings of the workshops.

**Workshop Procedures**

Each biome-level workshop would be divided into three phases: (1) preparation, (ii) workshop event and dissemination, and (iii) follow-up. Budgets would be prepared discriminating each of the three phases.

1. Preparation

(a) Produce base maps digitalized in the GIS format compatible with Arc-Info for the incorporation of biome data, as described in (b) below.

(b) At the beginning of each meeting, workshop participants would receive maps on a scale of 1:2,000,000 containing the following information:

(1) Political divisions, hydrographic features, and geographic irregularities.
(2) Remaining natural areas of the biome, based on satellite images.
(3) Conservation Units (direct and indirect use) and other protected areas, both public (federal, state, local) and private.
(4) Demographic characteristics and socioeconomic indicators.
(5) Land use patterns and other human pressure on the areas.
(6) Location and status of collections of key plant and animal groups.
(7) Distribution of biological/ecological communities and environmental units.
(8) Biogeographic provinces.
(9) Distribution of rare, endemic, and migratory species.
(10) Species diversity.
(11) Distribution of traditionally cultivated species and related wild species.

(c) Definition of key themes would be determined by participants at the beginning of each workshop, covering the following areas:

(1) Characterization, quantification, and critical evaluation of available information.
(2) Evaluation of the representativeness of the conservation effort.
(3) Evaluation of biodiversity knowledge and utilization.
(4) Socioeconomic trends, public policies, and human pressures influencing biodiversity.
(5) Economic factors influencing the use and degradation of biodiversity.

2. Participants

(a) Members of the scientific community.
(b) Members of the conservationist and environmentalist community.
(c) Producers and users of biological resources.
(d) Government agencies (federal, state, and local).

3. Workshop Organization

(a) Location.
(b) Duration.
(c) Definition of workshop agenda, thematic groups by the Organizing Commission.
(d) Organization of participants into thematic groups according to specialty.
(e) Scheduling of group and plenary sessions.

4. Workshop Results

(a) Priority Actions

(1) Define priorities and necessary activities for biodiversity conservation.
(2) The analysis and recommendations of the workshops should be framed not only in terms of species distribution but also in terms of habitat and ecosystem protection.
(3) Produce maps indicating priority areas for conservation and inventories.
(4) Define institutional responsibilities.
(5) Design program to follow up on workshop proposals.

(b) Characterization of principal biotic communities of Brazilian biomes

(1) Current, indexed bibliography.
(2) Maps of biogeographic provinces or regions.
(3) Analysis of abundance of key indicator species in Brazilian biomes.
(4) Analysis of flora, fauna, and ecological communities.
(5) Assessment of vulnerable and threatened species, and degree of risk.

(c) Analysis of socioeconomic trends

(1) Potential for the utilization of natural areas in Brazilian biomes and their economic importance for human communities.
(2) Social impact of the conservation of Brazilian biomes.
(3) Access of communities and social sectors to the biological resources of Brazilian biomes.
(4) Public policies affecting biodiversity (transportation, energy, production infrastructure, land use, taxes, etc.).
(5) Economic and social trends influencing biodiversity use and degradation.

(d) Definition of conservation needs

(1) Map of priority areas for biological conservation.
(2) Determination of biological importance of sub-regions or fragments.
(3) Map of areas in urgent need of conservation.
(4) Prerequisite social conditions for public support of biodiversity conservation.
(5) Representativeness of existing Conservation Units.
(6) Current and future costs of operating a network of Brazilian biome reserves.
(7) Identification of public policies supporting biodiversity conservation.

(8) Compatibility with recommendations of National Biodiversity strategy being prepared by Government.

(e) Dissemination of workshop findings through print and electronic media. Organizers and participants would make regular use of the Biodiversity Information Network to disseminate bibliographical and other sources, and create user groups.

(f) Report on the logistics, difficulties, omissions, and achievements of the workshop.

**Minimum Criteria for the Selection of Coordinating Institutions**

1. Each workshop would be coordinated by institutions which, alone or together, would meet the following qualifications:

   (a) Non-governmental organizations (NGOs) must be legally established and qualified to coordinate and carry out a workshop.

   (b) Workshop coordinators must have demonstrated technical capacity in the following areas:

      (1) Conservation and monitoring of biodiversity.
      (2) Biological inventories and data organization, management, and processing.
      (3) Workshop design and implementation.
      (4) Production of data bases and GIS.
      (5) Analysis of economic and political strategies related to biodiversity.

   (c) Proposed methodologies for the organization and implementation of workshops must be feasible and compatible with the stated objectives.

   (d) At least 50% of the personnel needed to develop and implement the workshop must be provided by the potential coordinating institution(s) (not including research preceding the workshop).

   (e) Potential workshop coordinators must have obtained past financing from outside sources for the development of projects.

   (f) Coordinating institutions must demonstrate competence to supervise the follow-up of priority actions defined by the workshop.

2. Three to six organizations will be invited to participate as workshop coordinators of any one workshop. Invited coordinating institutions may work in consortia with other organizations which may or may not appear on the list of invited institutions.

**Selection Procedures**

1. Preparation of a list of institutions to be invited to apply for workshop coordination. Confirmation of the list by the Bank. A letter of invitation, satisfactory to the Bank, would be sent to organizations with demonstrated capacity to fulfill the role of workshop coordinator for the respective biomes. Letters of invitation may also be sent to those institutions recommended by the target institutions. If a consortium of workshop coordinators is to be organized, the proposal submitted by the invited institutions should designate which organization would serve as head of the consortium. The letter of invitation would contain the components and the geographic limits to be covered by each workshop, and a proposed standard budget.

2. Project proposals for the design and implementation of workshops must be submitted to the Ministry of the Environment, Water Resources, and the Legal Amazon within 60 days from the date of the letter of invitation.

(a) The project proposal must consist of:

(1) Complete identification and description of the social objectives of the organization submitting the proposal.

(2) Staff description, including description of positions within the organization and the nature of the work performed by each staff member.

(3) Resumes of personnel who would participate in the project, describing the nature, duration and frequency of their past contributions to the organization; education; employment history; publications; and relevant experience.

(4) List of projects completed by the organization, including workshops, seminars, consultancies, studies, and environmental impact assessments.

(5) List of publications by the organization related to the theme of the workshop.

(6) Description of the methodology to be used in the design and implementation of the workshop.

(7) Timetable of preparation, implementation, and follow-up activities.

(8) Information about the financing already obtained for activities related to the theme of the workshop.

(9) Proposed budget with notes explaining any significant differences from budgets proposed in letters of invitation.

(10) If the candidate institutions intend to work as a consortium, proposed terms of agreement governing the administration and function of the consortium.

(b) A team composed of qualified MMA officials and noted experts who are not directly or indirectly involved in the proposed projects would evaluate the proposal, including the

technical, methodological and budgetary aspects. The evaluation by the MMA will be completed within 30 days of the deadline for submitting the proposal.

(c) The choice of coordinating institutions would be made according to the selection criteria described above and consideration of the proposed methodology, technical competence (see (a), above) and proposed budget. Considerations of quality will prevail in the selection process; in case of tie, the institution(s) with the lowest proposed costs will be chosen.

(d) Final selection of coordinating institutions will be submitted for Bank approval.

**Implementation of the Workshop**

1. A Draft Agreement between MMA and coordinating institutions shall be prepared according to World Bank procedures and *Instrução Normativa No. 2* of April 19, 1993, *No. 6* of October 13, 1993 of the Secretariat of the National Treasury, and Law No. 8,694 of August 12, 1993. Approval of financial plans, which may include indirect costs to cover small administrative expenses for accounting, rent, communications, fuel, transportation, electricity, and water, to the extent that these costs are not included in direct costs. The budget would be subject to negotiation after the choice of the coordinating institution.

2. Each stage of the workshop would be implemented by the professionals cited in the proposal. Any substitution must be previously approved by MMA. The contracting of consultants would follow Bank guidelines.

## Detailed Activities and Costs of One Model Assessment for the *Cerrado*

| Component | Activities and Sub-Activities | Inputs | Outputs | Impact Indicators |
|---|---|---|---|---|
| I. Preparation of information base for workshop | | | | US$140,000 |
| | 1. Establish coordinating committee, set timetable and workplan for preparation, workshop, dissemination phases. | | Identification and recruitment of key participants; final schedule and TORs for preparation work | Appropriate range of institutional participants are involved<br><br>Key issues are defined<br><br>Participant groups established<br><br>Information flow though BIN |
| | 2. Prepare background working papers on flora, fauna, land use, vegetation, etc. | | Working papers and identification of key issues to be addressed at workshop | |
| | 3. Compile bibliographies, create base maps, establish electronic forum through the Biodiversity Information Network (BIN). | | Base maps, bibliography, lists of information sources, institutions, databases (GIS), identification of specialist groups | |
| II. Workshop, integration of results, definition of priorities, dissemination of findings, formation of specialist groups | | | | US$100,000 |
| | 1. Distribute background material, working papers, base maps to key participants | | Detailed agenda for workshop defined and agreed | |
| | 2. Hold workshop, integrate findings, develop maps, draft priority action plan | | Issues and priorities established | Quality and acceptance of conclusions<br><br>Definition of concrete priority action plan<br><br>Establishment of electronic forum<br><br>Compatibility and linkage with National Biodiversity Strategy |

| Component | Activities and Sub-Activities | Inputs | Outputs | Impact Indicators |
|---|---|---|---|---|
| | 3. Disseminate findings, produce final synthesis, establish specialist group networks through the BIN | | Publications and other products, draft priority action plan | |
| | 4. Define follow-up program | | Composition and TORs for coordinating group defined | |
| III. Follow-up: develop priority action plan, define monitoring program, establish permanent working group | | | | US$20,000 |
| | 1. Establish coordinating group to track implementation of priority action plan, revise and update priorities as necessary | | Annual reports, periodic updates | Progress toward priority goals<br><br>Measurable results related to biodiversity conservation |
| | 2. Monitor status of implementation | | Regular reporting on status of priority targets and actions | |
| | 3. Propose projects to address priorities | | New projects identified and proposed | |

# Implementation Timetable of Biome-Level Assessments

| Cost ($)1.4M | Phases I, II & III[1] | Four-month intervals (project years 1 & 2) | | | | | |
|---|---|---|---|---|---|---|---|
| $ (x 1000) | Biome-Level Priority Assessments | 1 | 2 | 3 | 4 | 5 | 6 |
| 260 | 1. *Cerrado* & Pantanal | | | | | | |
| 140 | * Preparation | * | * | | | | |
| 100 | * Workshop | | * | | | | |
| 20 | * Follow-up | | | * | * | * | * |
| 260 | 2. Atlantic Forest | | | | | | |
| 140 | * Preparation | * | * | | | | |
| 100 | * Workshop | | * | | | | |
| 20 | * Follow-up | | | * | * | * | * |
| 300 | 3. *Caatinga* | | | | | | |
| 180 | * Preparation | | * | * | | | |
| 100 | * Workshop | | | * | | | |
| 20 | * Follow-up | | | | * | * | * |
| 300 | 4. Continental Shelf | | | | | | |
| 180 | * Preparation | | | * | * | | |
| 100 | * Workshop | | | | * | | |
| 20 | * Follow-up | | | | | * | * |
| 280 | 5. Amazônia | | | | | | |
| 160 | * Preparation | | | * | * | | |
| 100 | * Workshop | | | | * | | |
| 20 | * Follow-up | | | | | * | * |
| National Biodiversity Strategy[2] | | | | | | | * |

[1] Phase I: Preparation includes background studies, bibliographic review, database development and base map preparation. Phase II: Workshop includes workshop, integration of results and dissemination of findings. Phase III: Follow-up includes proposal development for priority actions and definition of monitoring program.

[2] National Biodiversity Strategy preparation process will proceed in conjunction with the biome-level analysis and incorporate findings of the biome-level workshops.

# BRAZIL

## GLOBAL ENVIRONMENT FACILITY

## PLAN FOR A NATIONAL BIODIVERSITY STRATEGY

1. The Ministry of the Environment, Water Resources and the Legal Amazon (MMA) has plans for developing a National Biodiversity Strategy in compliance with the United Nations Convention on Biological Diversity, to which Brazil is a signatory. The Ministry laid out the following tentative plans for development of a strategy. Funding for the entire sequence outlined below is available to the MMA, and consultants have been identified to carry out the first steps as outlined below.

2. Under the terms of the Convention on Biological Diversity (Article 6), Brazil would develop a National Biodiversity Strategy. The exercise would begin with a review of each chapter in the Convention on Biological Diversity to (a) assess the status of each element of the convention in Brazil in terms of which agencies are responsible, what structures exist for complying with agreements, what resources are allocated, what gaps exist, what are the potential obstacles and/or opportunities; and (b) propose priorities, guidelines and instruments for action. The review would consider genetic resources in terms of their economic and non-economic benefits; ways of returning benefits from biodiversity to communities that are dependent upon them or serve as their custodians; and evaluate conservation efforts and human resource development needs. This review would be circulated as a draft report for comment and review as shown below and finally would be presented to the Interministerial Commission on Sustainable Development (CIDES) for review and formal approval as a National Strategy. The final disposition of the report would depend on the CIDES and the Executive Branch.

3. The final report would not make specific allocations of resources to biodiversity but would set goals and identify areas where action is needed, and set guidelines for policy development in different sectors including sectors such as agriculture, mining, transport, land-use and zoning activities, industry, health and sanitation, and urban development. Specific action plans would be developed in each Ministry or Government agency following the formal adoption of the strategy. According to the timetable outlined below, development of the proposed strategy would probably precede most of the biome-level workshops. It was agreed that the results of the National Biodiversity Strategy exercise would be taken into account in the preparation, discussions, and recommendations of these workshops.

**Steps Towards Development of a National Biodiversity Strategy**

| Step | Description | Product | Estimated Completion Date |
|---|---|---|---|
| 1 | Review all Chapters of the Convention on Biological Diversity assessing the status of each article in Brazil and proposing possible initiatives for compliance as needed. | Draft for limited internal circulation. | December 1995 |
| 2 | Compile comments; revise working document. | Report: "Basis for a National Biodiversity Strategy" | March 1996 |
| 3 | Hold a National Workshop on Biodiversity Strategy | Workshop Results: revised report. | May 1996 |
| 4 | Hold broad national consultations involving government agencies, academic and scientific institutions, private sector, NGOs, etc. providing input and comments to the Workshop Report. | Compiled results of consultation as a Proposed National Biodiversity Strategy | September 1996 |
| 5 | Present Report to Interministerial Commission on Sustainable Development (CIDES) | Resolution of CIDES or Presidential Decree | Late 1996 |

**BRAZIL**

**GLOBAL ENVIRONMENT FACILITY**
**PROJECT I**

## SUMMARY OF THE BIODIVERSITY INFORMATION NETWORK - BRAZIL

The André Tosello Foundation for Tropical Research and Technology (FAT) has already established leadership in developing Brazil's biodiversity information systems and access to such systems worldwide. The Foundation has been a leader in several international forums sponsored by UNEP and the Brazilian Government on establishment of the international Biodiversity Information Network (BIN21). This mechanism for linking information relevant to biodiversity and making it widely available by electronic and other means to support the Convention on Biological Diversity and Agenda 21 *is already functioning,* and has its secretariat at FAT. The Tropical Data Base node (Brazil) is maintained by FAT. At present, there are 10 international nodes in the BIN21 network.

FAT has already secured contracts with research and other institutions agreeing to make data available to the system, and its exceptionally qualified technical staff have addressed issues of data format, access, etc. This network is already in use through the FAT Internet gateway. Because of the currently limited access to the Internet in Brazil by non-government and non-academic users, FAT also provides access through a dial-up service called Phoenix, available by subscription (at nominal rates) to service users who do not have Internet access. Plans for the workshops proposed under the Brazilian Biodiversity Project have already been posted to the network.

FAT has clearly established itself as the leader in electronic dissemination of biodiversity information. To select another institution to implement this component would unneccessarily duplicate a system already under construction and well positioned to succeed.

The overall goal of this component is to establish a nationwide computer network to facilitate information exchange and communications among institutions, organizations, and individuals within Government, academic, NGO, and private sectors involved in activities related to biodiversity. The project design follows the principle of a distributed database network with participating institutions responsible for design, maintenance, and updating of their own databases, and the role of the foundation being principally that of providing an efficient user interface, providing training to users and participants, stimulating the formation and providing services to specialist user groups, and promoting utilization of the network by the broadest relevant constituency.

Specific objectives include: (i) establishing a coordination structure for development of the Biodiversity Information Network in Brazil, which will provide a forum for developing framework agreements for information sharing, defining hardware and software needs for network compatibility and use, and identifying training needs for users; (ii) upgrading equipment, infrastructure, and staff skills of the foundation and cooperating centers to provide data access services to the BIN and development of technical applications; (iii) stimulating participation by a broad range of users by providing training, organizing seminars and workshops, and establishing a cost-effective electronic forum for special interest user groups. The BIN would explicitly provide services designed to promote efficient information flow among the components of this project, such as establishing special interest user groups in connection with the biome workshops, making workshop proceedings, and other

relevant documents available to BIN users, and providing information services to the network as a whole.

The appraisal team reviewed the proposed schedule of objectives, activities and tasks; the training, seminars, and workshop calendar; the budget; and technical equipment requirements with project staff. In general, the budgets are well justified, although the detailed lists of specific equipment items need to be revised, and specifications and costs should be updated in the Annual Operating Plan (POA) to reflect changes in available technology. Terms of reference for personnel hired by the project should be developed and reviewed by MMA. MMA should also review the revised equipment list and approve plans for distribution of equipment between the Foundation and the cooperating centers. Annual Operating Plans would be submitted to the Bank for approval before effectiveness.

# BRAZIL

## GLOBAL ENVIRONMENT FACILITY
## PROJECT I

## SUMMARY OF THE FIRST-ROUND MODEL SUB-PROJECTS

### Conservation of Plant Genetic Resources

This sub-project would serve the purpose of conserving plant genetic resources by developing and implementing a program for the sustainable management of selected wild plant species, chosen on the basis of their high conservation priority value and potential for sustainable economic use; and establishing an initiative for the economic development of these genetic resources. To this end, the sub-project will carry out the following activities: (i) determine, survey, and map the distribution of target species population within three selected existing reserves; (ii) characterize the current genetic diversity of selected species and determine basic features of population biology and reproduction ecology necessary for enhancing natural propagation and potential off-site cultivation; (iii) provide detailed recommendations and methodological guidelines to improve management and permit sustainable harvest of seed stock from within existing protected areas; and (iv) develop extension and training programs to promote off-site propagation of target species and on-site management. The three reserves include Rio Doce State Park in the state of Minas Gerais (Atlantic Forest); Brasília State Park (*cerrado*); and Ferreira Penna Ecological Station in the Caxiuan National Forest (Amazon forest). They were chosen, in part, because they have adequate infrastructure and qualified personnel for the maintenance and management of on-site gene banks of the selected target species, and because they are representative of three of Brazil's main vegetation types. This sub-project would be executed by a team at the National Research Center for Genetic Resources and Biotechnology (CENARGEN), an affiliate of the Brazilian Agricultural Research Agency (EMBRAPA), and a leading organization for the conservation and development of genetic resources in Brazil.

### Conservation and Restoration of Biodiversity in Gallery Forests of the *Cerrado*

This sub-project would focus on the restoration and boundary stabilization of natural and partially degraded gallery forests in the Federal District and adjacent regions of Minas Gerais and Goiás States. The initial sites are near Botucatu, Minas Gerais. Gallery forests along the streams and watercourses cover about 5% (100,000 $km^2$) of the 2 million $km^2$ large *cerrado* biome. These forest remnants serve as refuges and corridors for vertebrate species which also occur in adjacent habitats. The project has three principal objectives:

(i) To establish baseline knowledge for three focal areas of the biota, land use practices, land cover, socio-economic conditions, and identify principal impacts and factors affecting the gallery forest remnants and adjacent natural habitats;

(ii) To conduct applied research and pilot interventions for restoration and stabilization of gallery forests and adjacent natural habitats; and

(iii) To build public support and involve local communities and farmers in restoration and stabilization of gallery forest ecosystems.

With the involvement of local residents in the design stage, this sub-project would develop practical methods for conservation and restoration which are compatible with the productive activities of local people. A minimum of 100 ha of degraded areas would be planted with native gallery forest species. A network of at least ten reference farms would be established. The sub-project would be implemented by a team representing the Agricultural Research Center of the *Cerrado* (CPAC) of EMBRAPA (coordination), the Federal University of Brasília, the Remote Sensing Center of IBAMA, and the Agricultural Colonization Company (CAMPO).

**Management of Conservation Units in the Guaraqueçaba, Paraná Region**

This sub-project would contribute to the conservation of Atlantic Forest remnants by improving management of conservation units in a relatively isolated 310,000-ha coastal area in eastern Paraná State. The area includes important estuaries, islands, marshes, and coastal plains, which contain large remnants of the Atlantic forest biome characterized by high degrees of endemism and a high proportion of endangered species . At present, 40% of the area is protected in six conservation units, which is likely to be insufficient to sustain the ecosystem in the long run in the absence of integrated management of adjacent areas. The project implementation plan and budget are organized around three principal objectives:

(i) Strengthening the technical capacity of local government, the university and NGOs for conservation and land use planning and management, including execution of a rapid ecological assessment, updating of management plans for existing protected areas, and establishment of an environmental information system;

(ii) Building public awareness of environmental issues and expanding community participation in pilot programs for environmentally compatible intensification of agriculture; and

(iii) Establishing an NGO-academic-government partnership for development and implementation of an integrated coastal zone management plan for the region.

The project would be implemented by the Wildlife Protection Society (SPVS), Curitiba (coordination), the Federal University of Paraná, IBAMA, and the Environmental Institute of Paraná (IAP). A cooperative agreement outlining the roles, responsibilities, and obligations of the collaborating institutions will be negotiated and signed prior to project effectiveness.

**Conservation and Restoration of Atlantic Forest in Tablelands of Linhares, Espirito Santo**

This sub-project would develop a technical and scientific model for biodiversity conservation in important remnants of Atlantic forest in northern Espírito Santo and southern Bahía States. Activities would include: (i) assessment of the functions of biodiversity in ecosystem dynamics; (ii) dissemination of information through publications; (iii) environmental education; (iv) film production; (v) scientific workshops; and (vi) planting and reforestation. The activities would be carried out in the Linhares Forest Reserve, Espirito Santo State, which belongs to the Companhia Vale do Rio Doce

(CVRD), and the Sooretama Biological Reserve, Bahía State, which is under the management of IBAMA. The total sub-project area is 50,000 ha. It would be implemented by a team of the Federal University of Rio de Janeiro (coordination), IBAMA, the University of São Paulo, EMBRAPA, and CVRD.

**Restoration and Management of the Natural Ecosystems of *Brejos de Altitude* in Pernambuco and Paraíba**

This sub-project would contribute to the conservation of the threatened ecosystems of the Eastern Escarpment (Borborema) in Pernambuco and Paraíba States. *Brejos de altitude* represent the most humid area in the semi-arid Northeast and have a unique fauna and flora. Activities, *inter alia*, would consist of land and water use characterization, biological inventories, environmental education, and participatory development of land use zoning plans. The sub-project would conserve two pilot areas of 32,000 $km^2$ and 52 $km^2$ along the escarpment, which is located about 100 km west of the coastline. The project would be implemented by a team of the Federal Universities of Pernambuco (UFPE, coordination), Paraíba (UFPB), Rural Pernambuco (UFRPE) and the Northeast Ecology Society (SNE).

# BRAZIL

## GLOBAL ENVIRONMENT FACILITY
## PROJECT I

## PROJECT ADMINISTRATION

1. Implementation of Project I would be under the authority of MMA through PRONABIO, the National Biodiversity Program, established by the Brazilian Government in 1994 to promote partnerships between the public and private sectors to support sustainable uses of biodiversity. Its purposes are to develop policies; promote research, information networks, and international cooperation; assist in the standardization of instruments and methodologies; provide input to CIDES, the Interministerial Commission on Sustainable Development; support training and institutional strengthening; and support model projects on the conservation and use of biodiversity. The present project is PRONABIO's first project.

**Structure**

2. A Coordinating Commission manages PRONABIO, and would also be the highest decision-making body for this project. The Coordinating Commission's 12 members are appointed by the Government (by the respective Ministers, or by MMA) and chosen to represent the interests of different sectors of Brazilian society. Representatives are to be chosen from MMA (one, chair), Ministry of Foreign Affairs (one), Ministry of Science and Technology (one), Ministry of Agriculture and Agrarian Reform (one), Ministry of Health (one), Ministry of Planning (one), the academic community (two), environmental NGOs (two), and the private (business) sector (two), to be nominated by a representative institution of the respective sectors.

3. Technical Secretariat. The Technical Secretariat would be a full-time body charged with project management and coordination, with administrative responsibility for carrying out the directives of the Coordinating Commission. The General Biodiversity Coordinator (appointed by MMA) would be its Executive Secretary and Budget Officer. Professional staff would include financial, administrative, communication/information, and logistical managers, as well as various interns. MMA would provide staff for the Secretariat and the Chairman of the Board. The operating costs of the Secretariat would be covered by the PRONABIO Budget. The Technical Secretariat would be charged of supervision of biome-level assessments; the evaluation and integration of biome-level assessment and workshop results; the formulation of a draft Biodiversity Strategy; monitoring and supervision of sub-projects and workshops; and the dissemination of results for the whole project.

4. CNPq. The Brazilian Government has recommended that the National Council for Scientific and Technological Development (CNPq), affiliated with the Ministry of Science and Technology, serve as the Administrative Agent.

**Operations**

**A. Responsibilities and Functions of the Coordinating Commission, Secretariat, FUNBIO and CNPq**

5. The Coordinating Commission's functions include: (i) discussion and approval of general guidelines for PRONABIO; (ii) approval of priority actions of PRONABIO; (iii) approval of criteria and norms for acceptance and selection of workshops and proposals for sub-projects, including approval of calls for proposals that may be issued; (iv) approval of workshops and sub-projects selected by FUNBIO, except for pre-selected sub-projects of Project I; (v) approval of contractual instruments developed by the Technical Secretariat and CNPq; (vi) approval of annual programs and budget proposals furnished by the Secretariat; (vii) approval of PRONABIO's annual implementation reports covering technical, physical, and financial aspects; (viii) review of independent financial and scientific audits; (ix) adjudication of contract disputes that may arise; and (x) analysis and approval of a logical framework of goals, indicators, and investments for each year period.

6. The Technical Secretariat would (i) propose operating guidelines; (ii) propose priorities and actions, following the recommendations of biome-level workshops, of CIDES, and commitments assumed in treaties and conventions, such as the Convention on Biological Diversity and Agenda 21; (iii) prepare calls for proposals for sub-projects, in collaboration with CNPq; (iv) submit sub-project reports to the Coordinating Commission; (v) prepare and submit model contractual instruments; (vi) prepare and submit annual plans and budgets; (vii) prepare and submit annual financial and technical reports; (viii) prepare and submit a one year logical framework of goals, indicators, and activities; (ix) comment on and submit to the Coordinating Commission CNPq's independent audits; (x) recommend actions related to contractual disputes; (xi) keep the Coordinating Commission informed on implementation of the project, including problems that arise and suggested corrections; (xii) coordinate monitoring and evaluation of sub-projects and workshops; (xiii) supervise the work of CNPq; (xiv) call meetings and provide technical assistance; (xv) promote stakeholder involvement in discussions of the project by various means, including publication of reports; (xvi) circulate information to the scientific and conservation communities; and (xvii) execute other administrative responsibilities.

7. CNPq's responsibilities would be to: (i) work with the Technical Secretariat to prepare calls for proposals; (ii) monitor sub-project implementation; (iii) contract independent audits; and (iv) publish an informative bulletin. CNPq would prepare quarterly financial statements, prepare and sign contracts with sub-grantees, disburse funds, review statements of expenditure, maintain financial records, and have financial statements audited annually, receiving a fee for these services. Quarterly financial statements would include (a) contracted projects; (b) start-up and completion dates; (c) local and international costs incurred; (d) disbursements made; and (e) balances. Biannual reports would include information on (a) accomplishment of objectives, and (b) problems encountered. Legal agreements between PRONABIO and CNPq would include (a) clear provisions for contracting and disbursing funds from CNPq to the beneficiary; (b) clear definition of CNPq's role in providing guidance to the beneficiaries regarding preparation of financial reports; (c) rights and procedures for cancelling the agreement; (d) the right to impose penalties, when necessary; and (e) formula(s) to avoid inflation-related depreciation of funds.

**B. Project Implementation**

8. The project would begin with workshops to identify needs and priorities in each of five biomes: the *cerrado*, including the Pantanal and *campos rupestres*; the *caatinga* and deciduous forests; the Atlantic Forest; the Amazon; and islands and the continental shelf. Results and recommendations from these workshops would be submitted to the Coordinating Commission to guide the establishment of priorities. Following these priorities, calls would be issued for additional sub-project proposals. Members of local communities would be consulted during the preparation of terms of reference for calls for proposals and during the review of final reports. Each call for proposals would define funding priorities for the period. Once the calls have been approved by the Coordinating Commission and the Bank, FUNBIO will publicize them together with FUNBIO's calls. Efforts would be made to publicize the calls for proposals among potentially interested and capable groups, and to provide technical assistance and guidance to groups interested in applying for grants. FUNBIO would carry out the technical review of the proposal submitted. Upon receipt of proposals, FUNBIO would proceed with preliminary analysis, appointment of Evaluation Committees, gathering of any additional information and materials necessary, and submission of these to the Committees. The Committees would review proposals according to pre-defined criteria, and would make recommendations (not recommended, recommended with conditions, or recommended), to be determined by a simple majority of a quorum of their members. Rules of debate and consideration, and the format for presentation of recommendations, are spelled out in the Operational Manual of FUNBIO.

9. The Technical Secretariat of PRONABIO would submit the recommendations provided by FUNBIO to the Coordinating Commission for final approval. Upon approval, the contracting and disbursement would be handled by CNPq.

10. Individual workshops and sub-projects would be implemented by the institutions and organizations submitting successful proposals. They would be required to provide an appropriate counterpart contribution; use funds in strict accordance with contracts; provide agreed-upon reports and audits to CNPq; reimburse funds granted in case of non-compliance; and maintain accounts and records sufficient to establish compliance. The Technical Secretariat staff and consultants hired by them would visit sub-projects periodically to verify progress as reported in the progress reports and to assist in addressing problems which might arise during implementation.

# BRAZIL

## GLOBAL ENVIRONMENT FACILITY

## PROJECT I

## DRAFT GUIDELINES FOR THE OPERATIONAL MANUAL

1. The general issues addressed below were identified as critical during earlier missions and were agreed for the content of the Operational Manual. Annexes 11and 12 were also prepared and discussed during previous missions and would be incorporated in the final Operational Manual.

2. The operating manual should address the following issues:

(a) Objectives of PRONABIO, role of project;

(b) Organizational structure, Coordinating Commission, composition of members and mechanism for selecting them, roles and responsibilities of the members of the Coordinating Commission, Technical Secretariat and key staff; operating procedures of the Commission, profile or terms of reference of staff positions;

(c) Funding sources. The matching requirements for grants to be made under the second round should be detailed.

(d) Operating procedures for grant making, including:

(1) Calls for Sub-Project Proposals would be issued by PRONABIO: procedures for setting priorities for sub-project thematic eligibility and calls for proposals; procedures to determine types and size of grant to be awarded; guidelines for budget preparation, including sample forms, permissible budget categories, matching from grant recipients; procedures for publication of requests for proposals; description of dissemination vehicles (including press, mailings, notification of professional and trade associations, and NGOs);

(2) Sub-Project Selection and Approval: The step will be carried out by FUNBIO. Procedures should be compatible with FUNBIO's operating manual. Detail should be provide on procedures for judging proposals, including selection of technical reviewers; criteria for evaluation; guidelines to indicate and mitigate any environmental impact of sub-projects; feedback provided to proposing organizations; notification of results of evaluation. Draft eligibility and selection criteria are included in Annex 11.

(e) Financial management arrangements, including guidelines for contracting with and disbursing to grant beneficiaries; financial reporting; general guidelines for procurement of goods and services. For contracting and disbursement to sub-project beneficiaries, annexes could include, e.g., model contracts, statements of expenditure, and reporting forms.

(f) Guidelines for monitoring and evaluation of sub-projects and lessons learned. Draft guidelines for a monitoring and evaluation program are included in Annex 12.

(g) Other items: procedures for complaints, appeals, and reconsideration; guidelines for staff conduct and client relations, including discussions of conflict of interest, confidentiality, and disclosure of information.

Additional Guidelines and Suggested Annexes to the Operational Manual

(a) Terms of reference for key staff;

(b) Guidelines for appointing members of the Coordinating Comission of PRONABIO

(c) Guidelines for identifying, developing, submitting, and selecting sub-projects (e.g., model public procurement document and contract);

(d) Guidelines for settlement of disputes/claims.

# BRAZIL

## GLOBAL ENVIRONMENT FACILITY
## PROJECT I

## DETAILED PROJECT COST TABLES

Brazil
GEF Biodiversity Project
Table 1. Brejos de Altitude
Detailed Costs
(US$ Thousand)

| | Totals Including Contingencies | | | | | | Parameters (in %) | | | Expenditures by Financiers | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Phy. Cont. | For. Exch. | Gross Tax | GEF | | | | | | The Government of Brazil | | | | | |
| | 1995 | 1996 | 1997 | 1998 | 1999 | Total | Rate | Rate | Rate | 1995 | 1996 | 1997 | 1998 | 1999 | Total | 1995 | 1996 | 1997 | 1998 | 1999 | Total |
| **I. Investment Costs** | | | | | | | | | | | | | | | | | | | | | |
| **A. Civil Works** | | | | | | | | | | | | | | | | | | | | | |
| Installations | 59.2 | 3.4 | - | - | - | 62.6 | 10.0 | 2.8 | 0.0 | 29.6 | 1.7 | - | - | - | 31.3 | 29.6 | 1.7 | - | - | - | 31.3 |
| **B. Equipment** | | | | | | | | | | | | | | | | | | | | | |
| Computers | 17.6 | - | - | - | - | 17.6 | 5.0 | 2.8 | 0.0 | 8.8 | - | - | - | - | 8.8 | 8.8 | - | - | - | - | 8.8 |
| Vehicles | 33.5 | - | - | - | - | 33.5 | 10.0 | 2.8 | 0.0 | 16.7 | - | - | - | - | 16.7 | 16.7 | - | - | - | - | 16.7 |
| Lab Equipment | 72.2 | - | - | - | - | 72.2 | 10.0 | 2.8 | 0.0 | 36.1 | - | - | - | - | 36.1 | 36.1 | - | - | - | - | 36.1 |
| **Subtotal Equipment** | 123.3 | - | - | - | - | 123.3 | | | | 61.7 | - | - | - | - | 61.7 | 61.7 | - | - | - | - | 61.7 |
| **Total Investment Costs** | 182.5 | 3.4 | - | - | - | 185.9 | | | | 91.2 | 1.7 | - | - | - | 93.0 | 91.2 | 1.7 | - | - | - | 93.0 |
| **II. Recurrent Costs** | | | | | | | | | | | | | | | | | | | | | |
| **A. Services** | | | | | | | | | | | | | | | | | | | | | |
| Services | 101.5 | 93.0 | 75.4 | - | - | 269.9 | 0.0 | 2.8 | 0.0 | 50.7 | 46.5 | 37.7 | - | - | 135.0 | 50.7 | 46.5 | 37.7 | - | - | 135.0 |
| **B. Transportation** | | | | | | | | | | | | | | | | | | | | | |
| Air fare, etc. | 15.2 | 10.5 | 10.8 | - | - | 36.4 | 0.0 | 2.8 | 0.0 | 7.6 | 5.2 | 5.4 | - | - | 18.2 | 7.6 | 5.2 | 5.4 | - | - | 18.2 |
| **C. Per Diem** | | | | | | | | | | | | | | | | | | | | | |
| Per diem | 50.7 | 37.6 | 38.8 | - | - | 127.2 | 0.0 | 2.8 | 0.0 | 25.4 | 18.8 | 19.4 | - | - | 63.6 | 25.4 | 18.8 | 19.4 | - | - | 63.6 |
| **D. Supplies** | | | | | | | | | | | | | | | | | | | | | |
| Paper, etc. | 54.8 | 33.5 | 23.7 | - | - | 112.0 | 0.0 | 2.8 | 0.0 | 27.4 | 16.7 | 11.8 | - | - | 56.0 | 27.4 | 16.7 | 11.8 | - | - | 56.0 |
| **Total Recurrent Costs** | 222.3 | 174.6 | 148.6 | - | - | 545.5 | | | | 111.1 | 87.3 | 74.3 | - | - | 272.7 | 111.1 | 87.3 | 74.3 | - | - | 272.7 |
| **Total** | 404.8 | 178.0 | 148.6 | - | - | 731.4 | | | | 202.4 | 89.0 | 74.3 | - | - | 365.7 | 202.4 | 89.0 | 74.3 | - | - | 365.7 |

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Brazil
GEF Biodiversity Project
Table 2. Guaraquecaba
Detailed Costs
(US$ Thousand)

| | Totals Including Contingencies | | | | | | Parameters (in %) | | | Expenditures by Financiers | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Phy. Cont. | For. Exch. | Gross Tax | GEF | | | | | | The Government of Brazil | | | | | |
| | 1995 | 1996 | 1997 | 1998 | 1999 | Total | Rate | | Rate | 1995 | 1996 | 1997 | 1998 | 1999 | Total | 1995 | 1996 | 1997 | 1998 | 1999 | Total |
| **I. Investment Costs** | | | | | | | | | | | | | | | | | | | | | |
| **A. Equipment** | | | | | | | | | | | | | | | | | | | | | |
| Computers | 86.3 | - | - | - | - | 86.3 | 5.0 | 8.8 | 0.0 | 43.2 | - | - | - | - | 43.2 | 43.2 | - | - | - | - | 43.2 |
| Vehicles | 20.2 | - | - | - | - | 20.2 | 5.0 | 8.8 | 0.0 | 10.1 | - | - | - | - | 10.1 | 10.1 | - | - | - | - | 10.1 |
| Lab Equipment | 3.2 | 8.8 | 9.0 | - | - | 21.0 | 5.0 | 8.8 | 0.0 | 1.6 | 4.4 | 4.5 | - | - | 10.5 | 1.6 | 4.4 | 4.5 | - | - | 10.5 |
| **Total Investment Costs** | 109.8 | 8.8 | 9.0 | - | - | 127.6 | | | | 54.9 | 4.4 | 4.5 | - | - | 63.8 | 54.9 | 4.4 | 4.5 | - | - | 63.8 |
| **II. Recurrent Costs** | | | | | | | | | | | | | | | | | | | | | |
| **A. Services** | | | | | | | | | | | | | | | | | | | | | |
| Services | 162.4 | 192.4 | 161.5 | - | - | 516.3 | 0.0 | 8.8 | 0.0 | 81.2 | 96.2 | 80.8 | - | - | 258.1 | 81.2 | 96.2 | 80.8 | - | - | 258.1 |
| **B. Per Diem** | | | | | | | | | | | | | | | | | | | | | |
| Per Diem | 20.3 | 5.2 | 3.2 | - | - | 28.8 | 0.0 | 8.8 | 0.0 | 10.2 | 2.6 | 1.6 | - | - | 14.4 | 10.2 | 2.6 | 1.6 | - | - | 14.4 |
| **C. Transportation** | | | | | | | | | | | | | | | | | | | | | |
| Air fare, etc. | 6.1 | 1.1 | 1.2 | - | - | 8.4 | 0.0 | 8.8 | 0.0 | 3.0 | 0.6 | 0.6 | - | - | 4.2 | 3.0 | 0.6 | 0.6 | - | - | 4.2 |
| **D. Supplies** | | | | | | | | | | | | | | | | | | | | | |
| Paper, etc.) | 9.1 | 9.4 | 9.7 | - | - | 28.2 | 0.0 | 8.8 | 0.0 | 4.6 | 4.7 | 4.8 | - | - | 14.1 | 4.6 | 4.7 | 4.8 | - | - | 14.1 |
| **Total Recurrent Costs** | 197.9 | 208.1 | 175.6 | - | - | 581.7 | | | | 99.0 | 104.1 | 87.8 | - | - | 290.9 | 99.0 | 104.1 | 87.8 | - | - | 290.9 |
| **Total** | 307.7 | 216.9 | 184.7 | - | - | 709.3 | | | | 153.8 | 108.5 | 92.3 | - | - | 354.7 | 153.8 | 108.5 | 92.3 | - | - | 354.7 |

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Brazil
GEF Biodiversity Project
Table 3. Linhares
**Detailed Costs**
(US$ Thousand)

| | Totals Including Contingencies | | | | | | Parameters (in %) | | | Expenditures by Financiers | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Phy. | | Gross | GEF | | | | | | The Government of Brazil | | | | | |
| | 1995 | 1996 | 1997 | 1998 | 1999 | Total | Cont. Rate | For. Exch. | Tax Rate | 1995 | 1996 | 1997 | 1998 | 1999 | Total | 1995 | 1996 | 1997 | 1998 | 1999 | Total |
| **I. Investment Costs** | | | | | | | | | | | | | | | | | | | | | |
| **A. Civil Works** | | | | | | | | | | | | | | | | | | | | | |
| Installations | 3.3 | - | - | - | - | 3.3 | 10.0 | 11.4 | 0.0 | 1.7 | - | - | - | - | 1.7 | 1.7 | - | - | - | - | 1.7 |
| **B. Equipment** | | | | | | | | | | | | | | | | | | | | | |
| Computers | 6.4 | - | - | - | - | 6.4 | 5.0 | 11.4 | 0.0 | 3.2 | - | - | - | - | 3.2 | 3.2 | - | - | - | - | 3.2 |
| Vehicles | 39.1 | - | - | - | - | 39.1 | 10.0 | 11.4 | 0.0 | 19.5 | - | - | - | - | 19.5 | 19.5 | - | - | - | - | 19.5 |
| Lab Equipment | 72.6 | 8.0 | 1.9 | - | - | 82.5 | 10.0 | 11.4 | 0.0 | 36.3 | 4.0 | 0.9 | - | - | 41.3 | 36.3 | 4.0 | 0.9 | - | - | 41.3 |
| **Subtotal Equipment** | 118.0 | 8.0 | 1.9 | - | - | 128.0 | | | | 59.0 | 4.0 | 0.9 | - | - | 64.0 | 59.0 | 4.0 | 0.9 | - | - | 64.0 |
| **Total Investment Costs** | 121.4 | 8.0 | 1.9 | - | - | 131.3 | | | | 60.7 | 4.0 | 0.9 | - | - | 65.7 | 60.7 | 4.0 | 0.9 | - | - | 65.7 |
| **II. Recurrent Costs** | | | | | | | | | | | | | | | | | | | | | |
| **A. Services** | | | | | | | | | | | | | | | | | | | | | |
| Services | 204.5 | 172.5 | 70.0 | - | - | 447.0 | 0.0 | 11.4 | 0.0 | 102.3 | 86.2 | 35.0 | - | - | 223.5 | 102.3 | 86.2 | 35.0 | - | - | 223.5 |
| **B. Per Diem** | | | | | | | | | | | | | | | | | | | | | |
| Per diem | 16.7 | 13.1 | 9.7 | - | - | 39.5 | 0.0 | 11.4 | 0.0 | 8.4 | 6.5 | 4.8 | - | - | 19.8 | 8.4 | 6.5 | 4.8 | - | - | 19.8 |
| **C. Transportation** | | | | | | | | | | | | | | | | | | | | | |
| Air fare, etc. | 15.3 | 13.7 | 8.5 | - | - | 37.5 | 0.0 | 11.4 | 0.0 | 7.7 | 6.8 | 4.3 | - | - | 18.8 | 7.7 | 6.8 | 4.3 | - | - | 18.8 |
| **D. Supplies** | | | | | | | | | | | | | | | | | | | | | |
| Paper,etc | 23.1 | 14.0 | 7.6 | - | - | 44.8 | 0.0 | 11.4 | 0.0 | 11.6 | 7.0 | 3.8 | - | - | 22.4 | 11.6 | 7.0 | 3.8 | - | - | 22.4 |
| **Total Recurrent Costs** | 259.7 | 213.3 | 95.8 | - | - | 568.8 | | | | 129.9 | 106.6 | 47.9 | - | - | 284.4 | 129.9 | 106.6 | 47.9 | - | - | 284.4 |
| **Total** | 381.1 | 221.3 | 97.7 | - | - | 700.2 | | | | 190.6 | 110.7 | 48.9 | - | - | 350.1 | 190.6 | 110.7 | 48.9 | - | - | 350.1 |

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Brazil
GEF Biodiversity Project
Table 4. National Biodiversity Network
Detailed Costs
(US$ Thousand)

| | Totals Including Contingencies | | | | | | Parameters (in %) | | | Expenditures by Financiers | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Phy. | | Gross | GEF | | | | | | The Government of Brazil | | | | | |
| | 1995 | 1996 | 1997 | 1998 | 1999 | Total | Cont. Rate | For. Exch. | Tax Rate | 1995 | 1996 | 1997 | 1998 | 1999 | Total | 1995 | 1996 | 1997 | 1998 | 1999 | Total |
| I. Investment Costs | | | | | | | | | | | | | | | | | | | | | |
| A. CIVIL WORKS | | | | | | | | | | | | | | | | | | | | | |
| Installations | 20.1 | 20.7 | 21.3 | - | - | 62.1 | 10.0 | 50.0 | 0.0 | 10.0 | 10.3 | 10.7 | - | - | 31.1 | 10.0 | 10.3 | 10.7 | - | - | 31.1 |
| B. Equipment | | | | | | | | | | | | | | | | | | | | | |
| Computers | 170.5 | 197.6 | 203.5 | - | - | 571.6 | 5.0 | 50.0 | 0.0 | 85.3 | 98.8 | 101.8 | - | - | 285.8 | 85.3 | 98.8 | 101.8 | - | - | 285.8 |
| C. Technical Assistance | | | | | | | | | | | | | | | | | | | | | |
| Consultants | 69.0 | 71.1 | 73.2 | - | - | 213.3 | 0.0 | 50.0 | 0.0 | 34.5 | 35.5 | 36.6 | - | - | 106.7 | 34.5 | 35.5 | 36.6 | - | - | 106.7 |
| National PD | 7.1 | 7.3 | 7.5 | - | - | 22.0 | 0.0 | 50.0 | 0.0 | 3.6 | 3.7 | 3.8 | - | - | 11.0 | 3.6 | 3.7 | 3.8 | - | - | 11.0 |
| Air fare, etc. | 5.1 | 5.2 | 5.4 | - | - | 15.7 | 0.0 | 50.0 | 0.0 | 2.5 | 2.6 | 2.7 | - | - | 7.8 | 2.5 | 2.6 | 2.7 | - | - | 7.8 |
| Subtotal Technical Assistance | 81.2 | 83.6 | 86.1 | - | - | 251.0 | | | | 40.6 | 41.8 | 43.1 | - | - | 125.5 | 40.6 | 41.8 | 43.1 | - | - | 125.5 |
| Total Investment Costs | 271.8 | 301.9 | 311.0 | - | - | 884.7 | | | | 135.9 | 151.0 | 155.5 | - | - | 442.4 | 135.9 | 151.0 | 155.5 | - | - | 442.4 |
| II. Recurrent Costs | | | | | | | | | | | | | | | | | | | | | |
| A. Services | | | | | | | | | | | | | | | | | | | | | |
| Services | 129.9 | 133.8 | 137.8 | - | - | 401.6 | 0.0 | 50.0 | 0.0 | 65.0 | 66.9 | 68.9 | - | - | 200.8 | 65.0 | 66.9 | 68.9 | - | - | 200.8 |
| B. Per Diem | | | | | | | | | | | | | | | | | | | | | |
| Per diem | 7.1 | 7.1 | 7.4 | - | - | 21.6 | 0.0 | 50.0 | 0.0 | 3.6 | 3.6 | 3.7 | - | - | 10.8 | 3.6 | 3.6 | 3.7 | - | - | 10.8 |
| C. Transportation | | | | | | | | | | | | | | | | | | | | | |
| Air fare, etc. | 18.3 | 18.8 | 20.5 | - | - | 57.5 | 0.0 | 50.0 | 0.0 | 9.1 | 9.4 | 10.2 | - | - | 28.8 | 9.1 | 9.4 | 10.2 | - | - | 28.8 |
| D. Supplies | | | | | | | | | | | | | | | | | | | | | |
| Paper, etc. | 11.2 | 11.5 | 11.8 | - | - | 34.5 | 0.0 | 50.0 | 0.0 | 5.6 | 5.7 | 5.9 | - | - | 17.3 | 5.6 | 5.7 | 5.9 | - | - | 17.3 |
| Total Recurrent Costs | 166.5 | 171.2 | 177.6 | - | - | 515.3 | | | | 83.2 | 85.6 | 88.8 | - | - | 257.6 | 83.2 | 85.6 | 88.8 | - | - | 257.6 |
| Total | 438.3 | 473.2 | 488.6 | - | - | 1,400.0 | | | | 219.1 | 236.6 | 244.3 | - | - | 700.0 | 219.1 | 236.6 | 244.3 | - | - | 700.0 |

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Brazil
GEF Biodiversity Project
Table 5. Cerrado Gallery Forests
Detailed Costs
(US$ Thousand)

| | Totals Including Contingencies | | | | | | Parameters (in %) | | | Expenditures by Financiers | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Phy. | | Gross | GEF | | | | | | The Government of Brazil | | | | | |
| | 1995 | 1996 | 1997 | 1998 | 1999 | Total | Cont. Rate | For. Exch. | Tax Rate | 1995 | 1996 | 1997 | 1998 | 1999 | Total | 1995 | 1996 | 1997 | 1998 | 1999 | Total |
| **I. Investment Costs** | | | | | | | | | | | | | | | | | | | | | |
| **A. Civil Works** | | | | | | | | | | | | | | | | | | | | | |
| Works | - | 9.2 | - | - | - | 9.2 | 10.0 | 13.5 | 0.0 | - | 4.6 | - | - | - | 4.6 | - | 4.6 | - | - | - | 4.6 |
| Installations | - | 4.0 | - | - | - | 4.0 | 10.0 | 13.5 | 0.0 | - | 2.0 | - | - | - | 2.0 | - | 2.0 | - | - | - | 2.0 |
| **Subtotal Civil Works** | - | 13.2 | - | - | - | 13.2 | | | | - | 6.6 | - | - | - | 6.6 | - | 6.6 | - | - | - | 6.6 |
| **B. Equipment** | | | | | | | | | | | | | | | | | | | | | |
| Computers | 8.0 | 40.0 | - | - | - | 48.0 | 5.0 | 13.5 | 0.0 | 4.0 | 20.0 | - | - | - | 24.0 | 4.0 | 20.0 | - | - | - | 24.0 |
| Vehicles | 27.9 | 28.7 | 29.6 | - | - | 86.3 | 10.0 | 13.5 | 0.0 | 14.0 | 14.4 | 14.8 | - | - | 43.1 | 14.0 | 14.4 | 14.8 | - | - | 43.1 |
| Lab Equipment | 2.1 | 206.6 | 34.4 | - | - | 243.1 | 5.0 | 13.5 | 0.0 | 1.1 | 103.3 | 17.2 | - | - | 121.5 | 1.1 | 103.3 | 17.2 | - | - | 121.5 |
| **Subtotal Equipment** | 38.0 | 275.3 | 64.0 | - | - | 377.3 | | | | 19.0 | 137.6 | 32.0 | - | - | 188.7 | 19.0 | 137.6 | 32.0 | - | - | 188.7 |
| **C. Technical Assistance** | | | | | | | | | | | | | | | | | | | | | |
| Consultants | 5.6 | 30.3 | 31.2 | - | - | 67.1 | 0.0 | 13.5 | 0.0 | 2.8 | 15.2 | 15.6 | - | - | 33.6 | 2.8 | 15.2 | 15.6 | - | - | 33.6 |
| National PD | 1.0 | 4.2 | 4.3 | - | - | 9.5 | 0.0 | 13.5 | 0.0 | 0.5 | 2.1 | 2.2 | - | - | 4.8 | 0.5 | 2.1 | 2.2 | - | - | 4.8 |
| Air fare, etc. | 0.6 | 7.3 | 4.3 | - | - | 12.2 | 0.0 | 13.5 | 0.0 | 0.3 | 3.7 | 2.2 | - | - | 6.1 | 0.3 | 3.7 | 2.2 | - | - | 6.1 |
| **Subtotal Technical Assistance** | 7.2 | 41.8 | 39.8 | - | - | 88.9 | | | | 3.6 | 20.9 | 19.9 | - | - | 44.4 | 3.6 | 20.9 | 19.9 | - | - | 44.4 |
| **Total Investment Costs** | 45.2 | 330.3 | 103.8 | - | - | 479.4 | | | | 22.6 | 165.2 | 51.9 | - | - | 239.7 | 22.6 | 165.2 | 51.9 | - | - | 239.7 |
| **II. Recurrent Costs** | | | | | | | | | | | | | | | | | | | | | |
| **A. Services** | | | | | | | | | | | | | | | | | | | | | |
| Services | 8.0 | 80.2 | 82.4 | - | - | 170.6 | 0.0 | 13.5 | 0.0 | 4.0 | 40.1 | 41.2 | - | - | 85.3 | 4.0 | 40.1 | 41.2 | - | - | 85.3 |
| **B. Per Diem** | | | | | | | | | | | | | | | | | | | | | |
| Per diem | 6.1 | 23.0 | 23.7 | - | - | 52.8 | 0.0 | 13.5 | 0.0 | 3.0 | 11.5 | 11.8 | - | - | 26.4 | 3.0 | 11.5 | 11.8 | - | - | 26.4 |
| **C. Transportation** | | | | | | | | | | | | | | | | | | | | | |
| Air fare, etc. | 1.2 | 16.7 | 8.6 | - | - | 26.6 | 0.0 | 13.5 | 0.0 | 0.6 | 8.4 | 4.3 | - | - | 13.3 | 0.6 | 8.4 | 4.3 | - | - | 13.3 |
| **D. Supplies** | | | | | | | | | | | | | | | | | | | | | |
| Paper, etc. | 8.8 | 33.2 | 28.6 | - | - | 70.7 | 0.0 | 13.5 | 0.0 | 4.4 | 16.6 | 14.3 | - | - | 35.4 | 4.4 | 16.6 | 14.3 | - | - | 35.4 |
| **Total Recurrent Costs** | 24.2 | 153.2 | 143.3 | - | - | 320.6 | | | | 12.1 | 76.6 | 71.7 | - | - | 160.3 | 12.1 | 76.6 | 71.7 | - | - | 160.3 |
| **Total** | 69.4 | 483.5 | 247.2 | - | - | 800.1 | | | | 34.7 | 241.7 | 123.6 | - | - | 400.0 | 34.7 | 241.7 | 123.6 | - | - | 400.0 |

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Brazil
GEF Biodiversity Project
Table 6 - Genetic Resources
**Detailed Costs**
(US$ Thousand)

| | Totals Including Contingencies | | | | | | Parameters (in %) | | | Expenditures by Financiers | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Phy. Cont. | For. Exch. | Gross Tax | GEF | | | | | | The Government of Brazil | | | | | |
| | 1995 | 1996 | 1997 | 1998 | 1999 | Total | Rate | | Rate | 1995 | 1996 | 1997 | 1998 | 1999 | Total | 1995 | 1996 | 1997 | 1998 | 1999 | Total |
| **I. Investment Costs** | | | | | | | | | | | | | | | | | | | | | |
| **A. Equipment** | | | | | | | | | | | | | | | | | | | | | |
| Computers | 16.0 | - | - | - | - | 16.0 | 5.0 | 6.8 | 0.0 | 8.0 | - | - | - | - | 8.0 | 8.0 | - | - | - | - | 8.0 |
| Vehicles | 53.3 | - | - | - | - | 53.3 | 5.0 | 6.8 | 0.0 | 26.6 | - | - | - | - | 26.6 | 26.6 | - | - | - | - | 26.6 |
| Lab Equipment | 53.3 | - | - | - | - | 53.3 | 5.0 | 6.8 | 0.0 | 26.6 | - | - | - | - | 26.6 | 26.6 | - | - | - | - | 26.6 |
| **Subtotal Equipment** | 122.6 | - | - | - | - | 122.6 | | | | 61.3 | - | - | - | - | 61.3 | 61.3 | - | - | - | - | 61.3 |
| **B. Workshop** | | | | | | | | | | | | | | | | | | | | | |
| Services | 19.2 | 19.8 | 20.4 | - | - | 59.3 | 5.0 | 6.8 | 0.0 | 9.6 | 9.9 | 10.2 | - | - | 29.6 | 9.6 | 9.9 | 10.2 | - | - | 29.6 |
| Per diem | 11.7 | 17.6 | 20.4 | - | - | 49.6 | 5.0 | 6.8 | 0.0 | 5.9 | 8.8 | 10.2 | - | - | 24.8 | 5.9 | 8.8 | 10.2 | - | - | 24.8 |
| Air fares, etc. | 8.5 | 13.2 | 13.6 | - | - | 35.3 | 5.0 | 6.8 | 0.0 | 4.3 | 6.6 | 6.8 | - | - | 17.6 | 4.3 | 6.6 | 6.8 | - | - | 17.6 |
| Supplies | 1.1 | 1.1 | 1.1 | - | - | 3.3 | 5.0 | 6.8 | 0.0 | 0.5 | 0.5 | 0.6 | - | - | 1.6 | 0.5 | 0.5 | 0.6 | - | - | 1.6 |
| **Subtotal Workshop** | 40.5 | 51.6 | 55.4 | - | - | 147.5 | | | | 20.2 | 25.8 | 27.7 | - | - | 73.7 | 20.2 | 25.8 | 27.7 | - | - | 73.7 |
| **Total Investment Costs** | 163.1 | 51.6 | 55.4 | - | - | 270.1 | | | | 81.5 | 25.8 | 27.7 | - | - | 135.0 | 81.5 | 25.8 | 27.7 | - | - | 135.0 |
| **II. Recurrent Costs** | | | | | | | | | | | | | | | | | | | | | |
| **A. Services** | | | | | | | | | | | | | | | | | | | | | |
| Services | 36.3 | 19.3 | 27.4 | - | - | 83.0 | 0.0 | 6.8 | 0.0 | 18.2 | 9.7 | 13.7 | - | - | 41.5 | 18.2 | 9.7 | 13.7 | - | - | 41.5 |
| **B. Per Diem** | | | | | | | | | | | | | | | | | | | | | |
| Per diem | 60.9 | 56.5 | 58.1 | - | - | 175.5 | 0.0 | 6.8 | 0.0 | 30.5 | 28.2 | 29.1 | - | - | 87.8 | 30.5 | 28.2 | 29.1 | - | - | 87.8 |
| **C. Transportation** | | | | | | | | | | | | | | | | | | | | | |
| Air fares, etc. | 11.2 | 6.7 | 6.9 | - | - | 24.7 | 0.0 | 6.8 | 0.0 | 5.6 | 3.3 | 3.4 | - | - | 12.4 | 5.6 | 3.3 | 3.4 | - | - | 12.4 |
| **D. Spplies** | | | | | | | | | | | | | | | | | | | | | |
| Paper, etc | 25.4 | 10.5 | 10.8 | - | - | 46.6 | 0.0 | 6.8 | 0.0 | 12.7 | 5.2 | 5.4 | - | - | 23.3 | 12.7 | 5.2 | 5.4 | - | - | 23.3 |
| **Total Recurrent Costs** | 133.8 | 92.9 | 103.2 | - | - | 329.9 | | | | 66.9 | 46.5 | 51.6 | - | - | 164.9 | 66.9 | 46.5 | 51.6 | - | - | 164.9 |
| **Total** | 296.8 | 144.5 | 158.6 | - | - | 599.9 | | | | 148.4 | 72.3 | 79.3 | - | - | 300.0 | 148.4 | 72.3 | 79.3 | - | - | 300.0 |

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Brazil
GEF Biodiversity Project
Table 7. Cerrado & Pantanal
Detailed Costs
(US$ Thousand)

| | Totals Including Contingencies | | | | | | Parameters (in %) | | | Expenditures by Financiers | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Phy. Cont. | For. Exch. | Gross Tax | GEF | | | | | | The Government of Brazil | | | | | |
| | 1995 | 1996 | 1997 | 1998 | 1999 | Total | Rate | | Rate | 1995 | 1996 | 1997 | 1998 | 1999 | Total | 1995 | 1996 | 1997 | 1998 | 1999 | Total |
| **I. Investment Costs** | | | | | | | | | | | | | | | | | | | | | |
| **A. Technical Assistance** | | | | | | | | | | | | | | | | | | | | | |
| Consultants | 27.4 | 3.1 | 3.2 | - | - | 33.8 | 0.0 | 0.0 | 0.0 | 13.7 | 1.6 | 1.6 | - | - | 16.9 | 13.7 | 1.6 | 1.6 | - | - | 16.9 |
| National Per Diem | 2.0 | 1.0 | 1.1 | - | - | 4.2 | 0.0 | 0.0 | 0.0 | 1.0 | 0.5 | 0.5 | - | - | 2.1 | 1.0 | 0.5 | 0.5 | - | - | 2.1 |
| Transportation | 4.1 | 2.6 | 2.7 | - | - | 9.4 | 0.0 | 0.0 | 0.0 | 2.0 | 1.3 | 1.3 | - | - | 4.7 | 2.0 | 1.3 | 1.3 | - | - | 4.7 |
| **Total Investment Costs** | 33.5 | 6.8 | 7.0 | - | - | 47.3 | | | | 16.7 | 3.4 | 3.5 | - | - | 23.6 | 16.7 | 3.4 | 3.5 | - | - | 23.6 |
| **II. Recurrent Costs** | | | | | | | | | | | | | | | | | | | | | |
| **A. Services** | | | | | | | | | | | | | | | | | | | | | |
| Services | 145.6 | 6.8 | 7.0 | - | - | 159.3 | 0.0 | 0.0 | 0.0 | 72.8 | 3.4 | 3.5 | - | - | 79.7 | 72.8 | 3.4 | 3.5 | - | - | 79.7 |
| **B. Per Diem** | | | | | | | | | | | | | | | | | | | | | |
| Per diem | 1.4 | 0.5 | 0.5 | - | - | 2.5 | 0.0 | 0.0 | 0.0 | 0.7 | 0.3 | 0.3 | - | - | 1.2 | 0.7 | 0.3 | 0.3 | - | - | 1.2 |
| **C. Transportation** | | | | | | | | | | | | | | | | | | | | | |
| Air fare, etc. | 37.8 | 1.0 | 1.1 | - | - | 39.9 | 0.0 | 0.0 | 0.0 | 18.9 | 0.5 | 0.5 | - | - | 19.9 | 18.9 | 0.5 | 0.5 | - | - | 19.9 |
| **D. Supplies** | | | | | | | | | | | | | | | | | | | | | |
| Paper, etc. | 10.2 | 0.4 | 0.4 | - | - | 11.0 | 0.0 | 0.0 | 0.0 | 5.1 | 0.2 | 0.2 | - | - | 5.5 | 5.1 | 0.2 | 0.2 | - | - | 5.5 |
| **Total Recurrent Costs** | 194.9 | 8.8 | 9.0 | - | - | 212.7 | | | | 97.4 | 4.4 | 4.5 | - | - | 106.4 | 97.4 | 4.4 | 4.5 | - | - | 106.4 |
| **Total** | 228.4 | 15.6 | 16.0 | - | - | 260.0 | | | | 114.2 | 7.8 | 8.0 | - | - | 130.0 | 114.2 | 7.8 | 8.0 | - | - | 130.0 |

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**Brazil**
**GEF Biodiversity Project**
**Table 3 Administrative Expenses**
**Detailed Costs**

**(US$ Thousand)**

| | Totals Including Contingencies | | | | | | Parameters (in %) | | | Expenditures by Financiers | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Phy. Cont. | For. | Gross Tax | The Government of Brazil | | | | | |
| | 1995 | 1996 | 1997 | 1998 | 1999 | Total | Rate | Exch. | Rate | 1995 | 1996 | 1997 | 1998 | 1999 | Total |
| **I. Investment Costs** | | | | | | | | | | | | | | | |
| **A. Equipment** | | | | | | | | | | | | | | | |
| Lab Equipment | 7.3 | 7.5 | 7.7 | 7.9 | 8.2 | 38.5 | 10.0 | 0.0 | 0.0 | 7.3 | 7.5 | 7.7 | 7.9 | 8.2 | 38.5 |
| **B. Technical Assistance** | | | | | | | | | | | | | | | |
| Consultants | 182.7 | 188.2 | 193.8 | 199.6 | 205.6 | 970.0 | 0.0 | 0.0 | 0.0 | 182.7 | 188.2 | 193.8 | 199.6 | 205.6 | 970.0 |
| Per diem | - | - | - | - | - | - | 0.0 | 0.0 | 0.0 | - | - | - | - | - | - |
| Air fares, etc. | - | - | - | - | - | - | 0.0 | 0.0 | 0.0 | - | - | - | - | - | - |
| **Subtotal Technical Assistance** | 182.7 | 188.2 | 193.8 | 199.6 | 205.6 | 970.0 | | | | 182.7 | 188.2 | 193.8 | 199.6 | 205.6 | 970.0 |
| **Total Investment Costs** | 190.0 | 195.7 | 201.5 | 207.6 | 213.8 | 1,008.5 | | | | 190.0 | 195.7 | 201.5 | 207.6 | 213.8 | 1,008.5 |
| **II. Recurrent Costs** | | | | | | | | | | | | | | | |
| **A. Services** | | | | | | | | | | | | | | | |
| Services | 114.2 | 117.6 | 121.1 | 124.8 | 128.5 | 606.2 | 0.0 | 0.0 | 0.0 | 114.2 | 117.6 | 121.1 | 124.8 | 128.5 | 606.2 |
| **B. Per Diem** | | | | | | | | | | | | | | | |
| Per diem | 15.7 | 16.2 | 16.7 | 17.2 | 19.4 | 85.2 | 0.0 | 0.0 | 0.0 | 15.7 | 16.2 | 16.7 | 17.2 | 19.4 | 85.2 |
| **C. Transportation** | | | | | | | | | | | | | | | |
| Air fares, etc. | 22.1 | 22.8 | 23.5 | 24.2 | 26.3 | 118.8 | 0.0 | 0.0 | 0.0 | 22.1 | 22.8 | 23.5 | 24.2 | 26.3 | 118.8 |
| **D. Supplies** | | | | | | | | | | | | | | | |
| Paper, etc. | 5.9 | 6.1 | 6.2 | 6.4 | 6.6 | 31.3 | 0.0 | 0.0 | 0.0 | 5.9 | 6.1 | 6.2 | 6.4 | 6.6 | 31.3 |
| **Total Recurrent Costs** | 157.9 | 162.7 | 167.6 | 172.6 | 180.8 | 841.6 | | | | 157.9 | 162.7 | 167.6 | 172.6 | 180.8 | 841.6 |
| **Total** | 347.9 | 358.3 | 369.1 | 380.2 | 394.6 | 1,850.1 | | | | 347.9 | 358.3 | 369.1 | 380.2 | 394.6 | 1,850.1 |

Tue Nov 07 16:46:39 1995

# BRAZIL

## GLOBAL ENVIRONMENT FACILITY
## PROJECT II

## ORGANIZATION OF THE BRAZILIAN BIODIVERSITY FUND (FUNBIO)

# BRAZIL

## GLOBAL ENVIRONMENT FACILITY
## BIODIVERSITY PROJECTS

## DESCRIPTION OF THE GETULIO VARGAS FOUNDATION

1. The Getúlio Vargas Foundation has historically provided technical assistance in the fields of economics and administration to a wide range of public and private entities. It was the first institution in Brazil to provide graduate training in public administration, economics and business; it was also a pioneer in the systematic collection and analysis of statistical data on the Brazilian economy. FGV has played a pivotal role in the development and formation of key Brazilian institutions, such as the Central Bank of Brazil and the Treasury Department. Many of its teachers and former students have occupied important positions during the last 30 years in both Government and private business. International exchange with universities in the United States and Europe is a well-established FGV practice, and more than half of all Brazilian publications in foreign economic journals are by members of the Graduate School of Economics.

2. Because of its strong links to government, business, and the academic sector, FGV has been instrumental in the creation of effective partnerships among the various sectors. In 1990, for example, the FGV's Center for International Economics created the Committee for Private Sector Cooperation, with representatives from leading businesses in Brazil, to support the Center's research and the organization of public debates on the regional and national implications of international economic and political issues. Of key importance to the ultimate choice of the Getúlio Vargas Foundation to house FUNBIO has been its historically effective role as a respected, independent, and innovative catalyst for public-private sector cooperation in Brazil.

**BRAZIL**

**GLOBAL ENVIRONMENT FACILITY**
**BIODIVERSITY PROJECTS**

# INTERNAL REGULATIONS OF THE BRAZILIAN BIODIVERSITY FUND

## Chapter I. Designation and Characterization

*Art. 1* A Brazilian Biodiversity Fund (FUNBIO) is created under Article 8, No. XIII of the Getúlio Vargas Foundation (FGV) By-Laws with administrative, financial, and institutional autonomy, supported by two firms that shall be contracted by the FGV under competitive terms to:

I. Invest the funds initially provided by the GEF Trust Fund for FUNBIO and additional funds to be raised.

II. Audit the investments and operational expenditures of FUNBIO.

*Section 1* Although FUNBIO is included within the administrative realm of FGV, it shall be operationally independent from FGV.

*Art. 2* FGV, in compensation for the use of its space and indirect administrative expenditures to support FUNBIO, shall utilize 6% from income generated by FUNBIO as defined in Art. 7.

*Art. 3* The administrative expenditures of FUNBIO shall be funded with resources from the Fund and shall not exceed 10% of its annual budget.

*Art. 4* The duration of FUNBIO shall be undetermined, and shall be terminated by initiative of the Board of Directors of FUNBIO, with a final decision from the Board of Directors of FGV.

*Section 1* In the event of the termination of FUNBIO, the activities funded by FUNBIO shall be finished and the contracts of personnel involved in the activities shall be ended.

*Section 2* Once FUNBIO is liquidated, the balance of funds, after expenditures described in the previous paragraph and the fulfillment of existing contractual obligations, shall be turned over to those entities whose objectives most closely match the objectives described in Art. 5 below, after consultation with the Board of Directors of FUNBIO.

## Chapter II. Objectives

*Art. 5* The objectives of FUNBIO shall be to finance programs and projects related to the conservation, sustainable use, information gathering and dissemination, technical exchange, and other activities supporting biodiversity in accordance with the Convention on Biological Diversity, PRONABIO, and directives of related government agencies. Specifically, FUNBIO shall:

I. Promote partnerships between the public and private sectors in the conservation and sustainable use of biodiversity, and in the just and equitable distribution of any benefits resulting therefrom;

II. Coordinate fundraising with national and international, public and private entities.

III. Contribute to the development of actions that support the conservation and sustainable use of biodiversity.

IV. Select projects and sub-projects exclusively related to biodiversity and provide financial resources for their execution.

V. Promote innovative projects, tests of models, and methodologies oriented to the conservation and sustainable use of biodiversity in a participative and multidisciplinary way.

VI. Generate and disseminate information, prepare studies and assessments, and propose recommendations on priority actions for the conservation and sustainable use of biodiversity.

VII. Implement programs on human resources training, environmental education, and development of research activities, as well as propose and implement policies and strategies in support of biodiversity.

**Chapter III. Assets and Income**

*Art. 6* The assets of FUNBIO shall be constituted by:

I. Donations of goods or services by individuals, legal entities public or private, national or international, including those referred to in Art. 1

II. Goods and services from revenues from its assets.

*Art. 7* FUNBIO income shall be made up of:

I. Income generated from investments in-country or abroad.

II. Donations from individuals or legal entities public or private, national or international for the operational expenses of FUNBIO.

III. Payment for services rendered by FUNBIO in the course of meeting its objectives.

*Art. 8* Revenue from assets and income, when available, shall be invested in such a way as to maximize its return, following rules of prudence and specific directives approved by the Board of Directors of FUNBIO.

*Art. 9* Donations with associated obligation and which might bring onus made either directly to the Fund or for administrative expenses shall be approved by the Board of Directors of FUNBIO.

**Chapter IV Administrative Structure**

*Art. 10* FUNBIO's administrative structure shall be composed of the following:

I. Board of Directors.

II. Executive Secretariat.

*Section 1* The members of the Board shall not, under any circumstances, receive compensation for their services as Board members and shall not participate in any way in the economic or financial performance of FUNBIO.

*Section 2* The expenditures of FUNBIO, including salaries and benefits of FUNBIO's personnel, third party contracts, and employee severance costs, shall be paid from FUNBIO's account, in accordance with Art. 3.

**Chapter V. Board of Directors.**

*Art. 11* The Board of Directors shall direct FUNBIO and shall be composed of voting members and alternates from each of the entities or sectors indicated below:

I. Getúlio Vargas Foundation (FGV)

II. Ministry of the Environment, Water Resources, and the Legal Amazon (MMA)

III. Business sector interested in environmental activities

IV. Academic sector, not linked to FGV and engaged in environmental activities

V. Environmental non-governmental organizations.

*Section 1* Each of the entities indicated in I and II above shall have two (2) voting members and two (2) alternates serving indefinite terms.

*Section 2* Each of the sectors indicated in III to V above shall have four (4) voting members and four (4) alternates serving four-year terms, one quarter of whom will rotate and seek reelection for one consecutive term.

*Art. 12* Voting and alternate members of the Board of Directors shall be recommended or selected in accordance with paragraphs of this article, and designated by the President of FGV.

*Section 1* Representatives of FGV and MMA shall be recommended by their respective entities.

*Section 2* Members of the initial Board of Directors from the sectors indicated in III to V of the previous article shall be selected in each sector in consultation with FGV and MMA from among individuals who have knowledge of the environmental field.

*Section 3* The reelection of one-quarter of the members from sectors III to V will be decided by the Board of Directors, after consultation with the respective sectors and maintaining the proportional representation stipulated by the internal regulations.

*Section 4* The President and Vice-President of the Board shall be elected by plenary of the Board of Directors and appointed by the President of FGV.

*Section 5* The mandate of the President and Vice-President shall not be renewed beyond two (2) consecutive periods.

*Section 6* Voting members and alternates who miss three (3) consecutive meetings will automatically lose their mandate.

*Art. 13* The Functions of the Board shall be to:

I. Define a strategic program for achieving the objectives of FUNBIO;

II. Elect the President and Vice-President of the Board of Directors;

III. Elect the new voting members and alternates in accordance with Art. 12, Section 3.

IV. Approve:

a) By November 15 of each year, the work plans and budgets of FUNBIO;

b) By March 15 of each year, the annual report and financial statements from the previous year, audited independently.

V. Approve calls for proposals;

VI. Select and approve projects and sub-projects, decide on their funding amounts, and monitor their execution according to the operational norms of FUNBIO;

VII. Monitor the implementation of approved work plans and budgets;

VIII. Approve operational norms;

IX. Authorize the transfer of budgetary resources without raising expenditures and the opening of additional credits with specification of the income that would cover them;

X. Approve the acceptance of donations with associated obligations and which might bring onus.

XI. Approve contracting of independent consultants;

XII. Approve the selection of the Executive Secretary;

XIII. Propose changes in the internal regulations;

XIV. Comment on the termination of FUNBIO.

*Section 1* Changes in the internal regulations and termination of FUNBIO shall depend on the decision of the Board of Directors of FUNBIO and formal acceptance of the decision by the Board of Directors of FGV.

*Art. 14* The Board of Directors shall meet:

I. Regularly, every four (4) months.

II. Extraordinarily, upon convocation (with five days advance notice) by:

a) Its President

b) One-quarter of its voting members.

*Section 1* The quorum for decisions of the Board of Directors shall be:

a) Normally, the absolute majority of its voting members, nine (9) members;

b) For approval of work plans, budgets, reports, and annual financial reports, eleven (11) members.

c) To recommend modifications in the internal regulations or termination of FUNBIO, thirteen (13) members.

*Section 2* Resolutions will be passed by simple majority vote of the voting members or their alternates, and recorded in a registry signed by all members present.

*Section 3* In the case of a tie, the President, or his/her substitute, shall decide the vote.

**Chapter VI. President and Vice-President of the Board of Directors**

*Art. 15* The President of the Board shall:

I. Represent FUNBIO actively or passively.

II. Convoke the Board of Directors and chair its meetings.

III. Designate rapporteurs for matters submitted to the Board

IV. Supervise FUNBIO's services, carrying out necessary actions for its administration.

V. Submit for appointment by the Board of Directors of FGV the names of those selected to serve as the financial manager and independent auditor.

VI. Submit for appointment by the Board of Directors of FUNBIO the name of the person selected to serve as Executive Secretary.

VII. Recommend to FGV contracts with selected firms to:

a) Invest FUNBIO's funds;

b) Conduct independent financial audits and administrative reviews;

c) Raise additional funds for FUNBIO;

VIII. Present quarterly progress and financial reports to the Board of Directors.

IX. Submit for Board approval:

a) By November 30 of each year, a work plan and budget proposal for FUNBIO for the next fiscal year;

b) By the end of February of each year, an annual report and financial statements of FUNBIO related to the previous fiscal year, including an independent auditor's report.

X. Execute tasks designated by the Board of Directors.

XI. The President shall delegate to the Vice President or Executive Secretary the responsibilities described in I to IV of this article.

***Section 1*** In the event of absence or inability to fulfill the duties of office, the President shall be substituted by the Vice President, or in the absence of both, one representative of FGV shall be designated by the Board of Directors to assume the presidency.

**Chapter VII. The Executive Secretariat**

***Art. 16*** The purpose of the Executive Secretariat shall be to provide administrative support to the Board of Directors, and in particular, to the President; it should have a simple and flexible structure and low operational costs.

***Art. 17*** The Executive Secretariat shall be managed by an Executive Secretary, to be appointed by the President. The Executive Secretary shall perform the following duties:

I. Assume power of attorney to represent FUNBIO, actively and passively.

II. Ensure compliance with the internal regulations and operational guidelines approved by the Board of Directors;

III Submit proposals and requests for financial assistance for the Board's consideration, after the necessary technical evaluation;

IV. Provide the following to the Board of Directors:

a) Work plans, budget proposals, reports and financial statements;

b) Evaluation of entities responsible for financial management, auditing, and fund-raising.

V. Propose to FGV, through the Board of Directors in the case of b) and c) below, contracts for:

a) Necessary personnel;

b) Outside consultants and consultant firms;

c) Implementing agencies of approved projects.

VI. Supervise operational expenditures, third party contracts and other services.

VII. Take part in the meetings of the Board of Directors as a non-voting participant.

**Chapter VIII. General Conditions**

*Art. 18* The fiscal year will coincide with the calendar year.

*Art. 19* The mandates of Board members shall automatically be extended until successors are designated.

*Art. 20* The members of the Board of Directors shall not be liable for FUNBIO obligations.

*Art. 21* Once the Board accepts a donation, terms and conditions of the donations shall not be altered.

*Art. 22* FUNBIO shall not distribute profits, gains or any other returns to its administrators, managing institutions or directors, utilizing all of its income for the fulfillment of its stated objectives.

**Art. 23** To allow for the reelection of one-quarter of its members each year, the initial terms of the Board members selected by the sectors described in Art. 11, III-V, will have a differentiated duration of one, two, three and four years for each sector.

**BRAZIL**

**GLOBAL ENVIRONMENT FACILITY**
**BIODIVERSITY PROJECTS**

**INITIAL MEMBERSHIP OF THE FUNBIO BOARD OF DIRECTORS**

The following is a list of the first FUNBIO Board of Directors. The list has been reviewed and found satisfactory by the Bank. During its inaugural meeting on October 9, 1995, the Board appointed Robert Bornhausen as President and Gustavo Fonseca as Vice President.

1. **Private Sector**

a) Voting Members:

Roberto Konder Bornhausen (Unibanco) - President
Guilherme Frering (CAEMI)
Luiz Kaufman (Aracruz)
José Luiz Magalhães Neto (Belgo Mineiro)

b) Alternates:

Carlos Nascimento (Banco Real)
Leon Feffer (Suzano)
Manoel de Freitas (Champion)
Carlos Affonso de Aguiar Teixeira (Petrobrás)

2. **Academic Sector**

a) Voting Members:

Ângelo Machado (Federal University of Minas Gerais)
José Márcio Ayres (Goeldi Museum)
Benjamin Gilbert (Oswaldo Cruz Foundation)
Virgílio Viana (University of São Paulo)

b) Alternates:

Luiz Drude Lacerda (Federal University of Rio de Janeiro)
Nanuza Meneses (University of São Paulo)
Maria Angélica Figueiredo (Federal University of Ceará)
Warwick Estevam Kerr (Federal University of Uberlândia)

3. **Environmental Non-Governmental Organizations**

a) Voting Members:

Gustavo Fonseca (Conservation International of Brazil) - Vice President
Garo Batmanian (World Wildlife Fund of Brazil)

Jean Marc van den Weid (ASPTA)
Ibsen Câmara (Brazilian Foundation for the Conservation of Nature)

b) Alternates:

Niede Guidon (Fundação Museu do Homem Americano)
Paula Saldanha (Terra Azul Institute)
Adalberto Verissimo (Institute of Man and the Environment in the Amazon, IMAZON)
Guy Marcovaldi (TAMAR Project)

4. **Ministry of the Environment, Water Resources and the Legal Amazon (MMA)**

a) Voting Members:

Aspásia Camargo (SECEX)
Braulio F. de Souza Dias (SMA)

b) Alternates:

Lídio Coradin (SMA)
Carlos Pinto (SECEX)

5. **Getúlio Vargas Foundation**

a) Voting Members

Celina do Amaral Peixoto (Directorate)
Antônio Salazar Pessoa Brandão (Brazilian Institute for Economics)

b) Alternates:

Clóvis José Daudt de Faro (Directorate)
Ignez Guatimosin Vidigal (Center for Agricultural Studies)

# BRAZIL

## GLOBAL ENVIRONMENT FACILITY
## BIODIVERSITY PROJECTS

## FINANCIAL ANALYSIS AND MANAGEMENT

### Background

1. Trust funds and endowments have become increasingly important as a financing mechanism to provide the reliable, stable support to sustain effective programs promoting environmental biodiversity conservation programs. The essential features of trust funds include: (i) a capital fund which is invested with the aim of maintaining its real value while generating income to fund project activities; (ii) a decision-making mechanism to allocate the income for specified uses or to meet agreed objectives; and (iii) an administrative mechanism to distribute and monitor the funds disbursed and to evaluate the impact and cost-effectiveness funded relative to the stated objectives.

2. The trust fund to be established under the GEF Biodiversity Projects generally shares these features. However, it differs from other trust funds in one significant way; namely, the capital fund will actually be a sinking fund, with the objective of depleting the initial capital over a period of 15 years. The real value of the capital fund will still need to be adequately sustained so it is not depleted before its expected life, and the fund will still serve as the primary base for generating income to finance specific project activities. However, financial management of a sinking fund could entail a different risk-reward investment approach than the typically highly conservative approach used when seeking to maintain in perpetuity the real capital value of a trust fund (see para. 6).

3. While there is relatively little guidance available with regard to this sinking fund approach, there is growing GEF experience in the design of environmental trust funds. Preparation and analysis of the financial aspects of the proposed sinking fund draws upon such experience, which itself is based partially upon expertise from other organizations with conservation financing (e.g., the World Wildlife Fund; The Nature Conservancy; CARE; and the U.S. Agency for International Development). The analysis also draws upon research on issues and options involved in the design of trust funds conducted by the Bank, and on financial consultant reports utilized for similar projects. These reports advise on aspects relating to the investment of the capital fund, including: selection of an investment firm to manage the capital assets, appropriate contract terms, investment strategy, and estimates of realistic rates of return. However, financial analysis in general is ultimately constrained by uncertainties about future trends, in particular regarding economic climate (e.g., exchange and inflation rates), earning potential of capital, and costs of administration and project activities. Furthermore, any financial/investment advice which is tailored towards meeting the objectives of a specific given fund may not be relevant or useful for meeting the objectives of another/different fund.

### Investment and Management of the Sinking Fund

4. The specific investment strategy would be defined by FUNBIO's Board of Directors, in consultation with its asset manager and to the satisfaction of the Bank. However, the strategy would be consistent with investment criteria agreed with the Bank before Bank's Board approval. Furthermore, the strategy would seek to maximize total return, including interest, dividends, and capital appreciation, while generating a minimum level of annual investment income to cover operating expenses and asset management fees, and to provide subgrants to fund project activities.

5. Detailed spending and investment rules would be described in the Operational Manual, including acceptable levels of risk for investments, limits on capital invasion, mechanisms for re-investment of unspent income (e.g., in years with high investment performance), and mechanisms for incorporating and managing additional grants and assets provided by sources other than the GEF Trust Fund. Some preliminary basic parameters would include: (a) a relatively low-risk investment strategy (although not as conservative as with a trust fund for which capital invasion is prohibited) to ensure that capital is not depleted in less than 15 years; (b) generation of investment income which at least covers asset management fees and FUNBIO's operating expenses; and (c) capital invasion rule; since this is a sinking fund, for which all the GEF capital would be depleted at the end of 15 years, investment returns need not be re-capitalized. As such, a specific rule limiting overall annual fund expenditures is not necessary. However, to ensure adequate capital preservation for earning reasonable, an annual limit on capital invasion would be established. In each of the first 12 years, annual depletion of GEF capital would be limited to a maximum of 15 percent of the annual beginning-of-year capital value. Thereafter, this limit would be waived and the GEF capital would be phased out evenly over the remaining life of the sinking fund. The capital invasion limit would be reviewed annually by FUNBIO's Board and the Bank, and mutually agreed upon adjustments would be permissible.

6. While there are no fixed GEF requirements for offshore investments, there are precedents. Virtually all of the trust funds supported by the GEF Trust Fund are managed by off-shore asset managers (the only exception is Peru's National Trust Fund for Protected Areas, which is managed by a local financial institution). The principal reason for off-shore asset management is related to the need to preserve trust fund capital in perpetuity. And the international standard for administering trust funds is the use of conservative low-risk investment guidelines. This translates into off-shore investment accounts in high grade bonds or equities in developed markets, and in historically strong currency. In the case of FUNBIO, which is the first sinking fund to be supported by GEF, and not a trust fund in perpetuity, limited capital invasion would be acceptable, and a slightly less conservative investment strategy than in the case of a traditional trust fund could be utilized. Nevertheless, since the FUNBIO sinking fund has a relatively long life (15 years), the preservation of capital remains an important investment objective, particularly in the early years. As such, a moderately low-risk strategy with a balanced portfolio of off-shore and domestic investments would be appropriate. The definition of detailed investment objectives and guidelines would ultimately rest with the Board of FUNBIO, and would be approved by the Bank prior to Bank's Board approval.

7. Future rates of return, and therefore the financial sustainability of the sinking fund, would be estimated on the basis of projections provided by short-listed investment firms interested in and qualified to manage the fund. FUNBIO/FGV will proceed to identify the short list of asset managers, request proposals, and select the asset manager in accordance with Bank procurement guidelines. The Bank will provide its approval at the different stages of the process. Suggested terms of reference and selection criteria for contracting a financial/investment consultant to assist FUNBIO/FGV to assess qualifiable investment firms (as well as provide advice on appropriate specific investment strategies and rules) are provided in Attachment 1. Drawing on investment research prepared under other GEF environmental trust funds, Attachment 2 shows a preliminary investment analysis for the sinking fund. This analysis reflects the latest discussions regarding the release of GEF Trust Fund funds (US$10 million up front, and then tranches of US$2.5 million per year after that to match private contributions). The analysis assumes a 5% rate of return, net of investment management fees and transaction costs (estimated at 1.5% of capital). This estimate is cautious, particularly when the fund's capital does not need to be fully protected (para. 6), and it is hoped that average total returns will be

higher over the life of the fund. The investment management fee is also very conservative in that it over estimates the typical cost of services expected under the project. Even with these rather cautious estimates, the preliminary analysis shows that while the fund will be depleted in 15 years, about US$10 million (net of investment management and transaction costs) above the initial GEF Trust Fund capital is generated by the fund and made available to the program.

8. Because of the significant infusions of GEF Trust Fund capital in the first five years of the project, financial sustainability in the early years of project implementation should not be a serious issue. The only potential problem, in the event that investment returns are lower than the very cautious estimates mentioned above, is a reduced amount of funds available for sub-project financing. However, to a large extent, the provision for capital invasion will mitigate this risk. Nonetheless, the issue of financial sustainability is a significant issue which should be re-examined at the time of the project mid-term review (estimated to take place three years into project implementation). Long-term sustainability (e.g., beyond the life of the sinking fund) will be of the greatest importance. This will depend somewhat on the investment performance of the sinking fund, but more so on provisions which may allow re-investment of income and FUNBIO's access to other sources of financing (e.g., other local and international donors, endowments, and self-generated finance).

**Management of the Income**

9. FUNBIO's Activities and Budget. All proceeds of the fund, including investment income and capital, will be utilized by FUNBIO under the project, as acceptable to the Bank. In principle, FUNBIO would be a grant-maker, fundraiser, and catalyst in the area of biodiversity conservation. Its program activities would be divided among program administration for model sub-project grant-making, (limited) technical assistance to help potential beneficiaries solicit grants, fundraising locally and internationally among non-profit and for-profit sectors, and general administration. Considering that FUNBIO would not execute sub-projects, it would only require limited staffing. Initial staff would include an Executive Director, a professional program assistant, a technical assistant, and one secretary. Sub-project evaluation would be carried out on a case by case basis by technical reviewers, and would ultimately be reviewed and decided upon by FUNBIO's Board of Directors. Preliminary annual estimated costs are provided in Attachment 3. FUNBIO's activities, budget, and operating plans would only be finalized in the Operational Manual, which is expected to be submitted to the Bank for comments prior to grant effectiveness.

10. Disbursements. To finance FUNBIO's costs and activities under the project, up to US$20 million from the GEF Trust Fund would be deposited in the fund, to be managed by an internationally qualified asset manager, in accordance with the aforementioned investment guidelines. The funds from GEF Trust Fund and from other sources are expected to be disbursed into the asset manager's account over the first five years of the project in the form suggested in Attachment 2. The initial deposit would be made following Grant effectiveness. Additional deposits into the fund would be triggered by demonstrated donations to FUNBIO in the ratio of two (GEF Trust Fund) to one (other sources) (US$5 million). The funds could be raised in tranches, US$250,000 at a time, each tranche triggering a new release of funds from GEF Trust Fund until all GEF funding is committed. Contracts with donors and bank statements showing deposits from these donations to FUNBIO's asset manager account would serve as means of verification.

11. Auditing. FUNBIO's activities and related expenditures would be audited by independent private consultants (preferably recognized firms), in accordance with generally accepted accounting principles and acceptable to the Bank. Separate audit reports would be provided for the foundation and

the asset manager. The audit report for FUNBIO would provide a separate opinion regarding FUNBIO; project accounts, SOEs, and financial statements, as well as a management report analyzing overall financial management, control, and effectiveness. The audit report for the asset manager would be similar, but would not include an opinion regarding SOEs and project accounts. Furthermore, technical audits of FUNBIO's activities would be conducted to ensure that established selection criteria are followed consistently. Within four months of the close of each fiscal year, the results of both financial and technical audits would be made available to FUNBIO's Board of Directors, donors and affiliates, as well as to the Government and the Bank.

**DRAFT TERMS OF REFERENCE**
**FINANCIAL/INVESTMENT CONSULTANT**

1. In light of Brazil's recognized biodiversity importance in the world, the Global Environment Facility (GEF) has allocated US$30 million for GEF Biodiversity Projects in Brazil. Project I will be carried out directly by the Government and Project II by an independent fund (FUNBIO) operating within the Getúlio Vargas Foundation, a private foundation with public objectives.

2. Under Project II, the Bank will make a grant for US$20 million from the GEF Trust Fund to FUNBIO for financing biodiversity sub-projects. To manage this grant, the project will establish a sinking fund (Trust Fund) to be administered by FUNBIO and support a long-term grant program to promote conservation and sustainable use of biodiversity in Brazil. FUNBIO will contract a professional financial/asset manager to manage the Trust Fund in accordance with investment strategies and guidelines established by FUNBIO and acceptable to the Bank. FUNBIO's Board of Directors will select this asset manager from a short list of qualified firms, as acceptable to the Bank. To develop the short list, as well as provide advice regarding investment strategies and guidelines, FUNBIO would need to be assisted by an experienced financial/investment consultant.

3. Building on recent, similar research prepared for other GEF projects with environmental trust funds (e.g., Uganda, Bhutan), the consultant should prepare a report which includes:

(a) Possible investment strategies and guidelines consistent with recommended best practices for GEF trust funds and the objectives of the project and FUNBIO, with particular attention to asset allocation (equity vs. bonds and liquidity, domestic vs. offshore, rates of return, etc.), dealing with various risks (inflation, exchange, market volatility) and spending/investment rules;

(b) Analysis of a short list of four to six qualified investment firms (offshore and domestic, if relevant), to include coverage of the following information:

(1) A statement proposing how to manage the US$20 million capital fund, disbursed over five years;

(2) Recent and historical performance data;

(3) A nominated management team with relevant details on its members; and

(4) Suggested management fees/cost of managing the fund.

(c) A summary of the services to be performed by the prospective fund managers, ranking them by priority and justifying the ranking.

## SELECTION CRITERIA FOR ASSET MANAGER

### Investment Capability

1. Powers - Asset Manager has capability and flexibility to invest so as to reach or exceed established benchmarks.

2. Performance Record - is consistently (10 years or more) above or in line with relevant general and specific benchmarks.

3. Capacity - Asset Manager has experience and capacity in construction of balanced portfolios consisting of significant proportions of long-term fixed-income instruments, equities and cash, and has independent research and analysis capability.

4. Cost - Asset Manager is comparatively cost-effective relative to other asset managers with similar responsibilities.

### Experience and Reputation

1. Experience - is extensive in terms of years, foreign and local clients, and specific asset types which are relevant to the Trustee's needs and objectives.

2. Reputation and Rating - based on reference checks, reputation is excellent; international rating is top (AAA or AA) and has high client retention rates.

3. Management and Staff - are competent, highly professional, and compatible with foreign and local investors; generate significant business volume.

4. Social and Environmental Responsibility - Asset Manager is capable of adapting the portfolio to criteria that the client may impose regarding issues of social and environmental responsibility.

### Safety and Stability

1. Safety and Stability - Asset Manager maintains investment philosophy and portfolio which is not high risk, as demonstrated by historical and current portfolio; has no (or little) history of legal difficulties; can ensure that assets are protected from being used in any way other than that intended; is not affiliated with financially unsound institutions or politically vulnerable countries.

2. Liability - Asset Manager has a fiduciary responsibility and is held responsible for a "standard of care" which ensures that funds are not misused; is not eligible for any indemnity from the Trustee (or at most, only indemnity for losses due to Trustee negligence).

3. Risk Management Systems - Asset Manager has capability and flexibility to invest in long-term assets, regularly employs mechanisms (e.g., automatic stops) for avoiding losses due to large moments in markets, capability and flexibility regarding use of hedging instruments, and capability and flexibility to diversify investments across countries and asset types.

GLOBAL ENVIRON FACILITY
BRAZIL
BIODIVERSITY PROJECTS

PRELIMINARY INVESTMENT ANALYSIS OF THE BRAZILIAN BIODIVERSITY FUND

| | | year 1 | year 2 | year 3 | year 4 | year 5 | year 6 | year 8 | year 9 | year 10 | year 11 | year 12 | year 13 | year 14 | year 15 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GEF Trust Fund Contributions | 1 | 10,000 | 2,500 | 2,500 | 2,500 | 2,500 | | | | | | | | | | |
| Matching Contributions | 2 | | 1,250 | 1,250 | 1,250 | 1,250 | | | | | | | | | | |
| Capital nominal, BOY | | 10,000 | 12,262 | 14,625 | 17,095 | 19,678 | 18,630 | 16,171 | 14,741 | 13,166 | 11,435 | 9,535 | 7,455 | 5,182 | 2,702 | |
| Investment Income (nominal) | 3 | 650 | 797 | 951 | 1,111 | 1,279 | 1,211 | 1,051 | 958 | 856 | 743 | 620 | 485 | 337 | 176 | |
| Management fees & transaction costs | 4 | 150 | 184 | 219 | 256 | 295 | 279 | 243 | 221 | 197 | 172 | 143 | 112 | 78 | 41 | 2,852 |
| Available to program | 5 | 1,988 | 2,000 | 2,011 | 2,022 | 2,032 | 2,098 | 2,238 | 2,312 | 2,390 | 2,472 | 2,557 | 2,646 | 2,739 | 2,837 | 34,607 |
| Total expenditures | | 2,138 | 2,184 | 2,231 | 2,278 | 2,327 | 2,377 | 2,480 | 2,533 | 2,588 | 2,643 | 2,700 | 2,758 | 2,817 | 2,877 | 37,369 |
| End of year capital | | 8,512 | 10,875 | 13,345 | 15,928 | 18,630 | 17,464 | 14,741 | 13,166 | 11,435 | 9,535 | 7,455 | 5,182 | 2,702 | 0 | |

1. The GEF Trust Fund contributions to the Sinking Fund are spread over the first five years. These contributions are limited to the resources from the GEF Trust Fund.
2. Assumes that 50 percent of private contributions, required on a one-to-one basis to trigger GEF Trust Fund disbursements in years 2 through 5, will be in cash.
3. Assumes a 6.5% minimal return; it is likely, however, that actual returns will exceed this amount.
4. Asset management fees and transactions costs have been estimated at 1.5% of capital.
5. The amount available to the program is based on the assumption that total expenditures are amortized over the life of the sinking fund such that the fund is fully depleted at the end of year 20. It is also assumed that total expenditures will increase at a rate of about 2% per year to include expected inflation.

BOY: Beginning of Year

This is a Sinking Fund that has a pay out of 15 years. Therefore, there is no provision for reinvestment of investment income to keep the capital value.

## FUNBIO'S PRELIMINARY ANNUAL ESTIMATED ADMINISTRATIVE COSTS
## (US$ 000)

| | | |
|---|---|---|
| **Salaries** | | **340** |
| Executive Director | 80 | |
| Program Assistant (1) | 40 | |
| Secretary (1) | 25 | |
| Technical Assistant | 25 | |
| Benefits | 170 | |
| **Office expenses** | | **20** |
| Printing and services | 5 | |
| Equipment/Supplies | 15 | |
| **Travel and Representation** | | **40** |
| **Outside Services** | | **80** |
| **Contingencies** | | **40** |
| **Total** | | **520** |

**BRAZIL**

**GLOBAL ENVIRONMENT FACILITY**
**BIODIVERSITY PROJECTS**

**DRAFT GUIDELINES FOR FUNBIO OPERATIONAL MANUAL**

1. The general issues addressed below were identified as critical during earlier missions and are suggested for the content of the Operational Manual. Annexes 11 and 12 were also prepared and discussed during previous missions. Since preparation of the Operational Manual will be the main responsibility of FUNBIO's Board of Directors, we expect to discuss the content during negotiations in Washington. A draft Operational Manual prepared by MMA consultants and a model Trust Fund Administration Manual previously approved by the Bank were provided to the Getúlio Vargas Foundation (FGV) and will be available to FUNBIO's Board.

General Comments

2. The operating manual should be consistent with the FUNBIO regiment and address at least the following issues:

(a) Objectives, including a description of FUNBIO's focus and niche;

(b) Organizational structure, including organizational chart (FUNBIO within FGV); composition of Board and mechanism for re-electing Board members; roles and responsibilities of the members of the Board of Directors, President, Vice-President, Executive Director and key staff; operating procedures of the Board; profile of staff positions; process for the selection of the President, Executive Director, and other staff; description of staff positions (Annexes could include terms of reference for the Executive Director or for special committees, etc.);

(c) Funding sources, including existing and potential sources; mechanisms to attract private sector participation; programmed fund raising activities;

(d) Detailed spending and investment rules, including acceptable levels of risk for investments, limits on capital invasion, mechanisms for re-investment of unspent income (e.g., in years with high investment performance), and mechanisms for incorporating and managing additional grants and assets provided by sources other than the GEF Trust Fund.

(e) Operating procedures for grant making, including:

(1) Calls for Sub-Project Proposals: procedures for setting priorities for sub-project thematic eligibility and calls for proposals; procedures to determine types and size of grant to be awarded; guidelines for budget preparation, including sample forms, permissible budget categories, matching requirements for non-profit and for-profit applicants; procedures for publication of requests for proposals; description of dissemination vehicles (including press, mailings, notification of professional and trade associations, and NGOs);

(2) Sub-Project Selection and Approval: procedures for judging proposals, including selection of technical reviewers; criteria for evaluation; guidelines to indicate and mitigate any environmental impact of sub-projects; feedback provided to proposing organizations; notification of results of evaluation. Draft eligibility and selection criteria are included in Annex 11.

(f) Guidelines for setting administrative costs of FUNBIO and for financing fundraising programs and other FUNBIO activities;

(g) Financial management arrangements, including guidelines for contracting with and disbursing to grant beneficiaries; contracting with and establishing investment guidelines for an asset manager, auditing, and financial reporting; general guidelines for procurement of goods and services. For contracting and disbursement to sub-project beneficiaries, annexes could include, e.g., model contracts, statements of expenditure, and reporting forms.

(h) Guidelines for monitoring and evaluation of sub-projects and lessons learned. Draft guidelines for a monitoring and evaluation program are included in Annex 12.

(i) Other items: procedures for complaints, appeals, and reconsideration; guidelines for staff conduct and client relations, including discussions of conflict of interest, confidentiality, and disclosure of information.

Additional Guidelines and Suggested Annexes to the Operational Manual

(a) Investment guidelines for the asset manager consistent with recommended best practice for GEF trust funds (see Annex 9);

(b) Terms of reference for the Executive Director and key staff;

(c) Guidelines for appointing Board members as well as technical and advisory committees;

(d) Guidelines for identifying, developing, submitting, and selecting sub-projects (e.g., model public procurement document and contract);

(e) Guidelines for settlement of disputes/claims.

**BRAZIL**

**GLOBAL ENVIRONMENT FACILITY**
**BIODIVERSITY PROJECTS**

**DRAFT SUB-PROJECT ELIGIBILITY AND SELECTION CRITERIA**

1. FUNBIO will provide financial support to projects of governmental and nongovernmental entities, including the business sector, provided these projects conserve biodiversity and/or use it sustainably, and would also contribute to the following objectives:

(a) Demonstrate and test innovative models and methodologies;
(b) Support environmental education and human resources training programs;
(c) Support biodiversity research;
(d) Meet specific objectives as elaborated by FUNBIO and agreed with MMA/PRONABIO (in the case of business projects).

2. Eligible entities include: (i) federal, state, and municipal businesses and agencies; (ii) private businesses, for-profit or not; (iii) environmental NGOs; (iv) for research projects, individual researchers; and (v) consortia of the above.

3. Financing may be in the form of contracts (with business entities, for projects involving financial benefits and profits, which will be supported by loans, according to terms spelled out in the Operational Manual) or agreements (grants to non-profit organizations and entities).

4. FUNBIO will conduct a technical evaluation of the proposals received on the basis of selection criteria agreed with MMA/PRONABIO. Recommendations on sub-project selection will be reviewed by FUNBIO and subsequently transmitted to PRONABIO's Coordinating Commission for review and action. Projects will be selected according to criteria which will include, among others:

(a) Congruence with the objectives of FUNBIO and MMA/PRONABIO;
(b) Value in relation to the resources available;
(c) Presentation, including conformance with forms and analysis required;
(d) Compatibility with governmental environmental programs and priorities;
(e) Proposing organization's experience with biodiversity projects;
(f) Proposing organization's record of compliance with environmental laws.

5. More specific criteria could include:

(a) Innovativeness for new sub-projects or replicability for demonstrated successful sub-projects;
(b) Clarity in identifying the problem to be addressed;
(c) Clear definition of methodology;
(d) Applicability and appropriateness of the proposed technologies;

(e) Relevance of the proposed sub-project to the priorities defined by workshop results and/or calls for proposals;
(f) Technical and administrative capacity of the sponsoring institution to execute the proposed sub-project;
(g) Environmental sustainability;
(h) Participation of the affected population in the planning, implementation, and evaluation of the results of the sub-project.
(i) Social viability insofar as the proposed activities address needs identified by the affected population;
(j) Adequacy of requested budget to achieve objectives in the time frame proposed; and
(k) Quality of interdisciplinary linkages.

6. Guidelines to evaluate the environmental impact and social assessments of the sub-projects will also be applied. These guidelines should ensure that sub-projects will (i) follow good environmental practices, (ii) properly address any sensitive social issues, and (iii) mobilize matching funding from grant recipients. Good environmental practices imply taking care in the design of new tourist facilities and ensuring that any sub-project supported harvesting of wild organisms is sustainable. Properly addressing social issues includes (i) ensuring that any involuntary resettlement (if unavoidable) would follow Bank policy and (ii) promoting adequate participation by local stakeholders in the design and implementation of sub-projects. Mechanisms for matching fund contributions from sub-project grant recipients would be agreed at negotiations.

7. Proposals will be judged according to compatibility with criteria specifically set forth in each call for proposals, which will be based on the list above. To be eligible for funding, all project sponsors must contribute financially (at a level to be agreed at negotiations) to the costs of proposed sub-projects.

8. Calls for proposals will be issued through FUNBIO following their approval by PRONABIO's Coordinating Commission and the Bank. The calls will include specific selection criteria applicable to each round. For example, Attachment 1 lists proposed criteria for sub-projects to be implemented by private-sector for-profit businesses.

# DRAFT GUIDELINES FOR PRIVATE SECTOR (BUSINESS) PROJECTS

## Eligibility Criteria

Proposed sub-projects will be eligible for funding upon meeting the following criteria.

1. Types of business activities to be funded

   (a) In general, FUNBIO seeks to provide support to businesses that:

   (1) Increase the income and employment realized from a natural area while assuring its continued conservation and sustainable management;
   (2) Create employment and income as a result of restoration and sustainable management of degraded areas;
   (3) Substitute sustainable practices and technologies for existing unsustainable practices and technologies;
   (4) Improve markets for sustainably produced products and services;
   (5) Enhance, rather than compete with, community-based development and marketing of products and services;
   (6) Provide technical and support services to businesses and other entities achieving the outcomes above.

   (b) Business projects may be deemed eligible by complying with conditions set out in calls for proposals as issued by PRONABIO's Coordinating Commission through FUNBIO.[1]

   (c) An "open" category may also be established to consider proposals for sub-projects that do not respond to a specific call for proposals but meet the criteria established herein.

2. Necessary conditions

   (a) The sub-project must:

   (1) Follow all project guidelines FUNBIO may establish for sub-projects in its sector, including guidelines for the amount that may be requested, and for the percentage of FUNBIO and corporate investment.
   (2) Supply all information requested in application forms or guidelines.[2]
   (3) Present a business plan of at least three years, including projections of progress toward sustainability and profitability if these are not achieved within the first three years.

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[1] The assumption here is that FUNBIO will wish to support business projects linked to other investments. Thus, when FUNBIO supports a protected area or extractive reserve, for example, it may issue a call for proposals for appropriate businesses for the area. It may also issue calls for proposals in distinct sectors, such as agriculture, forestry, and tourism.

[2] This should include information (quantification where possible) on the biodiversity conservation or restoration benefits to be achieved, directly or indirectly, including information about the basis upon which the expected benefits are calculated.

(4) Show compliance with all applicable legislation, including environmental legislation.

(5) Include, as part of its business plan and budget, resources for independent technical assessments of the environmental impact and sustainability of the planned activities. This includes pre-implementation environmental impact assessments of any proposed construction (roads, buildings, etc.) as well as periodic and/or end-of-project assessments.

(b) If the sub-project includes civil works to be financed with FUNBIO funds, submit the following documentation:

(1) Complete description of the civil works;
(2) Construction materials used;
(3) Estimate of costs and timeline for construction;
(4) Proof of ownership of the property; and
(5) Address where the construction will occur.

(c) The proposing entity must:

(1) Demonstrate clear tenure (ownership, lease, legal right to use) to the site involved.

(2) Have been legally constituted for at least one year by 90 days prior to the date upon which FUNBIO will formally consider the proposal.

(3) Show relevant professional experience in natural resource management or sustainable development.

(4) Demonstrate a corporate record of compliance with environmental laws and regulations.

(d) The proposing entity must not be in a state of default; that is:

(1) The entity is not indebted to government or other entities. The corporation should supply standard Brazilian documentation (certificate of non-indebtedness);

(2) The entity has not failed to fulfill the requirements of previous projects funded by FUNBIO, and is up to date on all accounting and reporting requirements and with payment on any loans previously granted.[3]

[3] Note that many trust funds place a limit on the number of projects a single entity may present to the fund -- usually one at a time.

**Selection Criteria**

Proposed sub-projects will be selected for funding according to the following criteria:

1. Relevance of the sub-project to the objectives of FUNBIO and MMA/PRONABIO.

   The business activity should achieve one or more of the following:

   (a) Complement or enhance sustainable development plans and policies for the region in which it operates;
   (b) Contribute to the improved management of special protected areas such as parks, national forests, extractive reserves, or indigenous reserves;
   (c) Test or employ innovative technologies;
   (d) Demonstrate the economic viability of environmentally and socially sustainable systems of natural resource management; and/or
   (e) Strengthen the capacity of local populations to participate in and benefit from sustainable development activities.

2. Probability that the activities will be environmentally sustainable.

3. Efficiency in use of fund resources to achieve objectives.

   (a) Value of conservation/sustainable development benefits relative to investment required.
   (b) Level of economic benefits to be generated by sustainable uses.
   (c) Potential to generate long-term income to the public sector for support of purposes such as protected areas (user fees, concession fees, tax revenues, etc.)
   (d) Amount of the businesses' own investment relative to request from FUNBIO.

4. Innovativeness and replicability of activities.

5. Social viability.

   (a) Preference will be given to those business ventures that originate in the communities in which they propose to operate, or that can demonstrate involvement of local residents in planning and management; that provide markets for locally produced goods; that support or complement (as opposed to competing with) locally managed businesses; and/or that provide employment and training opportunities for local residents.

6. Unique applicability of resources from the fund (as compared to availability of other sources of finance).

   (a) Implementation of this provision requires that FUNBIO acquire data about other institutions offering grants and loans for businesses, and their conditions.

# BRAZIL

## GLOBAL ENVIRONMENT FACILITY
## BIODIVERSITY PROJECTS

## DRAFT MONITORING AND EVALUATION PLAN

1. This plan for monitoring and evaluation should be considered an early draft whose purpose is primarily to identify which agencies and organizations, or their component staffs and agents, have responsibility for various aspects of monitoring and evaluation. Indicators would be developed in the final Operational Manuals for evaluation of the projects' success in achieving their stated objectives to promote and support the conservation and sustainable use of biodiversity in Brazil. Indicators for individual sub-projects would be developed in the proposals submitted by the potential sub-project grant recipients.

2. The objective of monitoring and evaluation is to provide timely information to assist project and sub-project implementing agencies in reviewing progress achieved in their work and difficulties encountered, and to measure overall project performance and impact.

### Objective

3. The overall goal of the two projects is to promote and support partnerships among government, non-profit organizations, academic institutions, and the private business sector to improve Brazil's conservation and sustainable use of biodiversity. The goal would be pursued through a two separate but related projects. Project I would support the Government of Brazil to: (i) promote the generation and dissemination of diagnostic studies to identify priority actions for the conservation and sustainable use of biodiversity; (ii) develop a biodiversity information network; and (iii) support demonstration projects that would test new models and methodologies for sustainable use of biodiversity. Project II would (i) create a financing mechanism to secure long-term funding for biodiversity activities in Brazil and (ii) support the establishment and development of FUNBIO that would administer the fund and its grants programs.

4. Project II will provide an opportunity to test the effectiveness of trust funds as mechanisms for long-term financing of biodiversity conservation, and to address the associated design and management issues. Thus, two types of monitoring and evaluation will be necessary: (i) monitoring and evaluation of the GEF project per se; and (ii) evaluation of the project's impact on biodiversity conservation in Brazil, and its effectiveness in generating participation and additional funding sources to assure continuation of the funding mechanism as a sustainable source of support for biodiversity activities.

### Results

5. The results of the monitoring and evaluation system include:

(a) Management of information from reports, studies, and results of workshops at both project and sub-project levels;

(b) Reports and special studies submitted to the Bank.

**Responsibilities**

6. In general, the PRONABIO Technical Secretariat (for Project I) and FUNBIO's Executive Secretariat (for Project II) will be responsible for project monitoring and evaluation (hereafter, "the Secretariats"). Their responsibilities in this area include the following:

Sub-Project Monitoring and Evaluation[4]

(a) Assist sub-project implementing agencies in designing their own monitoring and evaluation indicators and data collection strategies;

(b) Establish, distribute, and monitor standard forms to be used for sub-projects with respect to submission of data on financial, physical, and other administrative indicators;

(c) Approve the design of monitoring and evaluation for sub-projects;

(d) Approve and inform executing agencies about final evaluation reports on sub-projects;

(e) Carry out visits to supervise sub-projects of particular interest or importance, and those with evidence of serious implementation problems;

(f) Hire consultants to conduct evaluation studies of concluded sub-projects in order to select cases with important lessons or which have significant potential and size.

Project Monitoring and Evaluation

(a) Prepare a consolidated six-month *activity report* for submission to the Bank. For Project I, reporting would include the status of workshops and their expected outputs and the status of the Biodiversity Network as well as sub-projects. For Project II the report would detail the number of proposals received for sub-projects, and provide a summarized description of sub-projects and their status in the consideration/approval/implementation cycle.

(b) Prepare a consolidated *evaluation report* on the *impact of project activities*, to be submitted annually to the World Bank. As discussed above, this report would evaluate project implementation and also provide information necessary to evaluate the Biodiversity Fund as a mechanism for biodiversity conservation.

(1) The annual evaluation report should cover (i) institutional capacity of the implementing agencies (PRONABIO and FUNBIO), including progress on indicators of board and staff development, effectiveness of technical committees, development of documents and processes; (ii) financial effectiveness, documenting adherence to guidelines for investment (of the Biodiversity Fund in Project II) and disbursement (for sub-projects in both projects); and (iii) any legal issues, including progress toward assuring that adequate legal instruments have been established.

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[4] These responsibilities may be formally delegated to Administrative Agents.

(c) Evaluation of the Brazil Biodiversity Fund as a mechanism for biodiversity conservation. Data would be provided on (i) success relative to the objective of promoting public-private partnerships, including participation of governmental and non-governmental sectors; (ii) biodiversity impacts; (iii) social impacts; and (iv) progress in fund-raising.

7. It is expected that two features of Project I -- the biome-level workshops and the national Biodiversity Network -- will be fully integrated into the monitoring and evaluation process, by providing baseline data on the current status of species and communities, and identifying and maintaining data on target areas and indicator species and communities. The Secretariats, in supervising sub-project monitoring and evaluation, would coordinate with the Biodiversity Network to assure that existing data is used for baseline and updated studies wherever feasible, and that new data are generated in formats compatible with those employed by the Network.

8. The monitoring of sub-projects is primarily the responsibility of the implementing agencies, which report periodically to the appropriate Secretariat. Implementing agencies should:

(a) Design the monitoring and evaluation component as part of the sub-project proposal, including monitoring indicators and indicators for evaluation of progress toward sub-project goals;

(b) Continuously collect data required for reporting to the Secretariat;

(c) Submit reports to the Secretariat every six months, based on standard forms and including additional data, as agreed with the Secretariat or its agent;

(d) Prepare a final report upon sub-project completion, describing to what extent the sub-project's objectives were met, problems and questions that were raised during sub-project implementation, and new or replicable experiences gained from the sub-project. Mid-term evaluations may be required by the PRONABIO Technical Secretariat for projects having a duration of three years or more;

(e) Cooperate as needed with supervision visits, analysis, and evaluation reports, evaluation workshops, and reviews of participants' and beneficiaries' inputs.

9. Either through their own actions or through collaboration with other entities, including the hiring of consultants, the Secretariats would:

(a) Provide training for the design of monitoring and evaluation systems to groups of potential beneficiaries;

(b) Provide training to sub-project implementers on the use of monitoring and evaluation techniques;

(c) Evaluate the design of monitoring and evaluation for sub-projects when analyzing proposals, indicating whether additional assistance may be necessary;

(d) Identify, during evaluation of proposals, cases in which external technical assistance may be required during or after sub-project implementation.

10. The Bank would:

(a) Carry out biannual supervision of the project in conjunction with the Secretariats to determine whether the project is meeting its objectives.

**Methods and Activities**

11. Monitoring and evaluation would be carried out by the Secretariats based on sub-project data, information from the biodiversity database, and other monitoring and evaluation data identified as necessary and collected by the Secretariats and their consultants. The Bank would receive regular reports on monitoring and evaluation.

12. Monitoring and evaluation for sub-projects would be carried out using a series of instruments, including but not limited to the following:

(a) Self-monitoring and self-evaluation for all sub-projects. Reports compiled by implementing agencies could be supplemented by participatory evaluation assisted by the Secretariats or surveys of beneficiaries;

(b) Monitoring and evaluation visits by Secretariat staff. Staff would periodically visit sub-project sites to verify reported progress and evaluate progress toward sub-project goals, especially for sub-projects experiencing difficulties in implementation;

(c) Evaluation studies. Consultants would be hired to carry out studies on sub-project implementation and evaluation, based on random samples, or according to samples chosen by the Secretariats.

13. The Secretariats may hire consultants to conduct studies on sub-project performance and impact in relation to critical management or technical issues. In addition to data collected on a sub-project's contributions to project objectives, in their evaluation studies, consultants would assess the environmental and economic sustainability of sub-project activities.

**BRAZIL**

**GLOBAL ENVIRONMENT FACILITY**
**BIODIVERSITY PROJECTS**

**REPORTS AND DOCUMENTS IN PROJECT FILES**

1. Report on Asset Managers for a Trust Fund for Brazil, October, 1995.

2. Report from the General Biodiversity Coordination (MMA) on the status of activities of PRONABIO, October 1995.

3. *Portaria* No. 14, Fundação Getulio Vargas, creating the Brazilian Biodiversity Fund (FUNBIO), document includes: Internal Regulations of FUNBIO and initial Board membership, September 28, 1995.

4. Final Report of the Biodiversity Consultative Group recommending the institutional arrangement for Project II, June 29, 1995.

5. Issues and Options in the Design of Global Environment Facility Supported Trust Funds for Biodiversity Conservation, 1995.

6. Draft PRONABIO Operations Manual, February 1995.

7. Draft FUNBIO Operations Manual, December 1994.

8. Decree No. 1354 establishing PRONABIO, December 1994.

9. Report on the Fiscal Status of a Brazilian Biodiversity Fund. Alberto Gomes Santos Carneiro, December 1994.

10. Formal declaration of intents, Workshop on public-private partnerships in biodiversity conservation and sustainable use, June 1994.

11. First Global Forum on Environmental Funds, Santa Cruz, Bolivia, May, 1994.

12. Legislative Decree No. 2, where Brazilian Congress ratifies the United Nations Convention on Biological Diversity, February 1994.

13. First-round model sub-project proposals:

    a. "Conservation and Restoration of Biodiversity in Gallery Forests of the *Cerrado*." EMBRAPA/University of Brasília/IBAMA/CAMPO, September 1993 and February 1994.

b. "Restoration and Management of the Natural Ecosystems of *Brejos de Altitude* in Pernambuco and Paraíba." Federal Universities of Pernambuco/Paraíba/Rural Pernambuco/SNE, December 1993.

c. "Methods and Strategies for the Integrated Conservation of Genetic Resources." EMBRAPA/CENARGEN, July 1993.

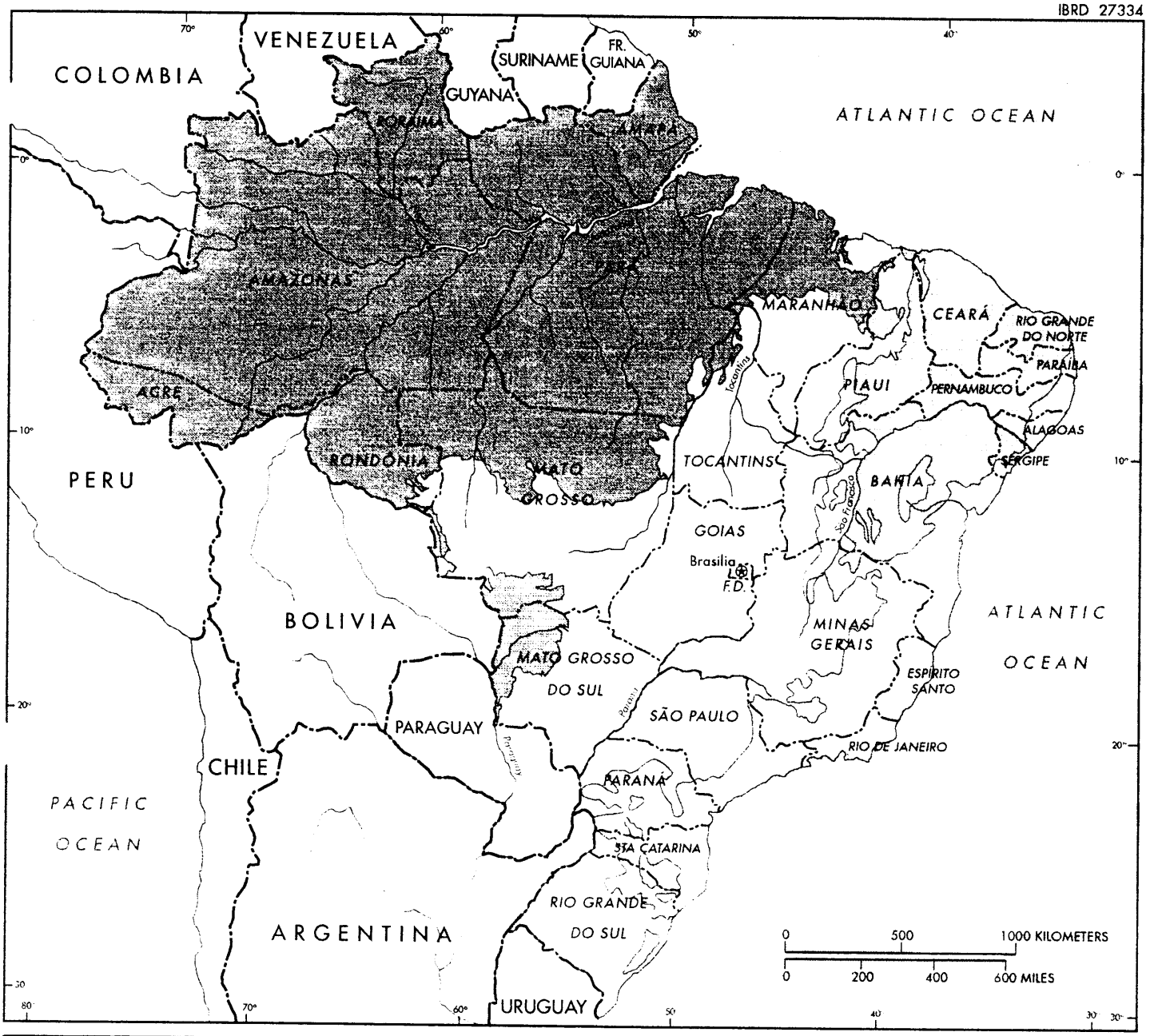
d. "Conservation and Restoration of Atlantic Forest in the Tablelands of Linhares, Espírito Santo." Federal University of Rio de Janeiro, 1993.

e. "Management of Conservation Units in the Guaraqueçaba, Paraná Region." SPVS/Federal University of Paraná/IBAMA/IAP, January 1993.

f. Proposal for Biome-Level Assessment Workshop on Priority Conservation Areas in the Cerrado. Pro-Nature Foundation, September 1993.

14. By-Laws of the Getúlio Vargas Foundation, 1992.

IBRD 27334




# BRAZIL
# MAJOR BIOMES OF BRAZIL

MAJOR BIOMES:

- AMAZONIA
- ATLANTIC FOREST
- GRASSLANDS, SAVANNAS, AND SHRUBLANDS (CERRADO)
- FLOODED GRASSLANDS (PANTANAL)
- DESERTS AND XERIC SHRUBLANDS (CAATINGA)

Source: Adapted from Dinerstein, E., D.M. Olson, D.J. Graham, A.L. Webster, S.A. Primm, M.P. Bookbinder, and G. Ledec, 1995. *A conservation assessment of the terrestrial ecoregions of Latin America and the Caribbean.* The World Bank, Washington, D.C.

- NATIONAL CAPITAL
- STATE BOUNDARIES
- INTERNATIONAL BOUNDARIES

*The boundaries, colors, denominations and any other information shown on this map do not imply, on the part of The World Bank Group, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries.*

OCTOBER 1995

## CURRENCY EQUIVALENTS

**Currency Unit = Real (R$)**
US$ 1.0 = R$ 0.95

## FISCAL YEAR

January 1 - December 31

## UNITS OF WEIGHTS AND MEASURES

The metric system is used throughout the report.

## ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| BDT | Base de Dados Tropical (Tropical Data Base) |
| CAMPO | Companhia de Promoção Agrícola (Agriculture Promotion Agency) |
| CENARGEN | Centro Nacional de Pesquisa de Recursos Genéticos e Biotecnologia (National Research Center for Genetic Resources and Biotechnology) |
| CIDES | Comisão Interministerial do Desenvolvimento Sustentável (Interministerial Commission on Sustainable Development) |
| CNPq | Conselho Nacional de Desenvolvimento Científico e Tecnológico (National Council for Scientific and Technological Development) |
| CPAC | Centro de Pesquisa Agropecuária do Cerrado (Agricultural Research Center of the *Cerrado*) |
| EMBRAPA | Empresa Brasileira de Pesquisa Agropecuária (Brazilian Agricultural Research Agency) |
| FAT | Fundação Tropical de Pesquisa e Tecnologia André Tosello (André Tosello Foundation for Tropical Research and Technology) |
| FBDS | Fundação Brasileira para o Desenvolvimento Sustentável (Brazilian Foundation for Sustainable Development) |
| FINEP | Financiadora de Estudos e Projetos (Agency for Financing of Studies and Projects) |
| FGV | Fundação Getúlio Vargas (Getúlio Vargas Foundation) |
| FNMA | Fundo Nacional do Meio Ambiente (National Environment Fund) |
| FUNAI | Fundação Nacional do Índio (National Indian Foundation) |
| FUNATURA | Fundação Pró-Natureza (Pro-Nature Foundation) |
| FUNBIO | Fundo Brasileiro para a Biodiversidade (Brazilian Biodiversity Fund) |
| G-7 | Group of Seven |
| GDP | Gross Domestic Product |
| GEF | Global Environment Facility |
| GEF Trust Fund | Global Environment Facility Trust Fund |
| GIS | Geographic Information Systems |
| GOB | Government of Brazil |

| | |
|---|---|
| IBAMA | Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (Brazilian Institute for the Environment and Renewable Natural Resources) |
| KfW | Kreditanstalt für Wiederaufbau |
| MMA | Ministério do Meio Ambiente, dos Recursos Hídricos e da Amazônia Legal (Ministry of the Environment, Water Resources and the Legal Amazon) |
| MPO | Ministério do Planejamento e Orçamento (Ministry of Planning and Finance) |
| NEP | National Environmental Project (PNMA) (Loan No. 3173-BR) |
| NGO | Non-Governmental Organization |
| PNMA | Programa Nacional do Meio Ambiente (National Environmental Project - NEP) |
| POA | Plano Operativo Anual (Annual Operating Plan) |
| PROBIO | Projeto de Conservação e Utilização Sustentavel da Diversidade Biológica Brasileira (Project for the Conservation and Sustainable Use of Biodiversity) |
| PRONABIO | Programa Nacional da Diversidade Biológica (National Program for Biological Diversity) |
| RNP | Rede Nacional de Pesquisa (National Research Network) |
| RPPN | Reserva Particular do Patrimônio Natural (Private Nature Reserve Program) |
| SNE | Sociedade Nordestina de Ecologia (Northeast Ecology Society) |
| SPVS | Sociedade para Proteção da Vida Selvagem (Wildlife Protection Society) |
| UFRG | Universidade Federal do Rio de Janeiro (Federal University of Rio de Janeiro) |
| UNEP | United Nations Environment Programme |

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This report is based on the findings of an appraisal mission which visited Brazil from March 20 to 31, 1995 and a post-appraisal mission from July 24 to 29, 1995. Mission members were Messrs./Mmes. Claudia Sobrevila (Mission Leader), Daniel Gross (Senior Anthropologist), Gustavo Rodrigues (Operational Lawyer), Alberto Ninio (Environmental Lawyer), Musa Asad (Financial Specialist), Ken Creighton (Biodiversity Specialist), Ruth Norris (Conservation Specialist), Miriam Parel (Institutional Development Specialist), and Irani Escolano (Project Cost and Procurement Specialist). Ms. Loretta Sprissler (Consultant) assisted with the writing and editing of this report. Mr. Gobind T. Nankani is the Department Director, Mr. Orville Grimes is the Projects Adviser, and Ms. Constance Bernard is the Sector Division Chief.