

PROJETO ÁREAS PROTEGIDAS NA REGIÃO AMAZÔNICA

(projeto 10%)

**elaborado pelo MMA
submetido ao GEF**

PROJECT BRIEF

1. IDENTIFIERS:

PROJECT NUMBER:

PROJECT NAME:

Brazil: Amazon Region Protected Areas Program (ARPA)

DURATION:

10 years in three phases of 4, 3, and 3 years

IMPLEMENTING AGENCY:

World Bank

EXECUTING AGENCY:

Ministry of Environment (MMA)

REQUESTING COUNTRY OR COUNTRIES:

Brazil

ELIGIBILITY:

Brazil ratified the Convention on Biological Diversity in 1992

GEF FOCAL AREA:

Biodiversity Conservation

GEF PROGRAMMING FRAMEWORK:

OPs 2 and 3

2. SUMMARY: The overall objective of the Amazon Region Protected Areas Program (ARPA) is to expand and consolidate protected areas in the Amazon region of Brazil. The program is anchored in the GOB's commitment to set aside as strict conservation areas, at least 10% of the land surface of the Amazon biome. The proposed project's Phase #1 would last four years and would be followed by two more phases of 3 years each. Phase #1 objectives include:

- (a) supporting the establishment of 15 new protected areas (PAs) under strict protection representing approximately 40% of ARPA's 10 year goal;
- (b) consolidating management of 12 existing protected areas;
- (c) developing legal, financial and institutional vehicles to ensure sustainability of new and existing protected areas; and
- (d) improving the quality and reliability of information by developing an environmental monitoring and evaluation protocol and testing it in 5 PAs.

Phase #1 will cost US\$63 million (US\$30 requested from GEF). The cost of the 10-year ARPA program has been estimated at a minimum of US\$210 million. Performance benchmarks will be established for each phase. Target benchmarks will need to be accomplished in order to enter into each subsequent phase.

3. COSTS AND FINANCING (MILLION US):

PHASE I

GEF:	-Project	US\$30.00 million
	- PDF:	US\$ 0.35 million
	Subtotal GEF:	US\$30.35 million
CO-FINANCING:	-PPG7:	US\$ 10.00million
	-Other International:	US\$ 5.00million
	-Brazilian Government:	US\$ 18.00million
	Subtotal Co-Financing:	US\$ 33.00 million
TOTAL PROJECT COST:		US\$ 63.00 million

4. ASSOCIATED FINANCING (MILLION US\$)

5. OPERATIONAL FOCAL POINT ENDORSEMENT:

Title: GEF Focal Point

Name: Washington Aquino de Mendonça **Date:** April 17, 1998

Organization: SEAIN, Min. of Planning

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BRAZIL
AMAZON REGION PROTECTED AREAS PROGRAM

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ABBREVIATIONS AND ACRONYMS

APAS	-	Environmental Protection Areas
ARPA	-	Amazon Region Protected Areas Program
CAS	-	Country Assistant Strategy
CBD	-	Convention on Biological Diversity
CNPA	-	Council for Protection of Fauna
CNUC	-	Council for Protected Areas
COBIO	-	National Biological Diversity Commission
CONAMA	-	National Council for the Environment
CTC	-	Scientific and Technical Committee
FUNATURA	-	NGO
FUNAI	-	National Foundation for Indigenous Affairs
FUNBIO	-	Brazilian Biodiversity Fund
GEFSEC	-	Global Environment Facility Secretariat
GOB	-	Government of Brazil
GTA	-	Amazon Working Group
GTZ	-	German Agency for Technical Cooperation
IBDF	-	Brazilian Institute for Forest Development
IBGE	-	Brazilian Institute for Geography
IBAMA	-	Brazilian Institute for the Environment and Renewable Natural Resources
INCRA	-	Land Registry Ministry
INPA	-	National Institute for Amazon Research
ISA	-	Institute for Social and Environmental Studies
ISPN	-	Social Institute for Native Populations
MMA	-	Ministry of Environment
MRE	-	Ministry of External Relations
NCC	-	National Coordinating Committee
NEP	-	National Environmental Project
NGO	-	Non-governmental Organization
M&E	-	Monitoring and Evaluation
PA	-	Protected Area
PCU	-	Project Coordination Unit
PNUD	-	United Nations Environmental Program
PPG7	-	Pilot Program for the Brazilian Rainforests
PROBIO	-	National Biodiversity Project
RFT	-	Rain Forest Trust Fund
SEMA	-	Special Secretariat for the Environment
SISNAMA	-	Brazilian National Environment System
SNUC	-	National System of Protected Areas
SUDEPE	-	Agency for the Development of Fisheries
SUDBEVEA	-	Agency for the Development of Rubber
UC	-	Conversion Units
WWF	-	World Wildlife Fund

A: Project Development Objective

1. Project development objective: (see also Annex 1)

The overall objective of the Amazon Region Protected Areas Program (ARPA) is to expand and consolidate protected areas in the Amazon region of Brazil. The proposed project would be the first phase of a three-phase program. The ARPA goals are to increase areas under strict conservation use to a minimum of 10% of the total area covered by the Brazilian Amazon biome, and to consolidate the management of these areas. Brazil currently has approximately 12 million hectares of tropical forest under strict protection in the Amazon region. The program would incorporate an additional 25 million hectares to reach the goal of 37 million hectares under protection. ARPA will take 10 years to reach this target.

ARPA has its origins in the political commitment assumed by Brazil's President Cardoso to adhere to the WWF-WB Forest Alliance Program, launched in 1997, that aims to ensure that at least 10% of each major forested biome in the world is protected. ARPA's Phase #1 is co-financed by two Brazilian Rain Forests Pilot Program (PPG7) projects: the Ecological Corridors Project (under preparation) and the Natural Resources Policy Project (RN P006565 TF021946). The ARPA also builds on the experience of ten other PPG7 projects and a half dozen recent World Bank loans. The Indigenous Lands Project (RN P006567 TF021946) and the Natural Resources Management Bank Loans to the states of Rondonia and Mato Grosso (*Planafloro* and *Prodeagro*), established and demarcated indigenous lands, parks and reserves in the Brazilian Amazon region. The Brazilian Biodiversity Fund (FUNBIO, GE P044597 TF28310) created an autonomous fund for financing biodiversity projects, and the National Biodiversity Project (GE P006210 TF28309) established conservation priorities for the entire country. The National Environmental Project (PE P006446 TF) financed IBAMA to strengthen the Protected Area System in Brazil.

Phase #1 of ARPA (the proposed project) would last four years. Project objectives of this phase include:

- (a) supporting the establishment of 20 new protected areas under strict protection representing approximately 40% of the ARPA's target of 10% of the Brazilian Amazon biome;
- (b) consolidating management of 12 existing protected areas;
- (c) developing legal, financial and institutional vehicles to ensure the sustainability of new and existing protected areas; and
- (d) improving the quality and reliability of information by developing an environmental monitoring and evaluation protocol and testing it in 5 PA's. Phase #1 performance benchmarks must be satisfied before proceeding to Phase #2.

Phase #2 would take three years. Building on lessons learned in Phase #1, it would focus primarily on establishing some 30 new protected areas under strict conservation use while supporting the managerial consolidation of existing and newly created PA's. By the end of Phase #2 it is expected that the identification of new PAs will be completed. Institutional capacity-building efforts will include continued strengthening PA management capacity including financial and environmental information systems. In addition, it is expected that critical legal reforms will have been approved including user fees and market based cost recovery mechanisms, and low environmental impact community-based income generating activities will have been identified. Phase #2 would consequently adapt and implement these initiatives creating the basis for financial sustainability. To this end, initiatives would be undertaken to develop partnership programs with the private sector.

Phase #3 would focus primarily on consolidating the long-term sustainability of the targeted areas. Institutional strengthening activities would continue through this phase and implementation of revenue generating activities and private sector participation would be intensified.

2. Key project performance indicators: (see also Annex 1)

The principal Phase #1 indicators include:

- Completion of mapping, zoning, definition of management category and rapid assessments for 20 new PAs;
- Substantial advances in the effective management of 12 existing PAs;
- Improved legislation to facilitate the establishment of PAs;
- Improved mechanisms for effective coordination with other federal and state initiatives supporting PAs establishment and management.
- Strengthening of PA financial management and addition of new mechanisms for cost recovery.

B: Strategic Context

1. Sector-related Country Assistance Strategy (CAS) goal supported by the project: (see Annex 1)

As part of its overall country assistance strategy in Brazil, the Bank is supporting (i) protection and conservation of priority ecosystems, and (ii) more efficient use and sustainable management of natural resources such as water, forests and land. The CAS emphasizes the importance of focusing ecosystem protection on the Amazon and Atlantic rain forests, where rapid environmental degradation imposes particularly high economic, social and environmental costs. The CAS identifies a number of strategies that are also incorporated into ARPA including:

- improved **coordination** among different GOB and sub-national agencies to strengthen planning and implementation of environmental policies;
- further **decentralization** to state and local levels of environmental protection responsibility to improve management performance;
- **new regulations and economic incentives** to encourage environmentally responsible behavior;
- increased involvement of the **private sector, local communities and NGOs** in delivering environmental services; and
- increased **enforcement** of environmental policies, particularly in remote areas where governmental presence is most fragile.

2. GEF Operational Strategy/Program Objectives Addressed by the Project:

Occupying nearly half the South American Continent, Brazil has a wide range of climate zones, ranging from humid tropics to semi-arid and temperate areas, which contribute to several ecologically differentiated biogeographical zones (biomes). These include the world's largest standing contiguous tropical rain forest (Amazonian 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. Brazil is acknowledged as the most biodiversity-rich country in the world (Mittermeier, 1998). With more than 50,000 species of vascular plants (one fifth of the world total), Brazil is the most plant-rich country in the world, 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 Amazon region of Brazil contains 23 ecoregions and is the repository of significant global biodiversity. It encompasses the largest area of remaining tropical rainforest in the planet (30% of the total area), holding carbon stocks of around 120 billion tons. According to the latest estimates, the region houses around 2.5 million species of insects, tens of thousands of species of vascular plants, at least 2,000 fish species, 950 bird and 200 mammal species, offering some of the greatest genetic diversity on earth. The 206 known ethnic groups surviving in the area, with close to 170 indigenous languages still spoken reflect the region's rich cultural diversity.

The Amazon Region Protected Areas Program (ARPA) supports GEF's Operational Strategy by contributing to long-term protection of these globally important ecosystems. Specifically, this project supports Operational Programs 3 (Forest Ecosystems) and 2 (Freshwater Ecosystems) and to a lesser extent, Program 4 (Montane Ecosystems). The project would target three GEF priorities: *in situ* conservation of globally unique biodiversity; sustainable use of biodiversity; and local participation in the benefits of conservation activities. The project is fully consistent with Brazil's first report to COP IV. The project is also fully consistent with the principles of the CBD by supporting all three levels of biodiversity (ecosystems, species, and genes) and supports COP Decisions I/8, II/8, II/9, III/9, III/10 and III/12, and the SBSTTA Recommendation I/3.

The GEF is asked to finance the incremental costs of creating new protected areas. In addition, the proposed GEF grant would be invested in strengthening basic management infrastructure including equipment and training of key staff. It would also support the implementation of financial management and cost recovery mechanisms necessary to ensuring the long term managerial and financial sustainability of both existing and newly created Amazon protected areas.

2. Main Sector Issues and Government Strategy:

a. *Overview and Government Responses*

Among the key green issues in Brazil is deforestation of the biologically rich Amazon forest regions, which is driven by a complex set of forces including agricultural expansion, ranching and logging. Vested interests, poverty and an absence of environmentally sustainable alternative economic activities exacerbate the situation. Consequences of these factors are increased clearing and burning of tropical forests, degradation of watersheds and coastal areas, and over-exploitation of wildlife and fisheries. In the Amazon landless rural people continue to be settled in inappropriate areas, timber extraction has increased with growing participation by foreign (mostly Asian) logging companies, and large tracts of forest are being converted to cattle pastures and monocultures such as soybeans. Long-term solutions will require measures to reduce poverty, provide economically feasible and environmentally sustainable alternatives, and strengthen effective protection of priority ecosystems.

Deforestation in the Amazon and other environmental problems in Brazil have received growing government attention in recent years, driven mainly by an increasing public awareness of the deleterious effects of deforestation in Brazil. As a result, federal and state governments are moving towards adopting environmentally friendly policies for sustainable development. Major reforms that are relevant to the Brazilian Amazon include

- adoption of a "Green Protocol," which requires banks and lending agencies to incorporate environmental criteria in the projects they finance;
- ratification of the Convention on Biodiversity and preparation of an Agenda 21 for Brazil and for the Amazon;
- devolution of environmental management to states and municipalities;
- introduction of a "green sales tax" (*ICMs verde*) for biodiversity protection in some states;
- increase in the amount of private land holdings required to be kept in "legal forest reserves" in the Amazon from 50% to 80%;
- improvement of land tax collection and legislative reform allowing for forested lands to be considered to be "in productive use";
- declaration of a temporary ban on mahogany extraction in Amazon forests;
- approval of a national water resources law (1997) establishing a legal framework for integrated watershed management; and
- approval of the Environmental Crimes Law (February 1998), which allows for the prosecution of environmental violators.

Each of these policies constitutes an important reform. However, efforts to coordinate and implement environmental policies in the Brazilian Amazon biome have lagged owing to the vastness of the territory, lack of managerial capacity and resources, vested interests and poverty. One Ministry of Environment (MMA) initiative to address these problems a decade ago was an integrated government environmental program for the Amazon Region, “Brazilian Rain Forest Pilot Program (PPG7)” briefly described below.

b. *Brazilian Rain Forest Pilot Program.*

The PPG7 has been supporting pilot projects aiming to optimize the environmental benefits offered by rain forest ecosystems in a way that is consistent with the development goals of Brazil. With currently about US\$280 million in grant funds provided by the G-7 countries, the European Union and the Brazilian government, this program is the largest multilateral donation for environmental conservation in a single country. Its ten core pilot projects—eight of which were launched began in 1995 and two more are expected for 2000-2001—address areas critical to conservation of Brazilian tropical forests. The program includes pilot projects on extractive reserves, indigenous reserves, innovative approaches for managing forests and floodplains, environmentally sound development initiatives carried out by local communities, strategic research and strengthening of key research centers; and improved surveillance and enforcement of environmental policies at the state level. At the request of the G-7 countries and Brazil, the World Bank coordinates the PPG7, supervises ongoing projects and administers the Rain Forest Trust Fund (RFT). The PPG7 program has helped promote constructive changes within the wider institutional and policy context in the Brazilian Amazon. The formulation of the National Integrated Policy for the Legal Amazon (1995) benefited from much of the early work undertaken by the PPG7. The PPG7 has also contributed to the strengthened role of NGOs through the GTA (Amazon Working Group) network and been a catalyst for new and productive forms of collaboration linking Federal and sub-national government and civil society.

c. *The Role of “Strict Protection” Reserves*

The Government’s approach to the Amazon has generally stressed the importance of sustainable development and attempted to balance legitimate economic aspirations and ecological imperatives. Hence, PPG7 investments have supported extractive and indigenous reserves, sustainable development projects for NGOs and grass roots organizations, state and municipal development plans, and ecological corridors. However, relatively little attention has been given to *strict protection* which is the foundation for sustainable development and for the maintenance of ecological integrity. Brazil has only about 12 million hectares of tropical forest under strict protection in the Amazon region or 3.2% of its land surface, which is low relative to other Amazon countries—Venezuela has 18% and Colombia and Ecuador have 15% of its Amazon territory under strict protection.

The creation of new protected areas is a viable strategy for the Brazilian Amazon. It is well known that the cost of creating protected areas increases as development of rural areas expands. However, the Brazilian Amazon still has vast expanses of remote, and scarcely populated areas rich in biodiversity that are ideal for transformation into protected areas. A significant amount of the Brazilian Amazon (12%) is still categorized as “unclaimed government lands”. This open land designation creates favorable conditions for squatters and other land users and speculators to invade these unclaimed lands, a situation that is exacerbated by the government’s limited enforcement capacity. Important studies being carried out by Conservation International indicate that areas in the Brazilian Amazon that have been legally designated as protected areas, even when not implemented, are much better preserved from encroachment than other “non-declared” areas, yet under minimal enforcement. This underscores the importance of legally establishing protected areas and promoting public awareness as necessary first steps in protecting land from encroachment from mining, logging, colonizers and road construction, and, more importantly, in order to maintain the ecological integrity of the entire region over the long term. Therefore, creating protected areas from “unclaimed government lands” in remote areas—even if enforcement capacity is limited—is a cheap and strategically important choice for the Brazilian Amazon, especially considering that only 3.2% of the land surface is currently under strict protection.

Government efforts at the Federal and sub-national levels together with the increased public awareness of environmental concerns resulting from a decade of PPG7 efforts has created a strong constituency for strict protection. There is a growing recognition that sustainable development and strict protection are both necessary and reinforce one another. One result is that, with the catalytic support of the WWF/WB Alliance and GEF, Federal and State authorities, NGOs, and the PPG7 are forming a partnership: the *Amazon Region Protected Areas Program (ARPA)*, to add 25 million hectares in new strictly protected areas over the next 10 years. The goals of the ARPA program, combined with existing efforts, will result in a total of 70 million hectares--nearly 30%--of Amazon forested ecosystems under some form of effective protection and sustainable use within a decade.

d. *Institutional Roles and Challenges*

The management of protected areas in the Brazilian Amazon Region is the primary responsibility of two Federal institutions under the Ministry of Environment (MMA): the National Council for the Environment (CONAMA) and the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA). State and Municipal governments also participate in the management and administration of PAs. In recent years, the GOB has also promoted the involvement of Brazilian society in general, in conservation issues. Through meetings and workshops, local communities and their representatives are now taking a more active part in all stages of the planning and implementation of protected areas, frequently carried out through partnerships between the Government institutions, NGOs, and other institutions and organizations of the private sector.

The Bank provided loan funds to IBAMA under the National Environment Program for institutional strengthening and management of a number of PAs (See section D.3, for lessons learned). While improvements resulted, PA management continues problematic. Major problems include: (a) overly centralized management; (b) PAs are numerous, scattered and often too small (less than 100,000 ha) to ensure genetically viable populations of the larger, wide-ranging species such as top predators (c) IBAMA resources are insufficient to manage effectively a large number of small units; (d) protected areas lack staff and staff with necessary skills--on average, there is one IBAMA employee for every 27,560 ha. of protected areas (only 20% of the 575 employees administering protected areas have a higher education); (e) incomplete structure within the legal framework that regulates PAs (covered in the next section); and (f) budgetary processes are centralized and inflexible.

Some of IBAMA's problems are being addressed with the help of PPG7 projects. The Extractive Reserves, Forest Management and Flood Plains Management Projects are currently being implemented under IBAMA, but using a different model from the NEP. In these projects, the Project Coordination Unit is headed by a highly qualified staff contracted under UNDP and not subjected to political appointment. This coordination unit is inserted within IBAMA's structure, but it is supervised by a project committee that includes representatives from NGOs and local communities, adding expertise and local knowledge to ensure sound project implementation. In the case of the Forest Management and Flood Plains Management Projects the coordinators are based in the Amazon Region (Manaus and Santarem, respectively). Another characteristic of these projects is that IBAMA implement less than 30% of project activities, the remainder being the responsibility of NGOs, state governments and community associations thereby enhancing ownership. With 2-4 years of implementation experience these projects are already demonstrating positive results.

e. *Financial Challenges*

During the past five years, GOB investment in strictly protected areas in the Amazon has been very limited. Less than US\$ 3.5 million were invested in only 30 areas, with an average of US\$ 22,000 per area per year. These figures include funds channeled through the National Environmental Program (US\$ 1.6 million). Funds from international cooperation have been the main source of financial resources for areas under strict protection in the Amazon, with US\$ 6.5 million invested over the past five years, mainly in four areas (Serra do Divisor National Park in Acre, and Jau National Park, Anavilhanas Ecological Station and Mamiraua

State Park in Amazon State). The Pilot Program is responsible for the largest investment on protected areas of direct use, through three of its projects: a) Extractive Reserves (US\$ 9.5 million), b) Indigenous Lands (US\$ 22.7 million), and c) Forest Management (US\$ 18.7 million). The federal budget for the period of 2000-2003 (still pending approval by Congress), however, includes a total of US\$ 18 million to be invested in protected areas, representing a significant increase in federal investments in biodiversity conservation in the Amazon. There are also some new funds from international partnerships under implementation, with US\$ 1.3 million of the National Environmental Project II, US\$ 1.8 million of the Ecotourism Project (PROECOTUR – IDB Loan), and US\$ 10 million for the Central Amazon Corridor (Ecological Corridors Project – PPG-7).

f. *The Legal Environment--SNUC*

Recognizing the need for a comprehensive legal framework for protected areas in Brazil, the GOB has submitted a National Protected Areas System Law (the SNUC Law) to Congress. Following a lengthy process of public consultations and consideration in thematic Commissions, the Proposed Law (no. 2892/99) was approved by the House of Representatives on June 10, 1999, and is now in the Senate for final approval. The SNUC law regulates Article No. 225, and sections I, II, III and VII of the Federal Constitution, constituting the National System of Protected Areas. Its overall objective is to contribute to the maintenance of biological diversity and genetic resources in national territory and jurisdictional waters. It aims to achieve this by providing a uniform legal basis, concepts and methodologies for the numerous governmental agencies responsible for the consolidation of conservation units at the municipal, state and federal levels. This new Law, when passed, will eliminate the contradictions and overlaps observed in the current legislation governing protected areas in Brazil (see Table 1 Annex 2 and Annex 7). Even though the new law will substantially strengthen the legal framework for protected areas, the proposed project activities can still be implemented with a high degree of confidence under existing legislation. The approval of the new law, therefore, is not a pre-requisite for successful project implementation. It is, however, expected that ARPA will be the first example for implementation of the new law during its first and subsequent phases. Consequently, phase #1 will include funding for workshops, public consultations and studies required for dissemination of the expected new legal framework..

3. Sector Issues to be Addressed by the Project and Strategic Choices

Legal and Policy Framework: The current project will demonstrate in practice some key and potentially very important elements of the proposed SNUC Law:

1. Participation of local populations in the establishment, implementation and management of conservation units;
2. Creation of vehicles to elicit support and cooperation from the public and private sectors for studies, scientific research, environmental education, recreation, ecotourism, management, monitoring and other activities relevant to the establishment and maintenance of conservation units.
3. Incentives for local populations and private organizations to establish and manage conservation units within the national system.
4. Creation of conditions for the economic sustainability of conservation units where possible.
5. Establishment and management of conservation units within the legal framework governing land and water management taking into account local socioeconomic conditions and requirements.
6. Provision of alternative forms of livelihood or adequate compensation for traditional populations that who can no longer harvest existing natural resources within conservation units.
7. Provision of sufficient financial resources for proper management of conservation units
8. Establishment of financial and administrative autonomy for the conservation units whenever possible, and in accordance with Federal guidelines.

9. Establishment of Consultative Management Councils for each Protected Area.
10. Regularization of financial contributions by private enterprises that obtain direct benefits from PAs.
11. Regularization of land tenure within and surrounding PAs.

Financial Sustainability. IBAMA currently has only one staff for every 27,560 hectares under its responsibility. It manages more than 174 conservation units for a total area of 35 million hectares. Given the current budget constraints and the shortfall of resources to manage existing protected areas, it is unlikely that the GOB will have sufficient budget to meet the future needs of both existing and new PAs. GEF and other donor financing are expected to decrease over time (see Annex 6 for a summary of resources allocated and planned for protected areas in Brazil). In a time of shrinking government and enhanced participation of the private sector and the civil society in Government affairs, a new *modus operandi* is needed. Consequently, it is critical that the project lay the basis for long-term financial sustainability of PAs in the Amazon Region. The project will address this issue by identifying, developing and implementing appropriate financial vehicles to generate the needed resources. Project finance will fund studies of different funding sources, cost recovery strategies, and develop and implement financial strategies.

Protected Areas Programs Coordination: The project will address the need to coordinate the currently diffuse government efforts related to PA creation and management. A proposal for ensuring the coordination of on-going MMA programs supporting PAs has been drafted and will for the basis for this effort. A strategy to consolidate State PAs will be developed through a series of meetings with State environmental officials and with the active participation of civil society that will be initiated prior to project effectiveness. A strategy will be developed that defines the roles of the Federal, State and local governments in PA management and strengthens Municipal and State level management capacity. Components will include PA consolidation, improved resource mobilization, financial management, improved environmental information management, strengthening of the regulatory system, and strengthened decentralized PA management.

Participatory approach: The proposed project takes as a central premise that the success of demarcation and protection of PAs depends upon direct involvement and participation of the local population. Hence, the active participation of local communities will be a key part of PA selection and design. The project will also promote the incorporation of established Brazilian CBOs, NGOs, scientific and academic institutions and civil society organizations. Assistance will be sought in the areas of PA management, natural resources management, rural development, community organization, technology transfer, monitoring and evaluation, and environmental education. The mechanism for involving civil society will be partnership and concession agreements in order to increase the number of qualified stakeholders and to facilitate an effective participatory management. The project would provide funding for assessing the viability of different organizations and mechanisms, strengthening the management capability of candidate organizations, and developing appropriate partnership ‘contracts’ (e.g. concessions, leasing) for the management of PA. This participatory approach would also contribute to the strengthening of the on-going process of decentralization promoted by the MMA/IBAMA; and would reduce the government’s financial burden by tasking PA management partners with mobilizing private sector funding (e.g. matching funds for PA management).

FORMTEXTPhased approach: The project will address the issue of absorptive capacity by phasing project implementation over three tranches of 4, 3, and 3 years respectively. Each tranche will be readied in the preceding tranche and will build upon accumulated experience. Also, by decentralizing to states and municipalities and encouraging civil society participation, the program spreads the implementation burden and increases the likelihood of efficient implementation.

C: Project Description Summary (see Annex 1 for indicators)

1. Project components (see Annex 2 for Detailed Description)

Project objectives will be met through five project components

- Creation of new PAs (see Annex 5 for information on the selection process and priority PAs);
- Consolidating and strengthening of management capacity in selected, existing PAs (see Annex 6 for information on these areas);
- Development of financial, legal and institutional vehicles to support the sustainability of PA interventions;
- Establishment of a PA monitoring and evaluation program, including support for dissemination of lessons learned; and
- Project coordination.

A summary of GEF financing of the project's core components is presented below

Component	Sector	Indicative Costs (US\$M)	% of Total	GEF-financing (US\$M)	% of GEF-financing
1. Creation of new PAs		23.4	37.1	10.5	44.8
2. Consolidation of existing PAs		15.2	24.1	6.5	42.8
3. Development of financial, legal and institutional vehicles		15.0	31.7	10.0	50.0
4. Development of a M&E program.		2.9	4.6	2.0	69.0
5. Project coordination.		1.5	2.4	1.0	66.7
Total		63.0	99.9	30.0	47.6

2. Key policy and institutional reforms to be sought

The project will pilot the implementation of new laws and regulations supporting the creation and management of Brazilian PAs, particularly the SNUC Law. The project would increase intersectoral dialogue and joint actions by engaging the Land Registry Agency (INCRA) and state and municipal government in PAs creation and management. It would develop critical core experience in creating and managing PAs and buffer zones synthesizing and disseminating the experiences of primary stakeholders including government, environmental/biodiversity conservation agencies, and civil society. One expected outcome of institutional reforms is the generation of stakeholder income from PA services and charges. Finally, the project will continue to strengthen financial management in the environmental sector by incorporating the lessons learned from using Banco do Brasil as a financial intermediary under the PPG7 and FUNBIO projects.

3. Benefits and target population

The project aims to achieve measurable improvements in biodiversity and natural resources quality and management in the Amazon Region at the federal, state, municipal and local levels.

Local Populations

The beneficiaries of these improvements would be the populations adversely affected by the loss of biodiversity and other forms of natural resource and environmental degradation. The establishment of strictly protected areas could also adversely affect such families in the short term owing to the elimination of clandestine exploitation of natural resources. To manage short-term economic dislocations and livelihood

losses for poor communities during the transition period the project would support a number of interventions enumerated below:

- (i) Support for targeted investments in alternative PA revenue-generation activities in PAs and also in buffer zones where additional private and public funding will be sought for low environmental impact development activities to benefit local populations;
- (ii) Building a strong constituency for protected areas, through partnerships, environmental education and awareness campaigns;
- (iii) Strengthening the capacity of states, municipalities and other local representative entities to conduct participatory PA management to allow decision-makers to make informed choices that promote poverty alleviation efforts along with conservation objectives;
- (iv) Strengthening IBAMA/MMA’s role as a coordinator of responsive PA policy, continuing its effort, started under PPG7, to include populations in all aspect of PA creation and management.

As specified in OP 4.30 (resettlement), the specific actions to be followed will be discussed and agreed with the GOB and will be delineated in a “process framework” prior to project effectiveness.

Brazil—the Country and the Government

Regional and national benefits will include

- (i) Maintenance of biodiversity and implementation of replicable sustainable development models in environmentally valuable areas;
- (ii) Development of income generating activities and other economic incentives to maintain PAs in the longer term;
- (iii) Poverty alleviation in and around PAs;
- (iv) Strengthened PA managerial capacity and legal framework
- (v) Replication of successful PA models in other areas resulting in additional benefits

Global Environmental Benefits

The global environmental benefits consist of:

- (i) Preservation, through creation of extensive protected areas and enhanced management of new and existing PAs, of arguably the most significant biodiversity reserves in the world—the Brazilian Amazon biome;
- (ii) Development of innovative models and experiences in preservation of biodiversity and sustainable development with potentially huge replicability potential in Brazil and globally.
- (iii) Engagement of the most important biodiversity country in the world, Brazil, in a relatively rare, meaningful and successful conservation effort that should lead to new efforts; and
- (iv) Maintenance of globally important watershed and carbon sequestration biomes.

4. Institutional and implementation arrangements:

Institutional Arrangements: The institutional arrangements are designed to meet the following goals: 1) maximizing the ownership and participation of all key players in protected areas management, including local communities. This implies have the capacity to assess the demands and needs at the local level and incorporating them in project planning and implementation; 2) ensuring a transparent and flexible decision making structure; 3) ensuring efficient, accountable and decentralized administrative and financial mechanisms; 4) ensuring continuous access to high level political support. The preparation of this proposal was supported by an Advisory Committee composed of representatives from the MMA and IBAMA, the Ministries of Finances and Planning, WWF-Brazil and the World Bank.

Project Coordination and Management: Two primary institutions, MMA and IBAMA, would be responsible for project implementation; they would be supported in carrying out their respective roles by partners from the NGO and grass roots organizations, and by state and municipal Government. IBAMA will take a stronger role in coordinating actions in federal protected areas, while MMA will coordinate actions which are under the jurisdiction of State and Municipal Governments. MMA and IBAMA would establish a Project Coordination Unit (PCU) that will report to both. The PCU would be part of the Secretariat for Biodiversity and Forestry and the Secretariat for the Amazon Region at MMA. The PCU will be also linked to the General Program and Project Coordination Unit of the Executive Secretariat of MMA. The PCU will be physically located at IBAMA's Central Unit in Brasilia and would have a limited number of qualified and motivated staff. An office with personnel has already been established at IBAMA for the purposes of supporting project preparation.

A National Coordinating Committee (NCC) would be composed of representatives from the public sector and organized civil society. The NCC would act as a Board of Director ensuring efficiency in project implementation and balancing conflicting interests. be responsible for: i) approval of project strategies and action plans; ii) definition of procedures and general management guidelines (including the project operational manual); iii) approval of project activities in all components; and iv) analysis and approval of technical and financial progress reports. The NCC would allow for the active participation of key stakeholders in protected areas management and creation.

The PCU will implement the decisions made by the NCC and would ensure the following managerial approaches: i) improved planning and programming with support of an effective monitoring system; ii) effective and transparent allocation of resources; iii) decentralized management of resources; iv) flexible, opportune and result oriented decision-making and management; v) demand-driven action; vi) synergy and effective coordination between the project's components; and vii) effective follow-up of project outputs.

The PCU would be responsible for: i) planning and coordinating the execution of all project activities, ii) preparation and follow-up on third party agreements or contracts; iii) preparation and approval of all documentation for financial transfers and accounting; iv) preparation of annual operating plans and progress reports; v) ensuring that Bank procurement guidelines are followed; vi) coordinating Bank supervision missions. It will also coordinate actions with PPG7, IBAMA's other departments, PROBIO/ NEPII/SIMBIO, and other implementing partner organizations.

Implementation Arrangements. Project activities will be implemented by a variety of implementers ranging from IBAMA, MMA, State and Municipal Governments, NGOs and grass root organizations. A summary of stakeholder implementation responsibilities by component is presented below.

COMPONENTS	POTENTIAL IMPLEMENTERS & PARTNERS
1. Creation of new protected areas (PAs). Creation, demarcation and establishment of PAs Prioritization process	IBAMA, INCRA, INPA, MA, SIVAM, State Governments, Municipalities, NGOs, Local Community Organizations, Universities WWF, ISA, IBAMA, State Governments, IBGE, Universities and Research Institutions
2. Consolidation of existing protected areas.	IBAMA, State Governments, Municipalities, NGOs (international, national and local), private companies, Local Community Organizations, FUNBIO.
3. Development of legal and financial mechanisms.	IBAMA, MMA, FUNBIO, NGOs (international, national and local), universities, research institutions and private companies.
4. Monitoring and evaluation program.	IBAMA, Municipalities, State governments,

	Universities, Research Institutions, NGOs, SIVAM, IBGE
5. Project Coordination.	MMA, IBAMA

By the time of CEO endorsement, confirmation of which partners would implement project year 1 activities would be provided, including an assessment of technical capacity. Objective and transparent selection criteria for implementation partners during project years 2-4 would be finalized and agreed prior to CEO endorsement. Draft selection criteria to include State, Municipal, NGOs and local organizations to carry out some activities are: a) established presence in the local area; b) technical expertise for the activity proposed; c) proven track record in successful conservation work; d) counterpart funds; e) technical and administrative capacity; f) proven experience in participatory processes; g) adequacy of requested budget to achieve objectives in the time frame proposed. For detailed roles and ways these partners will participate and carry out activities, please refer to the detailed project description in Annex 2.

Flow of Funds: The project would hire a financial agent to administer GEF funds at the national and sub-national levels. The project would have two accounts. One account would cover direct investments under components 1, 2, 3 and 5; and the second would be a trust fund account, where only the interest generated minus administration fees would be disbursed. The trust fund account would be used to defray the recurrent costs of PAs (see component 3). The financial agent would release funds upon authorization of the NCC and PCU. MMA/IBAMA, as the Project Executing Agencies, would be responsible for reporting to the Bank on financial progress and for ensuring that satisfactory financial and technical audits are carried out.

Monitoring and Evaluation of Project Results: Within MMA, and independent of the PCU, a Project Monitoring and Evaluation (M&E) unit will be established. The terms of reference and outputs of this unit will be designed to conform to the Project Design Summary (Annex 1) and the Monitoring Plan as detailed in the Operational Manual. M&E will be conducted through: a) activities of the PCU; b) annual progress reviews during Bank supervision missions; c) Mid-term Review of project implementation to be carried out jointly by the GOB, the NCC, the PCU, and the World Bank; and d) periodic beneficiary assessments and other special studies. The latter would include a participatory evaluation component to be carried out in consultation with local communities and NGOs and an independent evaluation mechanism at mid-term and completion of Phase 1. Progress in achieving targets would be assessed during the Mid-term Review and again at project conclusion which will inform the decision regarding to proceed to Phase #2.

Biological Monitoring will be carried out under component 4. This component will also include studies/activities to capture lessons learned, disseminate results, and promote replication elsewhere in Brazil and globally. Every six months, the project administration unit will transmit to the Bank, progress reports on project implementation and outcomes, using the format agreed at negotiations. An Implementation Completion Report will be prepared within six months after the closing of the grant.

D: Project Rationale

1. Project alternatives considered and reasons for rejection:

One option that was considered was to place the project entirely under IBAMA. This option was rejected because of the scope of the project and the need to ensure broader ownership and reinforce IBAMA's administrative and budgetary capacity in order to achieve project objectives within the allotted time period. A second alternative was to attempt a project that excluded IBAMA in order to avoid administrative bottlenecks caused by relatively limited implementation capacity. This alternative was rejected because of IBAMA's key role and substantial experience in creation and management of protected areas in Brazil. The option that was chosen builds upon IBAMA strengths and addresses weaknesses by incorporating numerous, competent partners/stakeholders to work with IBAMA and MMA. By maximizing stakeholder participation in project management we expand ownership and increase the probability that its ambitious goals will be achieved within the proposed time frame. Finally, a third option that was explored was that PPG7 finances

the current project. However, the PPG7 is only a pilot program and works in very few areas of strict conservation use. The current project works with the underlining framework that protected areas will be created following ecosystems' representativeness as its main premise. The alternative reached was that PPG7 would co-finance the project and join in the current project in its main objective which is to expand and consolidate PAs to reach the target of at least 10% of the land surface of the Amazon biome.

Major related projects financed by the Bank and/or other development agencies completed, ongoing and planned):

Sector issue	Project	Latest Supervision (Form 590) Ratings (Bank-financed projects only)	
		Implement. Progress (IP)	Development Objective (DO)
<u>Bank-financed</u>			
<ul style="list-style-type: none"> Strengthen main environmental agencies, and develop a legal and regulatory framework 	Brazil – National Environment Project	S	S
<ul style="list-style-type: none"> Environmental institutional strengthening and capacity building 	Brazil – Rondonia Natural Resources Management Project (PLANAFLORO)	U	U
<ul style="list-style-type: none"> Promote the adoption of modern, sustainable forms of land management, soils and water conservation; and increase agricultural productivity to mostly small-scale farmers 	Brazil-Land Management I (Approved FY 89)	S	S
<ul style="list-style-type: none"> Environmental management 	Brazil – Mato Grosso Natural Resources Management Project (PRODEAGRO)	U	U
<ul style="list-style-type: none"> Develop biodiversity strategies for key biomes in Brazil and promote partnerships among government, NGOs & private sector to promote biodiversity conservation 	Brazil – Biodiversity Fund Projects (GEF-FUNBIO & GEF-PROBIO)	S	S
<ul style="list-style-type: none"> Promote sustainable natural resource management & conservation by local communities in the Amazon 	Brazil – Rain Forest Pilot Program, Demonstration Projects (PD/A)	S	HS
<ul style="list-style-type: none"> Complete the legalization and assisting in the protection of Indigenous Lands in the Amazon 	Brazil – Rain Forest Pilot Program, Indigenous Lands Project	S	HS
<ul style="list-style-type: none"> Develop and test approaches to the social, economic and environmental management of extractive reserves in the Amazon 	Brazil – Rain Forest Pilot Program, Extractive Reserves Project	S	S
<ul style="list-style-type: none"> Institutional strengthening, environmental licensing, water quality monitoring and coastal zone management 	National Environmental Project (NEP II) (Approved FY 1500)		
<ul style="list-style-type: none"> Strengthen policy analysis, regulatory & implementation capacity of state environmental agencies in the Amazon 	Brazil – Rain Forest Pilot Program, Natural Resources Policy Project	S	S
<u>Other development agencies</u>			
UNDP- enabling activity	Brazil – Management of Biological Diversity in	N/A	N/A

Interamerican Development Bank (IDB)	Brazil Brazil – National Environmental Fund	N/A	N/A
German Technical Cooperation Agency (GTZ)	Brazil – Tripartite Protected Areas Management in Atlantic Forest of Minas Gerais State	N/A	N/A
German Development Bank (KfW)	Brazil – Protected Areas Management in Atlantic forest of Minas Gerais and Paraná	N/A	N/A

IP/DO Ratings: HS (Highly Satisfactory), S (Satisfactory), U (Unsatisfactory), HU (Highly Unsatisfactory)

The proposed GEF project is most closely associated with the PPG7 Pilot Program which is financed by G-7 donors and the Brazilian Government. The GEF project's objectives are complementary to PPG7 objectives which are to (i) strengthen Brazil's institutional framework and capacity to protect the Amazon; (ii) support protection of specific endangered ecosystems, in particular the Amazon region and Atlantic forests through indigenous reserves, extractive reserves, corridors, forest and floodplain management; (iii) strengthen the regulatory framework of the environmental sector at the state and municipal level; (iv) support environmentally sound development initiatives carried out by local communities; and (v) support strategic research and strengthening of key research centers. It is planned that three GEF project components will be jointly carried out by the project and the PPG7 program. These activities are (i) the creation and consolidation of PAs in the Amazon which are also supported by the Corridors project; (ii) the development of mechanisms to achieve financial sustainability of PAs, which could be co-financed by the Demonstration Projects and the Natural Resources Policy Project; (iii) monitoring and evaluation of biodiversity conservation which would be closely coordinated with the PPG7 AMA project.

Two GEF Pilot Phase projects—the National Biodiversity Project (PROBIO) and the Brazilian Biodiversity Fund (FUNBIO)—are also directly linked to the proposed GEF project. PROBIO is of national scope and has supported 5 priority setting assessments, a national biodiversity information network and 22 model demonstration projects spread all over Brazil. PROBIO financed the workshop that set conservation priorities in the Amazon Region. The ARPA project will work with those priorities to create and manage PAs in the Amazon region. One of the major endowment funds that the WB/GEF has supported is the FUNBIO fund in Brazil. This endowment was established in 1996 under the GEF Pilot Phase (\$20 million grant from GEF, \$10 million from other domestic and international partners). FUNBIO involves an innovative arrangement whereby release of GEF capital for the endowment is tied to mobilization of matching funds mainly from the private sector. FUNBIO will be directly linked to this project by providing an interim institutional home for a new PA Trust Fund. Lessons learned from FUNBIO have influenced project design (see below).

UNDP has provided extensive technical assistance to the GOB in a wide range of environment related projects. The most relevant to the present proposal is the project "Management of Biological Diversity in Brazil" (funded by the GEF as an Enabling Activity), which is supporting National Biological Diversity Commission (COBIO) coordination efforts within the MMA. COBIO has the charter to plan, monitor and evaluate actions related to the conservation and sustainable use of Brazilian biological diversity, especially PRONABIO program activities. One result of this project is the first recently published *Strategy and Action Plan*. The First National Report to the COP was published and has been used to prepare the ARPA project.

3. Lessons learned and reflected in proposed project design:

Lessons have been taken from a number of projects financed by the Bank and other institutions which have shared the goal of establishing protected areas and effective, sustainable management systems.

Strengthening conservation units. The recently closed National Environmental Project (NEP), financed the consolidation of 30 Brazilian conservation units (UCs). Lessons learned include the importance of

- (i) developing clear guidelines for the creation and management of UCs—this will be facilitated greatly by SNUC reforms;
- (ii) basic equipment and infrastructure improvements were necessary to support UCs management reforms;
- (iii) involving local stakeholders (civil society, municipal and state governments) in UC co-management is essential for efficient operation and to grow a conservation constituency—considerable GEF project resources will be devoted to these activities;
- (iv) financial problems are endemic and undercut objectives, hence adequate and sustainable financing must be assured—the GEF project will identify cost recovery/user fees/concessions and other financial mechanisms, require managing partners to fund match, create a trust fund to defray recurrent costs, and explore best practice solutions to address this issue;
- (v) training of involved staff from IBAMA to local co-managers of PAs is essential to upgrade performance and create a heightened awareness and sense of ownership among stakeholders—training will be emphasized in the ARPA institutional components.

Demarcation of Indigenous Lands in the Brazilian Amazon: The PPG7 project has been financing the establishment and demarcation of Indigenous Reserves since 1994, the target being 150 reserves (44,153,584 ha.). Demarcation and registration will be critical in the ARPA project as well. The key lessons learned and incorporated into the ARPA project are:

- (i) Constituency building is critical—with a strong constituency, it is possible to create many new areas in a short period of time;
- (ii) When modern participatory techniques are employed demarcation has a better chance of proceeding efficiently.
- (iii) Costs of land acquisition were not included under the project since indigenous lands right have priority over any other tenure however, this must be carefully assessed in the ARPA project;

Brazilian Biodiversity Fund (FUNBIO): The ARPA project seeks to develop long-term financing mechanisms for protected areas. The key lessons learned and incorporated into the ARPA project are:

- (i) a strong, active and responsible Board of directors;
- (ii) a Board that works with technical commissions which are small groups constituted by Board Members that are delegated specific tasks and become accountable for them.
- (iii) a project director that quickly responds to the Board's direction and presents key issues for decision making to the Board;
- (iv) a flexible financial structure with funds managed by an asset manager;

Other Lessons Learned. There is a body of experience with biodiversity projects within the Bank and among environmental practitioners that reconfirms the importance of:

- (i) 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;
- (ii) Increased participation by interested stakeholders and in particular local communities, NGOs and the private sector;
- (iii) Development of a strategic policy framework for biodiversity conservation;
- (iv) Need for financial mechanisms to fully cover operational costs; and
- (v) Decentralization of responsibilities from the federal to state and municipal environmental agencies.

The development of a strategic policy framework including adequate financial mechanisms, decentralization of responsibilities and a high degree of participation by stakeholders are all included in ARPA program.

The project will explore further both the successes and the shortcomings of the Indigenous Demarcation Project, PLANAFLORA and PRODEAGRO experience in creating and managing PAs and apply lessons learned to improve the current project design.

4. Indications of borrower commitment and ownership:

The Amazon forest of Brazil is recognized as part of the National Patrimony in the Constitution of Brazil (article 225) and a national consensus on the need to conserve the Amazon and other important biomes is gaining momentum. Commitment for the project is very high among all participating agencies and at all levels. The project was legitimized and gained political support at the highest levels when President Cardoso pledged to achieve the target of at least 10% strict conservation of all forest types in Brazil by the year 2000. The GEF project proposal supports Cardoso's pledge for the Amazonian biome, but it is expected that as experience is gained, additional protected areas will be created in other forest biomes. Cardoso's pledge is also echoed in a recent Congressional report on the Amazon forest that recommended the achievement of the 10% target by the year 2000. Although the target date has slipped owing to the global financial crisis and consequent austerity program, the government has created a significant number of new areas since the announcement enumerated in the table below.

PAs of strict conservation created in 1998-99				
Name	State	Decree	Number of Ha.	Biomes
P.N. do Viruá	RR	S/N - 29.04-98	227.011	Amazonia
P.N. Serra da Mocidade	RR	S/N - 29.04.98	350.960	Amazonia
P.N. Serra das Confusões	PI	S/N - 02/10/1998	502.411	Caatinga e Ecótono Cerrado/Caatinga
P.N. Pau Brasil	BA	S/N - 15/04/1999	11.538	Mata Atlântica
P.N. Descobrimento	BA	S/N - 15/04/1999	21.129	Mata Atlântica
P.N. Restinga de Jurubatiba	RJ	S/N - 29.04.98	14.860	Mata Atlântica
P.N. Cavernas do Peruaçu	MG	S/N - 21.09.99	56.800	Ecótono Cerrado/Caatinga
R.B. União	RJ	S/N - 22.04.98	3.126	Mata Atlântica
Área Total (ha)			1187.835	
PAs of strict conservation under consideration for creation				
Name	State	Decree	Number of ha. (estimate)	Biomes
P.N. Aponiã	RO	-	104.000	Amazônia
P.N. Capitari	RO	-	5.250	Amazônia

Project preparation has been guided by an inter-agency steering group composed of MMA, IBAMA, the Planning Ministry and WWF. In addition, it has developed a collaborative relationship with the Civil Society/NGO community which also strongly support the initiative. The project has been endorsed by the national GEF focal point at SEAIN as being consistent with Brazil's national conservation strategy and a top

national priority. The fact that the federal government has requested congress US\$18 million to the project (PAs in the Amazon region) for the next 4 years is also a strong sign of government commitment, particularly when compared with historical averages.

5. Value added of Bank support in this project:

The Bank possesses considerable experience in Brazil through the GEF Pilot Phase projects (FUNBIO and PROBIO), the PPG7 program for the Amazon region, the NEP I, and the state loans (Prodeagro and Planaflo), which address directly or indirectly biodiversity conservation and protected areas management. With the ARPA project presented here, the Bank will assist the government in developing a full program on protected areas management at a regional level (the Amazon biome). GEF funds under this proposal will complement and provide synergy to those already invested, by developing stronger links among these initiatives and bringing the lessons learned during the design and implementation phases. One strong aspect of the current proposal is the emphasis in developing long-term financial mechanisms for protected areas which has been a recurrent issue in NEP I, Prodeagro and Planaflo. The structure of the component on financial mechanisms is being set as a set of pilot projects addressing specific PAs. Once these pilots are tested and proven functional, the potential replication benefits of such approach to other parts of Brazil or to other GEF-financed initiatives are remarkable.

E: Issues Requiring Special Attention

1. Economic

The execution of this commitment will result in the effective protection of a large fraction of all important biodiversity on earth. The project is identified in the Multi-Year Plan and Government funding is assured owing to the importance of the initiative. Therefore, the importance and magnitude of the effort cannot be over-emphasized. Although most costs associated with the project are considered incremental, a burden-sharing approach to financing project costs has been adopted. The goal is to leverage GEF funds with co-financing to cover the remainder of identified incremental costs. The overall match is roughly at the 1:1 level. The incremental cost assessment is presented in Annex 3.

2. Financial

A number of financial issues require further analysis prior to CEO endorsement and Bank management approval. These include:

Confirmation of the financing plan and the incremental cost co-financing. MMA has confirmed that there is a strong commitment from the Federal Government (US\$18 million just for Amazon protected areas) and from the PPG7 (US\$10 million). State and Municipal governments have also expressed support for the project and willingness to participate by setting aside areas for conservation and financially. Specific agreements, reflected in budget plans, would be confirmed prior to CEO endorsement. In addition, WWF has committed to organize an international campaign to raise a minimum of US\$5 million for the proposed project. With the current project being endorsed by GEF council for program entry, additional funds could be sought towards the Protected Areas Trust Fund from private international and bilateral donors.

Costing of the 10 year program. The project preparation team is confident regarding costing of the Phase #1 project being presented to the GEF Council for Work Program entry. With respect to the costing of Phases 2 and 3, the preparation team has tried to estimate to the best of its ability the costs of reaching the 10% target of expanding and consolidating PAs in the Amazon Region. Additional studies are planned to further analyze the recurrent costs of managing PAs and related activities, in order to confirm the financial magnitude of the program over the 10 year period. This will include buffer zone programs.

Income generation. Potential sources of recurrent income that can be generated from long-term financial

mechanisms will also be explored in further detail. The preparation team is incorporating the experience of qualified Brazilian NGOs, scientific, academic and financial institutions for the design and implementation of financial instruments. This process will be strengthened with the participation of regional experts, through a planned workshop to be held in Ecuador in May, "Workshop on Financing National Parks and Protected Areas". During the workshop, relevant experiences from Brazil, Bolivia, Ecuador, and other countries which have protected area projects in implementation or preparation for the GEF, will be analyzed. It is expected that the workshop will help define the most promising financial mechanisms for specific regions, and lead to the formulation of a strategy and a specific work plan to develop revenue streams required to cover recurrent costs associated with PA management. This input will strongly improve design of Component 3.

TF design: Although in an early design phase, the Trust Fund for protected areas in the Amazon is critical for the success of the project. The design of this Trust Fund will be fully designed within the current existing FUNBIO fund before CEO endorsement. Although the Trust Fund won't solve the recurrent cost needs of all Amazon PAs, it can be used for critical PAs with low possibility to generate income (see above) and complementary to those that would be supported under the income generating activities planned under the project.

3. Technical

Most technical issues have been addressed during preparation. The principal remaining issue is the appropriate investment in buffer zone management needed to maintain protected areas. Technical discussions of the appropriate balance between community development and protection of biodiversity in core areas and the role of buffer zones will take place in the next few months and the outcome will be reflected in the final project document.

The final design of the dissemination strategy will also be finalized prior to CEO endorsement. The strategy is to seek to institutionalize dissemination and exchange of information and experiences between government agencies, NGOs and local community associations involved in the project, as well as make lessons available to the larger international community of practitioners/interested observers. The sharing of project challenges, successes and failures will add to the technical outputs and facilitate replication elsewhere.

4. Institutional

MMA and IBAMA have increased their capacity to manage and coordinate complex environmental projects with differing objectives (PPG7, NEP, etc.). MMA has a relatively small core staff, but it has shown that it can make good use of expert consultants and other institutions to achieve the level of expertise and quality required to implement projects. MMA and IBAMA have also acquired considerable expertise in budgeting, project accounting, procurement and coordination of external executing agencies, at all levels of government and private sector, and under the National Environment Project (NEP I), the MMA acquired considerable experience in administering a decentralized program of investments too. This experience will help the PCU/IBAMA/MMA meet the requirements of the project.

MMA currently administers a wide range of projects supported by local funds, the World Bank, the IDB, and other multilateral and bilateral agencies. Synergy among various externally funded programs will be assured by a newly formed Department of Institutional Relations and Agenda 21, attached to the Office of the Executive Secretary. This Department will ensure that all Programs under the Ministry are consistent with the Ministry's policy goals, and act to prevent duplication of effort and conflicts among programs.

During the next phases of preparation a strong emphasis will be given in further developing the institutional arrangements for the project including the identification of key partner for the first year, the institutional arrangements for the establishment of a Protected Areas Trust Fund and for the financial administration of funds that will not be allocated to the Trust Fund.

5. Social

With respect to the Bank’s Indigenous Peoples’ Policy, O.D. 4.15, any PAs under the project that is adjacent to indigenous lands will carry out an Indigenous Peoples Development Plan. Representatives of the indigenous population were present at the Macapa workshop which established priorities for conservation which is the document from which this proposal is based. Furthermore, the Institute for Social and Environmental studies (ISA) which has acted in defense of Indigenous Peoples was the main convener and organizer of the Macapa workshop and will continue to be a key reviewer of the project documentation. The different components have been designed with a strong social component where communities living around the areas will play an important role in defining the areas to be created, in the demarcation process and in the management of PAs. Also, although no resettlement will take place under the project, some populations may lose access to resources; therefore, a “process framework” will be developed with the GOB prior to effectiveness. On the other hand, these cases are expected to be very few, since whenever possible PAs will be created in areas with very small (if any) human populations in them. In addition, the income-generating activities envisaged in Component 3 will involve some of the communities. As a result of final preparation and appraisal, more detailed definitions of the social dimension of the project will be incorporated in the final version of the project document. This was not done until the date, because the areas where the project would intervene had not been identified.

6. Environmental

Environmental Category []A []B [X]C

The project components will not have any negative impacts on the environment. There will be low-impact activities for ecotourism development in some buffer zones. The project will not finance sustainable economic activities, but will provide technical assistance to local communities for the preparation of feasibility projects for such activities and support their efforts to access funding from the project or other sources. Environment and social safeguard guidelines will be developed to ensure that these activities do not harm ecosystem health or jeopardize conservation goals and cultural/intellectual property rights.

7. Participatory Approach

Since its inception the project has been framed as a collaborative effort among stakeholders. The WWF initiated the process, including important international and national NGOs in Brazilian briefings that prepared the ground for the creation of an Advisory Committee to oversee the elaboration of the GEF proposal. The Committee comprises the World Bank and principal Government ministry and NGO project sponsors, including MMA/IBAMA and the WWF. The Committee in turn created a Task force to elaborate the proposal, composed of MMA, IBAMA, the WWF, the World Bank and environmental specialists. Local groups and NGOs consulted during this initial organizing phase include Funatura, USAID, ISPN, the Nature Conservancy-TNC, the British council, Grupo de Trabalho da Amazonia-GTA, INESC, REde Brasil de Bancos Multilaterais, GTZ, PNUD, and Instituto Socio Ambiental-ISA.

The Federal Government sponsored a key social forum, the Macapa Workshop, to establish priority areas for Amazonian biodiversity conservation and to identify actions supporting regional sustainable development. The Workshop was attended by a cross section of community, NGO, indigenous, private sector, governmental and environmental specialist stakeholders. Workshop results underpin the ongoing PA selection process.

The project itself is also being framed as a highly collaborative and participatory exercise to ensure ownership of beneficiaries and stakeholders and facilitate efficient implementation. Participation of stakeholders is programmed in each of the five components as summarized below.

Component #1--Creation of PAs. Evaluation of local conditions require participatory social and environmental analyses. The process and its implications for local communities will be fully disseminated through a social communication campaign. Demarcation activities will include local and especially indigenous people and/or their representatives. The on-going process of updating information basis, including socioeconomic information will also rely on local participation.

Component #2--Consolidation of Existing PAs. Selection criterion for these PAs already include stakeholder participation and NGO activity in the candidate area. The partnership paradigm for this component will promote the involvement of local groups and NGOs in PA and buffer zone management and provide training as necessary. PA Management Councils will be formed (they are envisaged in the SNUC law) from local government and private stakeholders and the development of management plans and identification and implementation of any revenue generating activities during this phase will be participatory and the plans will be vetted by beneficiaries and those affected.

Component #3--Financial and Legal Sustainability. A workshop in Ecuador will look at successful mechanisms for financing parks. In addition to the Trust Fund, this component will delve into market-driven revenue generation instruments to support PA management. Plans will be developed to pilot instruments/mechanisms and these will involve local and indigenous community consultation to ensure they are feasible and demand driven. Also, a sub component will disseminate information on PA laws and regulations to affected populations and monitor closely for anomalies.

Component #4--Environment and Project Monitoring. While this component is more technical it will also involve collaboration at the technical level with SIMBIO, NMA, organizations specialized in monitoring. The results of monitoring, which will include project implementation progress as well as environmental monitoring, will be broadly disseminated.

Component #5--Project Coordination and Management. A National Coordinating Committee would work with public sector and CSO representatives to assure that guidelines are functional and being implemented properly and to generally monitor project progress. The results will also be widely available to interested parties.

8. Checklist of Bank Policies

a. Safeguard Policies (check applicable items):

	Policy	Risk of Non-Compliance (H, M, L)
	Environmental Assessment (OD 4.01)	
x	Natural Habitats (OP/BP/GP 4.04)	
	Forestry (OP 4.36)	
	Pest Management (OP 4.09)	
	Cultural Property (OPN 11.03)	
x	Indigenous Peoples (OD 4.15)	
x	Involuntary Resettlement (OP 4.30)	
	Safety of Dams (OP 4.37)	
	Projects on International Waterways (OP 7.50)	
	Projects in Disputed Areas (OP 7.60)	

b. Business Policies (check applicable items):

<input type="checkbox"/>	Financing of recurrent costs (<u>OMS 10.02</u>)
<input type="checkbox"/>	Cost sharing above country 3-yr average (<u>OP/BP/GP 6.30</u>)
<input type="checkbox"/>	Retroactive financing above normal limit (<u>OP/GP/BP 12.10</u>)
<input type="checkbox"/>	Financial management (<u>OP/BP 10.02</u>)
<input type="checkbox"/>	Involvement of NGO's (<u>GP 14.70</u>)
<input type="checkbox"/>	Other (provide necessary details)

c. Describe issue(s) involved, not already discussed above:

F: Sustainability and Risks

1. Sustainability:

The project will address the challenge of calculating PA and buffer zone recurrent costs and identifying/developing long-term financial vehicles to meet those obligations on a sustainable basis. Much of this work will be done during appraisal and Phase #1. Consultants will develop a schedule of recurrent costs over time associated with each PA that will take into account the areas unique characteristics (size, immediate risks, remoteness, etc.). Simultaneously, studies will be undertaken to identify revenue generating vehicles including analysis of current and best practice financial mechanisms based upon Brazilian and international experience. Specifically, cost recovery mechanisms, fees for services, and leasing arrangements will be investigated for each PA. At the same time, the potential for economically sustainable activities such as ecotourism will be evaluated. A third area, the Trust Fund initiative, will also be developed. The May 2000 workshop on "Financing Mechanisms for Protected Areas", will contribute importantly to this work. In the end, the project will have as priority objectives, the task of presenting realistic cost and revenue estimates to the Government and environmental community, the implementation of revenue generating activities, and assuring that the PAs are financially sustainable. The project also places a strong emphasis on training and capacity building of NGOs, local communities, State and Municipal Governments which will increase the sustainability of protected areas management in general.

2. Critical Risks: (reflecting assumptions in the fourth column of Annex 1)

Risk	Severity	Risk Minimization Measures
<i>From Outputs to Objectives</i>		
Creation of PAs		
1. Inadequate GOB support, esp. following elections	M	Project will be presented during Cardoso administration; social marketing/ dissemination will build conservation constituency; financial mechanisms minimize Federal cost and reduces PA burden
2. Difficulty in identifying/ prioritizing new PAs	N	PRONABIO workshop, studies, continual updating and evaluation of data bases by technical team will ensure optimization; detailed criterion for prioritization agreed
3. Difficulty in creating PAs from priority list owing to conflicts, bureaucratic impediments	M	Federal, state & municipal support forthcoming (see #1-2 above); most PAs on unclaimed Federal lands, many remote; SNUC guidelines will orient work;
4. Required funding not forthcoming for program, especially given GOB constraints	S	Cost to GOB will be minimized; international organizations will assist in trust fund capitalization; significant potential for cost recovery measures will be developed; non-governmental partners will have funding

		obligations; revenue generating activities will be identified through forthcoming workshop and detailed studies
5. Buffer program not feasible owing to political/financial considerations resulting in risk to PAs	S	Design and costing of buffer zone will be subject of intensive study to dimension the program; community development programs and alternative income generating activities will minimize conflicts and improve quality of live of communities; social marketing will build constituencies; financial mechanisms will need to defray costs;
Consolidation of PAs		
1. MMA/IBAMA managerial weakness prejudices implementation	S	Commitment to high profile project will ensure efficiency; experience with previous projects; technical assistance funding is available if needed; high level Council will be created to oversee and assist; decentralized management augmented by financial incentives, partnerships and constituency building will facilitate
2. PA management continues weak prejudicing implementation	M	Technical assistance and training programs will ensure that management plans can be developed and implemented; management partnerships/concessions will ensure that technically competent partners are selected; management information systems will be implemented to allow management/M&E
Development of Legal/Financial Mechanisms		
1. Trust Fund capitalization inadequate	S	WWF has committed to raise \$5m; FUNBIO experience demonstrates feasibility/will facilitate establishing and capitalizing fund; high profile project and social marketing/dis-semination will facilitate marketing campaign
2. Revenue generating activities inadequate	S	Workshop to identify feasible activities plus comprehensive feasibility studies and implementation funding will enhance chances of success; constituency building and local ownership will facilitate cost-recovery solutions
From Components to Outputs		
<i>From Components to Outputs</i>		
Creation of PAs		
1. Data inadequate for PA prioritization	N	Sufficient data should be available for informed judgements; technical teams with required expertise will be constantly updating data base and evaluating existing information sources; environmental audits will be conducted in candidate PAs
2. Conflicts slow PA creation	M	Financial compensation and incentives should mitigate; participatory approach will extend ownership and create a constituency; risk management and participatory training will be given PA management; plans for resolving land use conflicts will be prepared as part of PA preparatory work

3. Non-participatory approach undercuts ownership/efficiency	M	Operation Manuals will require participation from time PA becomes candidate; training in participatory methodologies will be given to PA managers; M&E will ensure through systematic and periodic monitoring that participatory paradigm is being followed in each PA;
Consolidation of PAs		
1. Community Development Plans not participatory/without ownership	M	Idem above. Plans will require community endorsement and this will be confirmed through M&E
2. Lack of interest in PA management partnerships by civil society	M	This has not been a problem elsewhere when PAs have been set up; marketing and financial incentives should ensure partnerships
Development of Legal/Financial Mechanisms		
1. Trust Fund fund raising inadequate; amount required underestimated	M	Detailed financial analysis of costs and revenue sources will be undertaken during project preparation and continue through each phase; remoteness of many PAs will reduce initial costs; each PA will be required to address this issue in its Plan and funding will be a management partner responsibility; international assistance to capitalize the trust fund will be forthcoming
2. Implementation of SNUC will be complicated/litigious	S	Project will pilot SNUC and funding and TA are available to identify impediments and develop solutions
Monitoring & Evaluation Program		
1. Environmental & project monitoring proves too complicated	N	IBAMA's SINBIO will greatly facilitate; technical assistance will be provided at all levels to facilitate M&E; collaborative agreements with NMA; elaboration of detailed Operations Manual for M&E
Project Coordination		
1. PCU incapable of managing complicated multi-state project, multi-partner program	S	Decentralized, participatory management paradigm should simplify management task; M&E will have strong, multi-disciplinary team; TA will be available at all levels for management; financial/legal mechanisms and incentives plus social marketing and constituency building expected to ease project implementation
Overall Risk Rating	S	Implementing multi-state environmental projects in the Amazon will challenge.

Risk Rating-H (High Risk), S (Substantial Risk), M (Modest Risk), N (Low Risk)

Annexes

- Annex 1:** Project Design Summary and Triggers for Next Phases
- Annex 2:** Detailed Project Description
- Annex 3:** Incremental Cost Analysis
- Annex 4:** STAP Roster Expert's Technical Evaluation
- Annex 5:** Selection process and List of Candidate Areas
- Annex 6:** List of Existing Protected Areas to be supported under the project
- Annex 7:** Legal and Institutional Framework for Protected Areas management in Brazil
- Annex 8:** Financial Data:
- 1) Financing plan for the first phase by financiers (4 years)
 - 2) Financing plan for the whole program (10 years)
 - 3) MMA financing plan and allocation to the current project
 - 4) Financial Resources spent in a representative sample of Amazon Protected Areas from 1995 to 1999.
 - 5) Estimated project costs by component and activities.

Maps

Annex 1: Project Design Summary and Triggers for Subsequent Phases

Sector-related CAS Objectives	Key Performance Indicators	Monitoring and evaluation	Critical Assumptions
<p>Promote rural/agricultural sustainable development, and protection of natural resources through the increase of protected areas with adequate on-site management to improve environmental quality.</p>	<ul style="list-style-type: none"> • Sustainable natural resources management in protected areas and buffer zones improve environment quality in the Amazon Region. • Increase of number of conservation and income generating projects in PAs and Buffer Zones contributes to the poverty alleviation goals of the WB/CAS. • A sustainable management system is being establish for the PAs system in the Brazilian Amazon Region. 	<ul style="list-style-type: none"> • Occasional Bank country reports on the environmental and biodiversity sectors. • Project Reports. • Environmental and natural resources management monitoring reports. • Government reports on the environmental and biodiversity. • Private sector reports on the environmental and biodiversity. 	<ul style="list-style-type: none"> • Environmental issues and CAS continues to be a priority for the GoB
Project Development Objectives	Key Performance Indicators	Monitoring and Evaluation	Critical Assumptions
<p>Expand and consolidate a System of PAs in the AR, to sustain the conservation of the biodiversity and contribute to its sustainable development; and promote integrated coordination of programs and projects.</p>	<ul style="list-style-type: none"> • 10 Million ha. including 20 New Protected Areas – PA of strict protection established and 12 existing PA consolidated. • Legislation approved and published in the Official Gazette. • Mechanisms of coordination between projects defined and functioning. 	<ul style="list-style-type: none"> • Maps of the new PAs; • Reports on the quantities (ha) of new areas of PA created and consolidated; • Project Completion report • GoB occasional Reports on the consolidation of existing PA. • Concession agreements for the management of PAs. 	<ul style="list-style-type: none"> • The federal, state and municipal governments commitment to acquired compromises is stable. • GoB continues to support the decentralization process

Outputs by component (Continued)	Key Performance Indicators	Monitoring and Evaluation	Critical Assumptions
<p>COMPONENT 1</p> <p>1. Creation of new PA</p> <p>2. On-the-ground demarcation and establishment of New PAs.</p> <p>3. On-going prioritization of new PAs.</p>	<p>1.1. Analysis of 100% of the 23 eco-regions completed and permanent definition mechanism/team established and functioning.</p> <p>1.2. A defined criterion for the biological and ecological validation, as well as for the selection of areas has been applied.</p> <p>1.3. Assessment of the local conditions for the implementation of 20 new PAs and elaboration of preliminary mosaics.</p> <p>1.4. Defined extension, limits, and management category in 20 new PAs; zones selected and mapped (maps with characterization of 20 new PAs in the scale 1:2,500,000).</p> <p>1.5. Land registration completed in 20 new PAs</p> <p>1.6. New 20 PAs with categories of management defined and rapid diagnostics conducted.</p> <p>1.7. Decrees drafted, approved and published in the Official Gazette for 20 PAs.</p> <p>2.1. Demarcation, signaling and access control and entry fees in 15 PAs;</p> <p>2.2. Complete infrastructure constructed in 5 new PAs;</p> <p>2.3. Ten Management Plans for new PAs elaborated on a priority basis and being implemented; and management councils available for 10 new PAs.</p> <p>2.4. Training plans and programs available and information material for population around 10 new PAs elaborated and distributed.</p> <p>3.1. Prioritization analysis completed, approved and priority action plans available for 10 new PAs. Prioritization evaluation completed.</p>	<ul style="list-style-type: none"> • Environmental assessment reports • Popular consultation reports • Land registration reports • Conflict resolution strategy/plan • Criteria applied to selected areas • Maps and diagnostics reports • Decrees of creation enacted. • Training Program • Procurement plan • Bidding processes completed and resources disbursed. • Semi-annual progress reports and monitoring (on-going evaluation). • Published Decrees in the Official Gazette; • Minutes of meetings with communities and institutions. • Case studies on local participation. • Evaluations • Audits 	<ul style="list-style-type: none"> • Political commitment by federal, state and municipal government continues. • PCU increases capacity to negotiate with states and municipal governments. • GoB is committed to the creation of new areas. • Presence of land use and land tenure conflicts is low; • Local communities Interest in participating in the process.

Project outputs by component (Continued)	Key Performance Indicators	Monitoring and Evaluation	Critical Assumptions
<p>COMPONENT 2</p> <p>1. PA Management Plans</p> <p>2. PA Demarcation, infrastructure and equipment</p> <p>3. PA Partnership or concession agreements, institutional coordination; and community development and participation.</p>	<p>1.1. Management plans approved and being implemented, including protection activities, in 12 PAs: 5 PAs in the State of Amazonas (E.E: Juami-Japurá and Anavilhanas; R.E: Juami-Japurá; P.N: Jaú and R.B: Uatumã); 2 in the State of Pará (R.B: Rio Trombetas and Tapirapé); 3 in the State of Amapá (E.E: Maracá-Jipioca and Jari and R.B. Lago Piratuba); and 2 in the State of Roraima (E.E: Niquiá and P.N: Serra da Mocidades)</p> <p>2.1 Demarcation completed, infrastructure constructed or improved and equipment acquired and in operation in 12 selected existing PAs</p> <p>3.1. Partnership and/or concession agreements with organizations from the private sector signed and being implemented in 12 existing PAs.</p> <p>3.2. Management needs assesses and report available, and improved management system designed and being implemented. Management system supports all target PAs.</p> <p>3.3. Institutional mapping completed in 12 PAs and a participatory institutional coordination strategy has been designed and is being implemented; report available.</p> <p>3.4. Community development plans have been elaborated, approved and presented to State and Municipal governments in 10 new PAs and in 12 selected existing PAs.</p> <p>3.5. Evaluations verify that local participation and approval of development plans. Management Councils have been established in 10 new PAs and in 12 selected existing PAs.</p>	<ul style="list-style-type: none"> • Management Plans • Demarcation reports • Procurement Plan • Bidding carried out, resources disbursed. • Semi-annual progress reports and monitoring (evaluation in progress). • Field verification • Local population, schools and grass root organizations reports and surveys. • Case studies about community participation. • State and municipal proposals submitted for approval for participation in the project. • Minutes of meetings with communities • Partnership and/or concession agreements. • Community development plans. • Disbursement and financial reports • Biodiversity Monitoring Reports and maps • Audits 	<ul style="list-style-type: none"> • Land use conflict decreases as a result of active negotiations and the availability of conflict-solving plans for land tenure and land use conflicts. • GoB continues to support decentralization. • Effective mechanisms for direct resources transfer to PAs are available; • There is response from the states and the municipalities to the project. • There is interest in local communities to develop community development plans.

Project outputs by component (Continued)	Key Performance Indicators	Monitoring and Evaluation	Critical Assumptions
<p>COMPONENT 3</p> <p>1. Capitalized and operational Trust Fund</p> <p>2. Pilot income/revenue generating mechanisms and projects</p> <p>3. Law awareness and improved legal framework</p>	<p>1.1. Capitalization of Trust fund reached US\$ 20 million by the end of the project.</p> <p>1.2. Trust fund for PAs is managed by a FUNBIO sub account and according to operations manual.</p> <p>1.3. Trust fund Board semi-annual meetings take place regularly</p> <p>2.1. Study to identify innovative income generation mechanism completed and mechanisms defined in a strategy.</p> <p>2.2. Design and implementation of 10 pilot projects for sustainable financial management, in partnership, of 5 existing Federal PAs and 5 new federal PAs. Ten implementation-concession agreements signed and being implemented.</p> <p>2.3. Process to generate financial sustainability initiated in 10 new PAs and 12 existing PAs of indirect use.</p> <p>3.1. Legal gap analysis completed and Law Workshops implemented at State and PA level.</p>	<ul style="list-style-type: none"> • Trust fund agreement with FUNBIO • Financial sustainability plans • FUNBIO and Trust Fund Board Reports • Trust Fund Operations Manual • Register of companies and entities interested in participation, prepared. • FUNBIO disbursements • Trust fund donor reports • Case studies on new financial mechanisms for sustainability. • Report on Income Generating mechanisms • Income generating project documents and implementation agreements • Training reports • Reports on legal gaps and application of laws • Semi-annual progress and monitoring reports; • Reports on institutional and public consultation • Field validation. • Audit reports • Procurement Plan 	<ul style="list-style-type: none"> • Partners develop communication means and institutional capacity. • New financing mechanisms are less bureaucratic and legally viable. • SNUC Law is passed, approved and published in the Official Gazette • Interest from private sector, local communities and NGOs in participating. • Stable trained staff strengthens institutional capacity

Project outputs by component (Continued)	Key Performance Indicators	Monitoring and Evaluation	Critical Assumptions
<p>COMPONENT 4</p> <p>1. Establishment of a biodiversity M&E System at PA and regional levels; and establishment of a M&E System for the project components</p>	<p>1.1. equipment and software acquired, installed and operating</p> <p>1.2. Study to design the BM&E system completed. Indicators for environmental monitoring identified and selected; and environmental monitoring in selected areas under implementation.</p> <p>1.3. Information resulting from M&E supports decision-making and is incorporated into planning and programming. Database and documents available.</p> <p>1.4. Detailed environmental monitoring in 5 existing Federal PAs; and general environmental monitoring in existing 25 Federal PAs. Information available</p> <p>1.5. Monitoring and evaluation system for projects components in place. Quarterly reports available</p> <p>1.6. Staff training complete and collaboration agreements and reports available.</p> <p>1.7. System evaluation completed</p>	<ul style="list-style-type: none"> • Study report • Document with indicators selected and accepted by involved parties. • Environmental monitoring reports • Semi-annual progress and monitoring reports (evaluation in process); • Reports on information dissemination results; Database. • Procurement Plan • Biodiversity Monitoring reports • IBAMA Project Progress Reports • Evaluation report 	<ul style="list-style-type: none"> • GOB continues to support M&E of ecosystems and environment conditions • Project executing agencies IBANA and Partners prioritize information updating and the incorporation of accurate reliable data into planning and programming; and coordinate actions.

Project Components and Subcomponents Inputs (budget for each component)	Monitoring and Evaluation	Critical Assumptions
<p>COMPONENT 5</p> <p>1. Establishment of a Project Coordination and Management Unit.</p>	<p>1.1. Board meetings take place in a semi-annual basis</p> <p>1.2. PCU plans and programs are reviewed and approved timely. Documents available.</p> <p>1.3. PCU disbursements occur timely</p> <p>1.4. Staff appointed and trained according to Procurement plan; and staff is stable.</p> <p>1.5. PCU equipped according to procurement plan.</p> <p>1.6. PCU reports regularly</p> <p>1.7 Audits have been completed</p>	<ul style="list-style-type: none"> • Consultation with partner organizations • Semi-annual progress reports. • Board reports and minutes of meetings • Financial reports. • Project monitoring reports; • Audit documents. • Procurement Plan • Donors reports
	<ul style="list-style-type: none"> • Government resources annually allocated. • Timely donor disbursements. • PCU develops effective and result oriented management approach. 	

Project Components and Subcomponents Inputs (budget for each component)	Monitoring and Evaluation	Critical Assumptions
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<p>Component 1: Creation and Establishment of New PAs 10,500.00</p> <p>I. Investment Costs</p> <p style="padding-left: 20px;">A. PA Creation of new PAs 1,295.00</p> <p style="padding-left: 20px;">B. Ongoing demarcation and establishment of new PAs 7,200.00</p> <p style="padding-left: 20px;">C. On-going prioritization process 430.00</p> <p>II. Operating Costs</p> <p style="padding-left: 20px;">D. Operating costs 1,575.00</p> <p>Component 2: Consolidation of Selected Existing PAs 6,500.00</p> <p>I. Investment Costs</p> <p style="padding-left: 20px;">A. Consolidation of existing PAs 5,705.00</p> <p>II. Recurrent Costs</p> <p style="padding-left: 20px;">A. Operating costs 795.00</p> <p>Component 3: Financial & Legal Mechanisms for PAs 10,000.00</p> <p>I. Investment Costs</p> <p style="padding-left: 20px;">A. Establishment of the Trust Fund 7,100.00</p> <p style="padding-left: 20px;">B. Establishment/development revenue-generation instruments 1,350.00</p> <p style="padding-left: 20px;">C. Concession for establishment revenue generating projects 25.00</p> <p style="padding-left: 20px;">D. Development of law awareness and legal framework 250.00</p> <p>II. Recurrent Costs</p> <p style="padding-left: 20px;">A. Operating costs 1,500.00</p> <p>Component 4: Biodiversity Monitoring and Evaluation 2,000.00</p> <p>I. Investment Costs</p> <p style="padding-left: 20px;">A. Biodiversity monitoring and evaluation (BM&E) 1,700.00</p> <p>II. Recurrent Costs</p> <p style="padding-left: 20px;">A. Operating costs 300.00</p> <p>Component 5: Project Coordination and Management 1,000.00</p> <p>I. Investment Costs</p> <p style="padding-left: 20px;">A. Establishment of the Project Coordination Unit (PCU) 1,000.00</p> <p>II. Recurrent Costs</p> <p style="padding-left: 20px;">A. Operating costs 0.00</p> <p>TOTAL (investment and recurrent costs, incl. contingencies) 30,000.00</p>	<ul style="list-style-type: none"> • Procurement Plan • Financial and Disbursement reports • Mid-term review • Project Operation Manual • Audits 	<ul style="list-style-type: none"> • GoB continues to support decentralization of financial resources. • SERNAP and Stakeholders comply with their counterpart financial obligations. • Institutions collect and disclose financial information timely and accurately, in a transparent manner.
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Annex 1a: Long-term Program Design And Triggers for Subsequent Financing (*Phase included in this Project)

Project Phases	Phase I (2000-2003)*	Phase II (2004-2006)	Phase III (2007-2009)
Objectives	<ul style="list-style-type: none"> - Establish 20 new protected areas (PAs) under strict protection in the Amazon region of Brazil; - Consolidate the management of 12 existing PAs; - Develop legal, financial and institutional vehicles to ensure sustainability of new and existing PAs; - Improve the quality and reliability of information by developing an environmental monitoring and evaluation protocol and test it in 5 PAs. 	<ul style="list-style-type: none"> - Establish 30 new protected areas in the Brazilian Amazon; - Consolidate management of 15 existing PAs; - Implementation of market based and cost recovery mechanisms to finance existing PAs, - Identify low environmental impact community-based income generating activities in established PAs; - Consolidate the coordination process among the projects implemented by MMA. 	<ul style="list-style-type: none"> - Consolidate PAs created in Phase I and II; - Evaluate results from implementation of legal framework (SNUC) and financial mechanisms; - Consolidate lessons learned on legal, financial and institutional .
Expected Results	<ol style="list-style-type: none"> 1. All 23 ecoregions in the Brazilian Amazon analyzed for identification of new PAs; 2. 12 existing PAs physically consolidated; 3. Approximately 20 new PAs created and 5 new PAs consolidated; 4. Fiduciary Fund for the financial sustainability of PAs with US\$ 15 million created; 5. 10 pilot projects for maintenance of PAs implemented; 6. System to maintain existing PAs improved; 7. Methodology for environmental monitoring defined; 8. Environmental monitoring implemented for 5 specific PAs; 9. Monitoring via remote sensing implemented for 25 PAs; 10. Coordination Committee, Management Unit and Monitoring and Evaluation Unit created and operational. 	<ol style="list-style-type: none"> 1. 15 existing PAs physically consolidated; 2. Approximately 30 new PAs created and 20 new PAs consolidated; 3. Resources for the Fiduciary Fund increased by US\$ 10 million; 4. Mechanisms and procedures for the financial sustainability of 40 PAs established and operational; 5. Environmental monitoring implemented for 10 specific PAs; 6. Monitoring via remote sensing extended to 45 PAs; 	<ol style="list-style-type: none"> 1. 20 new PAs consolidated; 2. Resources for the Fiduciary Fund increased by US\$ 10 million; 3. Mechanisms and procedures for the financial sustainability of 80 PAs established and operational; 4. Environmental monitoring implemented for 15 specific PAs; 5. Monitoring via remote sensing implemented for 80 PAs; 6. Final Project evaluation completed.

<p>Steps to reach the subsequent financing phase (trigger)</p>	<p>a) select appropriate areas for the creation of 50 new PAs, including state and municipal areas; b) conclude the land demarcation process; prepare management plans and complete land-tenure surveys for 9 PAs; acquire machinery and equipment for improving the infrastructure of communities located in buffer areas around 14 PAs; c) finance the process to consolidate approximately 4 PAs at the state level; d) carry out land-tenure surveys for 15 new PAs; land demarcation for 15 new PAs; management plans for 10 new PAs and acquisition of machinery and equipment for the infrastructure and support of communities in buffer areas around 5 new PAs; e) initiate operation of the Fiduciary Fund to support the financial sustainability of the PAs; f) implement innovative experiences of financial sustainability in 10 PAs; g) improve process for maintenance of 25 existing PAs; h) prepare specific reports for the environmental monitoring of 5 PAs and a general one for 25 PAs; i) prepare documents for planning, monitoring and evaluation of the PAs; and j) conclude final evaluation of Phase I.</p>	<p>a) review selected areas until reaching the target of 25 million ha of newly protected area; b) conclude the land demarcation process, the land-tenure surveys and the acquisition of machinery and equipment for improving the infrastructure of communities in buffer areas around 16 existing PAs; c) finance the process to consolidate 5 more state/municipal PAs; d) carry out land-tenure surveys for 30 new PAs; complete land demarcation for 15 new PAs; prepare management plans for 25 new PAs and acquire machinery and equipment for the infrastructure of communities in buffer areas around 25 new PAs; e) complete operational system for Fiduciary Fund to support the financial sustainability of PAs; f) extend the implementation of innovative experiences of financial sustentability to 30 more PAs; g) prepare specific reports for the environmental monitoring of 10 PAs and a general one for 45 PAs; h) prepare documents for planning, monitoring and evaluation of the PAs; and i) conclude final evaluation for Phase II.</p>	<p>a) finance the process to consolidate 5 more state/municipal PAs; b) carry land demarcation of 15 new PAs; prepare management plans for 15 new PAs and acquire machinery and equipment for improving the infrastructure of communities in buffer areas around 15 new PAs; c) evaluate the impacts of the Fiduciary Fund for the financial sustainability of PAs; d) extend the implementation of innovative experiences of financial sustainability to 40 more PAs; e) prepare specific reports for the environmental monitoring of 15 PAs and a general one for 80 PAs; f) prepare documents for planning, monitoring and evaluation of the PAs; and g) finalize contract for the project's final evaluation.</p>
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ANNEX 2: DETAILED PROJECT DESCRIPTION

Component 1: Creation of New Protected Areas (US\$ 23.4M/GEF US\$ 10.5M).

This component will support the creation of new use *protected areas of strict conservation use (PA)* in high biodiversity areas of the Brazilian Amazon. The selection of these priority PAs was based on priority setting PRONABIO Amazon Workshop, WWF-Brazil studies, and on Block-B supported analysis and consultations. The selection process is described in detail in Annex 3. Participating grass-root organizations, indigenous people and NGOs were actively involved in the PRONABIO Workshop and their concerns are reflected in the various documents resulting from the Workshop. The priority zones and their social importance are described in Annex 3.

The program will target over the next 4 years, 40% (12 million ha.) of the 25 million program goal. The remaining phases of the program (Phases #2 and #3 of 3 years each) will target the remaining 60% (13 million ha). The preparation team assessed whether these goals are realistic and came to the conclusion that the government has the commitment and experience to achieve this goal (see Section on Government Commitment).

Within this component, the following core activities will be financed.

1) Creation of New PAs.

This component will provide technical assistance to support the conversion of potential PAs within selected core zones (Annex 3) into PAs of strict conservation. The proposed project takes as a central premise that the success of demarcation and protection of PAs depends upon direct involvement and participation of the local population. Also, there will be no conflict with Indian lands. Brazilian legislation requires consultation and participation of local and indigenous communities in regularization and other activities affecting their lands. And according to Brazilian legislation, indigenous territories and their demarcation are accorded priority over any other land claim or proposed government land use designation. Hence, none of the areas proposed for strict conservation cannot overlap with indigenous lands. The project will constantly update its information about indigenous populations and will avoid overlaps when creating new areas. The process for the selection of PAs will be also be a multidisciplinary effort informed by the active participation of local communities thereby ensuring the viability of new PAs. The selection exercise will be lead by the project coordination team, MMA, IBAMA, and key potential project partners. Teams composed of anthropologists, environmental specialists and local inhabitants will support this effort.

The following steps will be undertaken to address the social, legal, administrative and other technical aspects associated with establishing PAs prior to their legal approval and publication in the Official Gazette

- 1) Completion of preliminary participatory environmental assessments with involvement of the regional and local populations and governments;
- 2) Social communication and local consultation;
- 3) Active participation/consultation with the institutions involved in human settlements, land use planning, and natural resources management, including CONAMA, Environmental State Councils and the municipalities;
- 4) Completion of cadastral surveys, mapping, topographic surveys, and financial assessments;
- 5) Analysis and definition of management categories, delimitation and control of PAs;
- 6) Preparation of plans for resolving land use conflicts, concession agreements, land acquisition, and compensation;
- 7) Preparation of draft decrees for PA creation.

2) On-the-ground demarcation and establishment of new PAs

The project will undertake a series of actions to complete the on-the-ground establishment of a new PAs zones and integrate it into the regional PA system. In the event that selected PAs are adjacent to indigenous territories intensive negotiations will be carried out with FUNAI (the GOB's bureau for indigenous affairs) and local indigenous organizations to define timetables, methods of demarcation, and local preferences. Results of these consultations would be communicated to the Project Coordination Unit (as in Component 5) and will design contracts or agreements governing the establishment of the PA, including those with FUNAI. During the execution of physical demarcation, representatives of the local/indigenous populations will participate in supervising the work. Indigenous representatives will check that the surveyed boundaries are consistent with the local understanding of the population's land area. Indigenous peoples, if they prefer, can also participate more actively in the demarcation activities, and sometimes may choose to carry out a significant portion of the work themselves and/or with support by non governmental organizations.

A set of sub-activities, similar to those defined for Component 2, will be designed to further support the process of establishing and consolidating new PAs. These will include

- 1) Implementation strategies to resolve land use conflicts;
- 2) Negotiation of concession agreements (as in Component 2) including work and financial plans;
- 3) Where appropriate, contingency plans for land acquisition, and compensation;
- 4) Elaboration and implementation of PA management plans;
- 5) Construction of infrastructure and acquisition of equipment;
- 6) Training and extension work.

In order to carry out multiple activities in state programs that are functioning at different stages it will be necessary to develop a tightly programmed public consultation process in all project phases. This will involve the following activities

- (i) technical consultations to define and establish the viability of the new PAs within the selected core zones and to define inventory needs,
- (ii) consultations with user groups to determine levels of demand for potential revenue-generating activities in new PAs; and
- (iii) additional consultations with local communities in order to ensure that their interests are represented, to incorporate local/indigenous knowledge of natural products, and to clarify issues regarding possible intellectual and cultural property rights.

The project will ensure that the State and the Municipal governments participate in the different stages of the selection and creation of new PAs. This include decentralized activities such as (a) participation in the consultation and technical process for the selection and the establishment of the new PAs; (b) participation in the different activities within the process of the drafting and approval of the Decrees to create the new PAs; (c) direct execution of the activities involved in the establishment and consolidation of PAs, including the allocation of resources to selected States and Municipalities; (d) development and establishment of financial mechanisms to compensate for the loss of areas with potential for agricultural production; (e) the signature of concession agreements with MMA/IBAMA and private sector organizations for the establishment and management of new PAs; (f) participation in the design, development and implementation of community development plans and projects based on sustainable management of natural resources at State and municipal levels to benefit communities in and around PAs; and (g) design and implementation of environmental monitoring and evaluation systems targeting PAs ant state and Municipal levels, and to evaluate the projects' outputs.

3) On-going process of prioritization

The identification and prioritization of PAs to be further created and regularized under the project will be an on-going process. There are 23 different ecoregions in the Brazilian Amazon that cover an area of 410 million hectares (4,105,401 km²). This is a vast expanse that biologists and social scientists are just beginning to know. During the 10 year program period, new scientific, socio-economic and land use information can provide new information bearing upon PA creation. For this reason, a team of technical

staff in the field of remote sensing, GIS and regional planning is crucial to the success of the project. This team would consolidate key information for the on-going identification and prioritization process. It will not generate new information, but will tap into various databases, such as RADAM Brazil, in order to make sound strategic choices regarding where to create new areas. The identification team would also provide an independent assessment of where to create new areas and ensure that new areas follow the highest biodiversity priorities and ecosystems representativity rather than being driven by other considerations.

This component will support

- 1) collecting information from different sources such as RADAM Brasil and keeping them up-dated in a project database;
- 2) prioritizing ecoregions and carrying out an on-going representativity analysis as new information becomes available;
- 3) analyzing the biological importance and ecosystems representativity of new areas for conservation identified by the State Ecological and Economic Zoning (ZEE);
- 4) recommending new areas to be created following the following scheme – i) Priority 1: areas recommended by PRONABIO and the ZEEs, ii) Priority 2: areas recommended by PRONABIO, but not identified in the ZEEs; iii) Priority 3: areas identified by the complementary representativity analyses and by ZEEs; iv) Priority 4: areas recommended by the complementary representativity analyses;
- 5) designing mosaics of protected areas (PAs) to ensure ecosystem function maintenance;
- 6) incorporating the results of consultation with local and indigenous organizations, anthropological reports, and inputs resulting from the participation of local people in the proposed polygons;
- 7) sending regularly to the Project Coordinating Commission lists of proposed new areas;
- 8) evaluating the effectiveness of the methodology and incorporating changes to improve it.

Outputs

The component outputs include:

- (a) Establishment of 20 agreed-upon new protected areas,
- (b) Development of 10 participatory Management Plans for new PAs elaborated and being implemented,
- (c) Backup studies and analyses (documents), including polygon maps, etc.
- (d) Completion of the on-the-ground establishment activities for 20 PAs including basic infrastructure, equipment, staffing and demarcation.

Component 2. Consolidation of Selected Existing Protected Areas (\$15.2M/GEF \$ 6.5M)

The main objective of the component would be to promote the consolidation of existing protected areas in the Amazon over the short-term until sustainability mechanisms are developed and implemented. Twelve PAs have been included in the first phase project, comprising a total of 5.8 million hectares. The criteria for the selection of targeted PAs included parameters such as:

- 1) Global and regional biodiversity importance;
- 2) Representativity within the system;
- 3) Biodiversity threats;
- 4) Geographical distribution/location and complementarity with other PAs;
- 5) Level of efficiency (objective completion: biodiversity protection, research, and education and recreation);
- 6) Level of participation of the public and private sectors (NGOs and other private enterprises);
- 7) The experience of NGOs in community/rural development;
- 8) Level of local participation and strategies to involve local populations interests and needs;
- 9) Opportunity to implement community-based low-environmental-impact economic activities; 10) Absence of conflict with indigenous territories;
- 11) Financial situation.

After an initial selection, the selected PAs have undergone an additional screening as indicated in the table below.

Groups	Grouping Criteria for PAs				
	Infrastructure and Equipment	Administration and Staff	Protection Activities	Research Activities	Management Plan (MP) / Planning Instruments
1	Poor	Limited (to a Chief of Area)	Sporadic (external)	Sporadic	Not available
2	Limited	Limited staff	Limited	Limited	Limited planning instruments available
3	Basic/good	Basic/sufficient	Basic/sufficient	Basic/sufficient	MP available

The final selection process resulted in the PAs presented in the Table below. A full description of each PA to be supported under Phase #1 is presented in Annex 4.

Selected PA	Category	State	Number of ha. (000)	Establishment date and Decree No.	Management Plan	Staff	Target Group
Juami-Japurá	EE	AM	573	03.06.1985 91.307	No	1	1
Juami-Japurá	ER	AM	265	21.07.1983 88.542	No	1	1
Anavilhanas	EE	AM	350	02.06.1981 86.061	MP (1998)	6	3
Jaú	NP	AM	2.272	24.09.1980 85.150	MP (1997)	4	3
Uatumã	BR	AM	560	06.06.1990 99.277	MP (1997)	8	3
Rio Trombetas	BR	PA	385	21.09.1979 84.018	PAE* (1995)	17	3
Tapirapé	BR	PA	103	05.05.1989 97.719	PAE (1995)	2	2
Lago Piratuba	BR	AP	395	16.07.1980 84.914	No	10	2
Maracá-Jipioca	SE	AP	72	02.06.1981 86.061	No	7	2
Jari	EE	AP	157	12.04.1982 87.092	No	4	2
Serra da Mocidade	NP	RR	351	29.04.1998 s/nº	No	1	1
Niquiá	EE	RR	287	03.06.1985 91.306	No	1	1

*Emergency Action Plan

The component will finance the following critical on-the-ground activities in the selected PAs:

- 1) Infrastructure and Equipment in 12 PAs. The project will provide funding to implement administration centers, interpretation centers, environmental education campaigns, guard lodgings, equipment and transportation, telecommunications, and recurrent costs for maintenance of buildings and equipment.
- 2) Demarcation and Delimitation in 9 PAs. The project will finance baseline land cadaster studies, surveys, mapping and demarcation of 8 selected PAs. This activity will also finance technical assistance to support workshops and seminars to disseminate the contents and applicability of PA laws and regulations

affecting PAs and to promote conflict resolution related to boundary demarcation and land use in the areas with potential conflicts. Five PA's would require land acquisition and purchase would be with Government counterparts funds.

3) Staff Training and Development of Management Tools. Under this activity, the project will diagnose *in situ* managerial systems for PAs including administrative and financial management and develop and implement programs to improve performance. The project would provide technical assistance to assess existing PA management mechanisms, and develop a managerial review system to support decision-making and to improve planning, programming, monitoring, evaluation and reporting at PA and central levels. The management system would also include a mechanism to ensure appropriate information flow between IBAMA, different stakeholders and civil society. This component will also fund training of staff and partners involved in PA management by developing training packages to cover key areas such as (a) PA management (participatory planning and programming), (b) conflict management and resolution, (c) public information management, (d) participatory monitoring & evaluation, (e) gender and ethnicity, (f) fund raising, (g) accounting, and (h) transparency, accountability and reporting. The project will develop the appropriate indicators to ensure a balanced participation of men and women in training events.

4) Development of Management Plans (MPs) for 9 PAs. The project proposes to support the development of 9 PA Management Plans (MP), to be prepared in a collaborative manner. The MPs would include the long-term mission for the protected areas, where the fundamental philosophical approach is articulated and agreed upon. The experience and lessons learned from PNMA in regards to PA management and the development of management plans will be incorporated to this component.

The plans would be adjusted periodically (every 5 years) as the need arises. Using additional information from MMA/IBAMA Remote Sensing Center/SIMBIO, scientific institutions and NGOs with experience in biological diversity, the MP would define clear objectives and activities, zoning, recommendations for sustainable use of natural resources, and control schemes. The MPs would take into account elements such as socioeconomic conditions, anthropology, archaeology, landscape, environmental education, tourism potential, and land ownership. The MPs would also include as an objective the implementation of mechanisms to incorporate data from existing biodiversity monitoring systems to support planning and programming.

The MPs would serve as the master tool for planning and programming PA management, and would also serve as instruments to validate PA categorization, boundaries, and for identifying possible overlapping coverage. The lessons learned from the implementation of Phase #1 MPs would guide the standardization of criteria used to create new areas and for matching existing areas with international classifications. The experience of elaboration and implementation of MPs in the 9 selected areas would support local and national political and institutional reforms required to the establish buffer zones around PAs. This, in turn, could increase the participation of local communities, private investors and other local, regional or national actors in PA and buffer zone management. The MP would also strengthen mechanisms for better communications and interinstitutional networking needed to promote coordinated conservation initiatives at all levels.

5) Development of partnerships to involve NGOs and other organizations of the private sector in PA management. The project would make full use of the considerable capacity of Brazilian CBOs, NGOs, scientific and academic institutions and the civil society in conservation. Civil society expertise will be especially important the areas such as PA management, natural resources management, rural development, community organization, technology transfer, monitoring and evaluation, and environmental education. This collaboration would be operationalized through partnership and concession agreements as one way to increase the number of qualified stakeholders and to facilitate effective participatory management. Hence, the project would provide technical assistance to assess the viability and to develop appropriate partnership mechanisms (e.g. concessions, leasing) for the management of PAs. This participatory approach would contribute to the strengthening of the on-going process of decentralization promoted by the MMA/IBAMA

and it would reduce the government's financial burden by enabling PA management partners to mobilize private sector funding (e.g. matching funds for PA management).

Concession agreements will target two specific areas: (a) PA administration and management and (b) implementation of revenue generating activities. Both will contribute to strengthening local participation and to support long term PA financial sustainability. In order to minimize implementation bottlenecks resulting from partnership agreements, the project will provide technical assistance to carry out *institutional assessments* of potential partners prior to the establishment of partnerships to identify institutional strengths and weakness, including gender gaps. These assessments will also focus on human resources, financial, and managerial capacity against established criterion. Partnership criterion will

- (a) established presence in the local area and acceptance by local population,
- (b) requirements of the MPs,
- (c) proven track record of successful conservation/ sustainable development work,
- (d) availability of management system,
- (e) capacity to mediate and resolve conflicts,
- (f) capacity to mobilize counterpart funding; and
- (g) experience with participatory processes and use of balanced gender approaches.

The establishment and development of participatory PA management will also serve as an instrument to promote an active participation of women in the process.

6) Increase CBOs, community organizations and participatory processes in PA and buffer zone management. It has been established that the sustainability of PAs depends heavily on the participation and effective involvement of local communities and civil society. It has also been clarified that local communities have a unique and mutual relationship with protected areas. Consequently, the project would aim to increase local participation by implementing a series of workshops to develop local ownership of the project, to make communities aware of the income generating potential of protected areas; and by promoting the sustainable use of natural resources in buffer zones through income-generating activities such as tourism, the sustainable use of genetic resources, and environmental services. It is expected that this approach will ensure a clearer understanding of the benefits for local communities resulting from established protected areas and consequently increase participation levels and ownership. One clear project objective is that by participating in PA management, local communities could improve their living standards.

The selection of participating communities would be done jointly by the Director of the area concerned, the Local Environmental Councils and the communities. Criteria for the selection of communities would be worked out under the project. The component would also provide information and technical assistance to the selected communities to enable them to prepare project related community pre-investment proposals and/or participatory community development plans. Development plans for local indigenous populations and settlers in key protected areas and buffer zones aim at improving living conditions, establishing sustainable uses for biodiversity, and incorporating sustainable activities that benefit local inhabitants. The project would ensure that gender, ethnic (original indigenous people and settlers) and poverty alleviation elements are considered within the above mentioned criteria for community selection and in community development plans.

Local Consultative PA Management Councils, as envisaged in the SNUC Law (Art. 29), will be key to enabling communication with local organizations and the development of positive relationships among PA management and stakeholders. Actions would be taken to strengthen the Councils' role in, for example, monitoring management actions that affect local populations and detecting possible environmental impacts of activities in the PA. New Councils will be established when local conditions warrant it. Existing Councils would be strengthened, not only by training (as indicated in the previous section), but also through the provision of improved meeting facilities and resources to support regular activities. Work plans and programs will be developed by Councils at the PA level and incorporated into the PA Management Plan.

Other related activities that will ensure enhanced local participation include

- 1) Planning and programming control and protection activities with participation of stake holders and local population.
- 2) Promoting enhancement of research activities and developing linkages between research and small economic activities at community level.
- 3) Workshops and seminars to increase information dissemination and exchange, and environmental education and public relations campaigns covering the 12 target PAs and their buffer zones. These would aim to raise the environmental awareness of decision-makers, local governments and civil society in and around protected areas.
- 4) Introduction of revenue sharing mechanisms from such sources as income from user fees.
- 5) Decreasing PA operating costs by minimizing impact of land tenure and land use conflicts in protected areas.

7) Implementation of revenue-generating mechanisms (defined in Component 3) in 12 PAs, at State and Municipal levels. The project will support, through the provision of technical assistance, the implementation of selected financial mechanism for revenue-generation at the PA level and mechanisms to allow more effective transfer of resources to PAs. The feasibility of wildlife production programs, ecotourism, biotechnology, and other income-generating mechanisms would also be evaluated under the activities in Component 3. In addition, a Trust Fund will be established to partially finance recurrent costs of PA management.

The component will extend priority emergency and preparatory actions, for Phase #2, to other selected existing PAs. The selection of these PAs will follow the selection process used for the first phase. The activities will include rapid environmental assessments and financial assessments in order to identify possible strategic and financing opportunities through FUNAI/FUNBIO/ IBAMA/ICRA/PPG7.

Outputs:

- (a) Nine approved PA Management Plans under implementation,
- (b) 12 PAs with basic infrastructure completed and equipped,
- (c) 9 PAs fully demarcated and delimited,
- (d) A management review system in place at IBAMA and at the target PAs,
- (e) PA partnerships and/or concession agreements signed and under implementation,
- (f) Increased and tangible inter-institutional coordination and community participation at the PA level,
- (g) Community development plans approved by state and municipal governments.

Component 3: Financial and Legal Sustainability of PAs (US\$ 15.0M/GEF US\$ 10.0M, Including US\$ 5.0M Trust Fund).

Given the current shortage of resources to manage the existing protected areas, it is still unlikely that there will be sufficient government resources to properly address the long-term needs of existing and new PAs. Particularly at a time of shrinking government and enhanced participation of the private sector and the civil society in Government affairs. To date, IBAMA has only 1 staff for each 27,560 ha. under its responsibility; yet throughout the country it has more than 174 conservation units for a total area of 35 M ha. This deployment of park guards is too low for the real need especially in areas that are under severe threat. In the Amazon Region, although many areas are still remote and under no significant threat, a significant portion of the existing PAs are requiring the presence of qualified staff and minimum resources to ensure proper PA management. Consequently, this component is a critical element to lay the basis for long-term financial sustainability of PAs in the Amazon Region, considering a realistic scenario where GEF and other donors financing will progressively decrease. This component would lay the basis for long term financial sustainability by identifying and implementing appropriate financial mechanisms to generate resources for protected area management recurrent costs.

The preparation team did a preliminary analysis of the recurrent cost needs to manage protected areas. The first Phase project will support the creation and consolidation of 32 PAs (20 newly created PAs under Component 1 and 12 existing PAs under component 2). Since detailed information on 20 of the PAs that will be created under Phase 1 is not available, a financial plan only for the 12 existing PAs under Phase 1 is currently been prepared. Funds to pay for PAs recurrent costs would come from two major sources: 1) interests from an endowment fund; and 2) income-generating activities (such as ecotourism or concessions). The recurrent costs of existing PAs in the Amazon was estimated at an average of US\$95,000 per Protected Area per year. Only 7 protected areas would be supported under the endowment fund. These PAs will be selected before appraisal. The remaining PAs with potential income-generating activities will be supported by financing projects to develop this potential.

The design of this component is laid out in the next section, however, this design will be revised before CEO endorsement. The design will incorporate the experience of qualified Brazilian NGOs, scientific, academic and financial institutions and with the participation of regional experts, as well as, specialists from The World Bank. A “Workshop on Financing National Parks and Protected Areas”, is being prepared for May 2000 to improve this component. During the workshop, relevant experiences from Brazil, Bolivia and Ecuador and other countries, which have protected area projects in preparation for the GEF, will be analyzed. It is expected that the workshop would help to define the most promising financial mechanisms for specific regions, and a strategy and a specific work plan to capture revenue streams to meet recurring costs of PAs management will be produced.

For the moment, the preparation team has agreed that the main activities of this component will include:

1) Establishment and development of a Trust Fund to support PAs in the Amazon Region.

The project will establish and develop a Trust Fund to provide long-term sustainable support to finance recurrent costs of protected area management and the implementation of revenue generating mechanisms/projects in selected PAs.

The options of where to house such a Trust Fund have been discussed during preparation and it was agreed that in the initial stages, the best option would be to establish as a sub account within FUNBIO (the Brazilian Biodiversity Fund is currently supported by GEF). The PA Trust Fund would be responsible for disbursing income generated by the fund and finance approved activities in the target PAs. Thus, the PA Fund will be responsible for making grants, mobilizing matching grants from grant recipients, fund raising, and it will also facilitate and contribute to mainstream public and private support for PAs in the Amazon Region. The project (IBAMA/PCU) and/or its executing partners would be responsible for implementing the agreed activities within the target protected areas. The norms to regulate operations, finances, administration and procedures for the Trust Fund and regulations for the partnership between IBAMA and the Trust Fund Administrator will be determined in a separate Trust Fund Operations Manual. This manual would be made available before effectiveness. Information related to the process of establishing the Trust Fund for PAs is being disseminated at the national level. During the process of project formulation, the following aspects of the trust fund will be defined:

- Governance
- Structure (endowment fund/sinking fund/revolving fund)
- Mechanism to support PAs operational costs
- Type of grants (e.g. matching grants)
- Eligibility criteria
- Cost and financing
- Structure (Board of Directors)
- Administration
- Operations manual
- Procurement agreements
- Asset manager
- Disbursements, auditing and reporting
- Monitoring and evaluation

2) Establishment and development of pilot market-driven revenue-generation instruments to support PAs management

This activity will provide technical assistance to execute 10 pilot projects aimed at raising income for PAs and supporting biodiversity conservation. During preparation it was agreed that the following income generating instruments would be pursued: ecotourism, services, royalties, and fiscal incentives. During preparation, a plan would be prepared that would include:

- 1) the modus operandi for each of the instruments;
- 2) analysis of previous experiences implemented in Brazil or in other countries;
- 3) identification of bottlenecks for successfully implementing these instruments;
- 4) development of strategies to overcome the bottlenecks;
- 5) identification of potential PAs where these instruments would best apply;
- 6) detailed assistance plan on operational and legal aspects for the pilot projects;
- 7) definition of potential implementers, selection criteria and contracting mechanisms.

The plan would be prepared based upon consultations with stakeholders already engaged in relevant activities/financial instruments or who would potentially be affected. The consultations would include: (i) technical consultation to develop detailed demand-driven protocols, methodology and operational plans for biodiversity inventories in the target PAs, (ii) consultation with user groups to determine levels of demand and investment feasibility for revenue- and non-revenue generating products identified through inventories; and (iii) consultation with indigenous people in order to incorporate their knowledge of natural products, and to clarify and negotiate intellectual and cultural property rights and issues. The consultation process will also serve to define models of partnership, implementation strategy and work plans.

Based on this plan, the project coordination unit would seek feasibility proposals from NGOs, the private sector and government institutions that would include the identification of the specific capital “assets” in the protected area, potential customers, location, and access ways. This information will allow the coordination team to determine the income-generating potential or core business opportunity. The feasibility proposals would also detail who are the partners in the business, detail cost and financial analyses, present risk assessments and detail how much/how revenue will be channeled back to park management. The feasibility proposals would be reviewed by the Project Coordinating Committee using the following selection criteria:

- 1) technically and financially sound;
- 2) local people issues are fully addressed;
- 3) no environmental impact;
- 4) cost-effectiveness;
- 5) replicability.

3) Concessions for the establishment and development of revenue-generating projects in PAs

The design and consummation of partnerships or concession agreements between IBAMA and qualified private organizations will be piloted through this component. Concession agreements would also include defined work plans and programs as well as a financial program. The selection of partners will follow the procedure outlined in the preceding section.

4) Development of law awareness and legal framework support

Finally, this component would provide technical assistance to monitor the impact resulting from the implementation of PA laws and regulations. It would identify any legal anomalies or bottlenecks which may arise in PA creation and management and study how these might best be resolved through legislation, regulatory modifications or other ways. The project will support inter-institutional actions (e.g. workshops and forums) to mainstream efforts to promote the approval of the SNUC Law, which has been in Congress since 1992. In addition, the project will support workshops and seminars at the State and PA level to develop awareness among civil society regarding the mechanisms, obligation and rights under the new SNUC Law and other related legal norms. The approval and publishing of the SNUC Law is a critical step for the success of this project.

A scenario of potentially critical project supported PA initiatives and how they would affect on-going legal processes is provided in the table below.

Actual scenario without SNUC Law	Expected scenario with SNUC Law approved	Improved scenario with project support
Absence of a legal body to regulate administration and management of PAs and constrained GOB financing results in donors reluctance to make financial commitments.	Conflicts regarding the implementation of specific mechanisms such as the establishment of Consultative Management Councils (CMC) at PA level	<ul style="list-style-type: none"> • Enabling environment where it is feasible to agree-upon the structure and functioning of the CMC. • Increased popular participation through the CMC. • Smoother coordination and communication between the CMS and the PA managers.
Limited private sector involvement.	Bottlenecks in regards to financial management and allocation of resources from the increasing private sector involvement.	<ul style="list-style-type: none"> • Systematization of private contributions to the Amazon Region and fairer allocation of resources on a priority-basis.
Not feasible to relocate local populations inhabiting PAs.	Bottlenecks and conflicts arise from Law enforcement and allocation of resources in cases where relocation of local population is necessary.	<ul style="list-style-type: none"> • Populations aware of SNUC Law are in a better position to negotiate relocation with support of the CMC. • Effective relocation
Absence of a coherent enforcement mechanism to improve administration of PAs constrains IBAMA/NGOs efforts to improve PA management.	High incidence of legal litigation resulting from the application of SNUC Law continues to constrain PA management.	<ul style="list-style-type: none"> • Reduced legal litigation due to higher degree of awareness about obligations and rights under the SNUC Law in local population. • Improved PA management

In addition, the project will provide support to IBAMA to facilitate the design, implementation and management of financial mechanisms (cost-recovery/revenue-generation), decentralization of PA management, and design the agreements specifying the obligations associated with civil society partnerships.

Outputs

The specific outputs of the component would include:

- Make operational and capitalize a PA Trust Fund;
- Implement an institutional arrangement with FUNBIO to administer the Trust Fund,
- Implement 10 pilot projects for PA revenue-generation
- Implement a cost-recovery strategy and program,
- Finalize 5 PA concession agreements for the implementation of financial mechanisms; and
- improve the legal framework supporting PA administrative and financial management.

Component 4. Environmental Monitoring (US\$ 2.9M/GEF US\$ 2.0M).

This component will improve the decision-making process as well as planing and programming by making available more accurate and reliable information. To this end, the project will support the establishment of a biodiversity monitoring system for Biodiversity conservation and threats thereto, both on a local (PA) and a regional basis. Monitoring would include core biological variables plus selected variables such as soil erosion and siltation from deforestation and road construction, urban growth, planned and unplanned settlements, overgrazing, and other community-based activities in and around PAs. In addition, the system will also monitor and measure the completion of the biodiversity conservation objectives of the project and the implementation of all project activities in the target PAs.

The indicators for the monitoring program have been selected in accordance with SIMBIO (IBAMA's Biodiversity Monitoring System, currently being finalized). Thus the project will be able to feed into

SIMBO, using 5 shared indicators bearing on situation, pressure and response including: (a) state of biodiversity, (b) pressure on ecosystems, (c) water resources and weather, (d) linkages, and (e) coordination and management effectiveness. This indicator will be adjusted during project implementation and take into account the local conditions of the target PAs.

During Phase #1 of the ARPA (this project), monitoring will target the selected, existing protected areas and will incorporate the newly created PAs as they are operationalized. Baseline data will be collected for all PA. A risk analysis methodology developed by the World Commission on Protected Areas and by WWF¹ will be applied. Each unit will be classified according to two levels of risk: (i) PAs with higher pressure from human threat and resulting in higher biodiversity loss; (ii) Less vulnerable PAs experiencing lower human pressure, where different factors threaten biodiversity. The following protected areas will be initially targeted by the project:

Risk level (WWF)/Monitoring instruments	Protected area	Category	State
Level 1. Field monitoring Effectiveness indicators	Rebio Gurupi		MA
	Rebio Guaporé		RO
	Rebio Lago Piratuba		AP
	Esec Juami-Japurá		AM
Level 2. SIG/remote sensing monitoring Effectiveness indicators	Parna Serra da Mocidade	PN	RR

The PAs selected for initial monitoring represent a variety of environments and logistical problems that will be challenge the project’s monitoring team and prepare it to assume responsibility for newly created PAs. The PAs categorized as Level 2 represent the 25 existing PAs.

The project will adjust indicators at regional and PA levels and develop appropriate methodologies for measurement taking into account the proposed expansion of the PAs in the Amazon Region. The project will also address the absence of basic information in some PAs by supporting in depth information gathering and field validation with the view to elaborate PA management plans (as in Component 2). Component 4 will serve as a pilot project for SIMBO in PAs in the Amazon Region.

It is expected that the project will collaborate with the GTZ-funded SIMBIO (GIS-monitoring system) which is currently completing the pilot testing of the methodology for PA monitoring. The availability of the SIMBIO provides a good opportunity to strengthen collaboration and minimize duplication of activities. Hence, the component will be implemented by IBAMA-NMA (Monitoring and Evaluation Unit/Núcleo de Monitoramento e Avaliação) with support from the IBAMA-CSR-SIMBO (Remote Sensing Center/Centro de Sensoriamento Remoto). The NMA will be responsible for maintaining an effective information flow (two-way) between the NMA, PA management units and the PCU. The information regarding indicator performance and analysis will be consolidated in an accessible database. The NMA will also be in charge of training staff at the central and PA level. In the long term, in coordination with SIMBO, the NMA will incorporate the monitoring of PAs as part of normal NMA activities. Therefore, SIMBO will be a catalyst for strengthening the organization equipment and staff.

Specific key sub-activities within this component include:

- (a) Development of a collaboration agreement with NMA.

¹ Brief description of WWF risk analysis....(to be completed).

- (b) Consolidation of the existing database of information regarding PAs in the Amazon region.
- (c) Validation of the classification/levels for PA monitoring.
- (d) Development of indicators and methodology based on the best tested cost effectiveness for PAs management.
- (e) Collection, analysis and consolidation of information to complete databases for the PAs selected for the project (e.g. field work, remote sensing, secondary data gathering).
- (f) Development of a database for the PAs of the Amazon Region to support PA planning, programming and management, including a mechanism for information exchange.
- (g) Elaboration of an Operational Manual to support the learning process of monitoring and evaluation of PAs, and detailing standard and special procedures, methodology and outputs.
- (h) Elaboration of a public information strategy to target local, national and international audiences. This strategy will include specific mechanisms to make information available not only via a Website, but through the use of traditional public information vehicles in order to be able to access local PA populations.

Outputs

The core outputs of Component 4 include:

- (a) A monitoring and evaluation system at PA and Regional levels including its complete implementation in 5 existing protected areas,
- (b) A monitoring and evaluation system for the implementation of the project's components.

Component 5. Project Coordination and Management (US\$ 1.5M/GEF US\$ 1.0M).

Project coordination and management would support a small team that would be responsible for the overall coordination of the various components and that would be specifically responsible for: (i) preparation of Annual Operating Plans; (ii) preparation of supervision reports or any request for information by donors or the Bank; (iii) monitoring and evaluation of project activities; and (iv) assurance that subsidiary agreements and financial execution are carried out effectively.

Standard project implementation monitoring, based on the Project Design Summary/Logical Framework, will be carried out throughout the project implementation period. An Operational Manual will be prepared before grant effectiveness which would include:

- (a) program's objectives;
- (b) description of the organizational structure;
- (c) funding sources;
- (d) eligible expenditures and detailed spending rules;
- (e) description of the funding approval cycle, eligibility of participating institutions and institutional responsibilities;
- (f) operating procedures for disbursing funds to existing PAs or third party contractors;
- (g) guidelines to ensure that protection programs will follow good environmental practices and properly address any sensitive social issues;
- (h) procurement rules;
- (i) guidelines for contracting a financial agent;
- (j) auditing, financial recording, and reporting procedures; and
- (k) guidelines on monitoring and evaluation of Program activities.

Project administration would also finance the operating costs of the project commission (see para. On Institutional Arrangements).

Outputs

The core output of Component 5 will be a functional PCU, operating in accordance with the Project Operations Manual.

Annex 3: Incremental Cost Analysis

Overview

1. The general objective of the GEF alternative is to support biodiversity conservation and its sustainable use in the Amazon through the creation and consolidation of new and existing protected areas under participatory management by Federal, State and Municipal governments, NGOs and other private sector institutions. The GEF alternative intends to achieve these outputs at a total incremental cost of approximately US\$ 30.0 million.

Context and Broad Development Goals

2. To date, the PAs of strict conservation created by the GOB cover 2.6% of the total area of the country. Most of these areas are in the Amazon Region. Protected areas for direct use cover 5.5. The GoB is being successful at promoting a greater involvement of local communities settled in and around protected areas, non-governmental organizations and other private sector institutions in the management of protected areas. This participatory approach is ensuring a more equitable distribution of benefits resulting from the establishment of PAs as part of the overall GoB's strategy for rural poverty alleviation. Furthermore, the GOB is at the final stages of approving the SNUC-Law no. 2.892/92 for the regulation of a National System of Protected Areas. With the SNUC Law in place, the GOB will be able to consolidate the principles and guidelines concerning the application of public policies in relation to *in situ* conservation of biological diversity and PAs.

3. The goals of the Amazon Region Protected Areas Program are to increase areas under strict conservation to a target of 10% of the Brazilian Amazon and to consolidate the management of these areas. To date, Brazil has approximately 12 million hectares of tropical forest under strict protection in the Amazon region. The program would incorporate an additional 25 million hectares to reach the goal of 37 million hectares under protection in the next ten years. Ten million ha. will be incorporated in Phase I (this project). The Program originated from the GoB's commitment to expand protected areas in the Amazon region.

Baseline

4. In the Amazon Region, the expansion of the system of protected areas is constrained by the lack of financial resources. Despite this, the GoB is making progress based on programs of loans and international cooperation that is the main source of funding for protected areas in the region. Two state in the Amazon (Rondonia and Mato Grosso) borrowed funds for a natural resources project which included a protected areas component. These loans are in their final lending stage and it is unlikely that future loans of this nature will be taken by States. Some protected areas benefit from visitor's fees, and from concessions to exploit forest products.

5. Creation and establishment of new PAs: Under the Baseline Scenario, the GoB with limited support from PPG7-Biodiversity Corridors Program (US\$ 6.2 Million) will continue to facilitate the creation and establishment of PAs. However, this process will lead to a reduced number of PAs (e.g. Jau, Anavilhanas, Amana and Mamiraua). Under the Baseline Scenario, although the GoB will likely invest resources in the public consultation process to involve State and Municipal governments, indigenous peoples organizations and organizations of the private sector in the creation of new PAs, however this consultation, might be limited by scarce resources.

6. Consolidation of existing PAs: The GoB is aiming at the consolidation of 12 priority PAs in the Amazon Region. The running costs for these areas (including investments and recurrent costs) have been established at approximately US\$ 95,000 per year, considering that these PAs are remote, of difficult access and that there are no major threats. The current level of spending in most of these PAs in the last 5 years

varies from area to area. For instance, considering funds from the GoB and NEP I during 1995 to 1999, most of these areas are receiving less than 20% per year of their estimated yearly running costs. Since these spending levels are unlikely to be substantially increased under the baseline Scenario, the GoB will continue to consolidate PAs with the only additional support from PPG7 (US\$3.8 Million), therefore, the consolidation of fewer PAs will be achieved at a slower flow and in a considerably longer period of time.

7. **Financial and Legal sustainability of PAs:** Under the Baseline Scenario, the development of innovative income generation mechanisms for the financial sustainability of PAs (including a dedicated Trust Fund) will be narrow. None of the current initiatives such as PPG7, NEP II and government funded programs include long-term financing mechanisms for protected areas. Under the baseline scenario, already existing financial instruments such as tourism entrance fees and environmental compensation might occur in a few PAs. However, additional income generating activities and experiences from other parts of the world would probably not take place. In addition, the establishment of a protected areas trust fund with seed capital from GEF, making it attractive to bilateral donors and debt for nature swaps is unlikely to take place.

8. **Biodiversity Monitoring and Evaluation:** IBAMA will continue to collaborate with SIMBIO (IBAMA's Biodiversity Monitoring System) and RADAM-Brazil. The process to develop regional indicators for biodiversity conservation and threats in PAs in the Amazon Region will be also achieved in a longer period of time, in the absence of a dedicated biodiversity monitoring system and limited financial resources. In addition, the international protocols for monitoring protected areas being developed by IUCN and WWF that are being designed into the project would not be brought to Brazil and bring the benefits of being tested worldwide.

9. The Baseline Scenario would therefore generate some short term gains in terms of biodiversity conservation but would not constitute a concerted effort to mainstream PAs conservation actions and resources for protected areas in the Amazon region, focusing on long-term social, financial and legal sustainability. The cost of the activities under the Baseline Scenario is estimated at US\$ 33.0 million.

Global Environmental Objectives

10. The Brazilian Amazon region is the core area of the largest continuous tropical forest on the planet, which includes 40 percent of all remaining tropical forests of the world. The Amazon region is the most important repository of biological diversity on earth, containing extreme rich biodiversity in terms of unique species, high levels of endemism, and habitat diversity. Many areas in the Brazilian Amazon hold world records in terms of biodiversity richness. The project would, in the next 4 years, support the addition of 10 million ha. of new protected areas in the Brazilian Amazon; and would support a more participatory management approach and the establishment of innovative financial mechanisms as a strategy to ensure long-term social and financial sustainability.

GEF Alternative

11. Conservation in the Brazilian Amazon region requires of a functional and structured system of protected areas. An expansion and consolidation of the protected area coverage is essential to maximize the opportunities for achieving long-term sustainable biodiversity conservation and PAs management in the region.

12. Under the GEF Scenario, the support from GEF, in Phase I, will enable the Brazilian Government to, in addition to implement the activities in the baseline scenario, with high involvement of State and Municipal governments, and local communities, non-governmental organizations and other private sector institutions, will all together support (a) creation and establishment of 20 new protected areas in priority zones (a total of 10 million ha.) through an intensive consultative process at local level; (b) consolidate 12 existing PA selected through a participatory process; (c) establish a broad base of innovative financial mechanisms, a dedicated trust fund and development of comprehensive public awareness to facilitate the implementation of the SNUC-Law; and (d) greater support to improve PA management, planning and programming by developing

an environmental monitoring and evaluation mechanism to increase the quantity and reliability of information. Other key gains enabled by the GEF support include:

- Partnership to leverage GEF financing, to further ensure the generation of global benefits.
- Enhancement of the decentralization process through participation of the State and Municipal governments in PA management, with a view to long-term PA accountability at local level.
- Coordination mechanisms to mainstream lessons and actions (PCU), and financial resources (Trust Fund) from the GoB, multilateral and bilateral donors to support PAs in the Amazon Region. These mechanisms will enable the progressive decrease of GEF support though out the ten-year program.
- Integrated approach for PA management that responds to social, economic, and political realities and regional long-term vision of the system for protected areas in the Amazonia.
- Amazon ecoregional representation within the SNUC, and greater coverage of globally significant areas.
- Definition of long-term management needs, management plans, and agreements to transfer responsibility to private sector organizations.
- Pilot projects based on sustainable use of biodiversity to provide economic incentives for conservation.

13. The GEF Scenario would therefore generate medium and long-term gains in terms of biodiversity conservation but would concerted the efforts to mainstream PAs conservation actions and resources in the Amazon region, focusing on long-term social, financial and legal sustainability. The total cost of the GEF alternative is US\$ 63 million.

Incremental Costs

14. The difference between the cost of the Baseline Scenario (US\$33.0 million) and the cost of the GEF Alternative (US\$ 63.0 million) is estimated at US\$30.0 million. This represents the incremental cost for achieving global environmental benefits and is the amount requested from the GEF. The following matrix summarizes the incremental costs and benefits.

Incremental Cost Matrix for GEF Funding

Component	Cost Category	Cost US\$ Million	Domestic Benefit	Global Benefit
1. Creation and Establishment of New Protected Areas	Baseline	12.9	<p>Few protected areas (PAs) created and PA coverage is slowly enhanced.</p> <p>Partial Biomes conservation needs-assessment, based on social, economic and political reality.</p> <p>Planning and management instruments available for the management of few PAs in the Amazon Region (e.g. PA management plans).</p> <p>Few PAs established (infrastructure, staff, and demarcation) and managed with participation of State and local governments, NGOs and community organization.</p> <p>PA management is being achieved with some degree of decentralization</p>	<p>Few protected areas of global conservation importance created and managed.</p> <p>Relative conservation of the Amazon ecosystems.</p>
	GEF Alternative	23.4	<p>20 PAs created and PA regional coverage respond to a comprehensive Biomes conservation needs-assessment, based on social, economic and political reality, and management instruments developed (e.g. PA management plans).</p> <p>Strengthening of the system of protected areas of the Amazon biomes through the establishment of new PAs, with different management categories at three governmental levels (Federal, State and Municipal).</p>	<p>Larger priority area for conservation in the Amazon Biomes created and managed according to biodiversity importance and socioeconomic criteria.</p> <p>Expansion of Amazon Biomes biodiversity protection through the creation of 20 new PAs comprising approximately 10 million ha.</p>
	Incremental	10.5		
2. Consolidation Existing Selected Protected Areas	Baseline	8.7	<p>Few Priority areas consolidated.</p> <p>Slow improvement of the capacity and conditions for the management of PAs, with occasional participation of State and Municipal Governments, local communities, non-governmental organizations and other private sector institutions.</p>	<p>The process of consolidation of PAs of global importance advances at slow pace.</p>
	GEF Alternative	15.2	<p>Priority PAs are consolidated.</p> <p>Strengthening of the system of PAs including improved infrastructure, equipment, trained staff and enhanced systematic participation of State and Municipal governments, local communities and local organizations in priority selected PAs.</p>	<p>12 Federal PAs consolidated in accordance with the conservation objectives for the biodiversity of the Amazon Biomes.</p>
	Incremental	6.5		

Component	Cost Category	Cost US\$ Million	Domestic Benefit	Global Benefit
3. Financial and Legal Sustainability of Protected Areas	Baseline	10.0	Limited short and long-term financial sustainability of most PAs. Low sustainability of protection, conservation, research, and education activities in PAs. Consolidation of principles and guidelines for PA management. Limited resource mobilization for PAs management and conflictive environment resulting from legal inconsistencies and gaps.	None
	GEF Alternative	20.0*	Development and establishment of prompt, permanent and efficient financial mechanisms for the sustainability of PAs. Improved legislation awareness and framework to enable efficient implementation of Law and PA management.	Ensured protection for the Amazon biodiversity through sustainable availability of resources and operative legal framework for the management of PAs of global importance.
	Incremental	10.0*		
4. Environmental Monitoring and Evaluation	Baseline	0.9	Limited capacity of monitoring and evaluation systems at Federal level.	None
	GEF Alternative	2.9	Establishment of a permanent integrated EM&E system for the conservation activities in PAs in the Amazon Region. Availability of updated, accurate and reliable information to support decision-making, planning and programming of PAs management in the Amazon Region.	Availability of updated reliable information; and improved understanding of the situation and the impact of biodiversity conservation activities and management of PAs with global importance.
	Incremental	2.0		
5. Project Coordination and Management	Baseline	0.5	None	None
	GEF Alternative	1.5	Establishment of updated and efficient management mechanisms to ensure appropriate project coordination and management.	Project's goals achievement and opportunities for the enhancement of project's results, and viability of project replication in other areas of global biodiversity importance.
	Incremental	1.0		
TOTAL	Baseline	33.0	Limited biodiversity protection and lower management capacity for PAs management in the Amazon Region.	Limited results regarding the protection of biodiversity of global importance, in the short-term.
	GEF Alternative	63.0	Expansion and consolidation of PAs of the Amazon Biomes through medium and long-term planning with support of sustainable financial mechanisms for PAs.	Ensured conservation of the biodiversity of the Brazilian Amazon Biomes through the consolidation of 10 million ha. of PAs within a system of global importance.
	Incremental	30.0		

**Annex 4: Technical Assessment
Comments from STAP Roster Expert**

**Technical Review of the Project Concept Document
Brazil - Amazon Region Protected Areas Program Phase I**

**Prepared by Michel Batisse
Consultant
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Overall impression.

The stated objectives of the project are ambitious. Creating protected areas in the Amazon, if properly delineated, adequately staffed and equipped and effectively monitored and controlled have a clearly significant role to play in biodiversity conservation. While the project document is well articulated and contains a large amount of information, it concerns only strict protected areas without providing convincing evidence that this constitutes the most urgent and effective solution in the long term, given the conditions prevailing in the Amazon. Failing to replace clearly its proposals within the overall development and transformation of the region, the project gives the impression of a somewhat theoretical and sectoral top-down approach, where financial support for a number of selected protected areas managed by a reinforced IBAMA would suffice to meet the challenge of conserving biodiversity in the Amazon.

Relevance and priority.

The project clearly related to the GEF Biodiversity component and to the objectives of the Biodiversity Convention. While other areas in the country and in the region are in greater danger than the Amazon, its exceptional richness and increasing threats justify that proper attention be given today to long-term conservation there, using all tools and reforms necessary to meet this objective.

Project Approach.

Unless socio-economic factors considerably change, these areas indeed will be hard to protect against illegal logging, gold mining, drug cultivation, poaching, and above all the constant shift of poor peasants. Success in such protected areas might thus be limited to those parts of the region which are so remote or so unproductive that they will remain uninhabited anyway, therefore not really in need of special protection. This consideration is not meant to deny the value of establishing some new conventional protected areas, as long as they can be effectively management and protected in the long run, and articulated with other forms of conservation and other types of protected or multiple use areas. An approach such as the "biosphere reserve" concept, with legally protected core areas and surrounding buffer zones, with institutional cooperation and benefit-sharing with the local population and with appropriate supporting research and education, might well be attempted in several of the listed sites.

Objectives

The central objective is somewhat biased since the establishment of strictly protected areas in the Amazonian context has to be accompanied by multipurpose buffer zones and by socio-economic eco-development measures which do not seem to be fully appreciated. The management of an expanded system of protected areas in this immense region will probably require strongly decentralized and participatory mechanisms, involving the states and the local authorities.

Background and justification

The PCD says little on the various stakeholders and on the specific issues to be resolved in the selected sites.

Activities.

The reinforcement of existing PAs and the development of legal, financial and institutional mechanisms would certainly be appropriate provided they are conducted in the light of the above considerations. As to the establishment of new PAs, some priority cases could probably be selected, taking into account the human factor, the need for participation and local benefits, and exploring application of the biosphere reserve concept.

National priorities and community participation

Protecting the Amazon is a national priority. At the international level, it naturally comes second to the special priority to be given to the Mata Atlantica or the Cerrado which are under greater threats. As regards, participation of local populations and the need to ensure that they actually benefit in some ways from the protected areas, needs to be stressed further.

Institutional arrangements

The establishment of a trust fund might alleviate some of the concerns one might have about the long-term validity of the proposed actions.

Time frame.

A total period of 10 years sounds reasonable, provided some downsizing of the project takes place and not too much of it is concentrated in the first and probably most difficult phase.

Innovative features/replicability.

Establishing or reinforcing PAs does not appear to show innovative methods in this respect. It would be truly innovative if, at this very scale, it would form part of an overall Amazon region land use and development strategy. Building up such a regional strategy would provide a useful example for other countries.

Annex 4b:

PROJECT TEAM’S RESPONSE TO STAP REVIEWER COMMENTS

1. Many of the comments pertain to the desirability of including elements of a much broader environmental strategy in the project. Reliance upon traditional PA approaches are seen as of limited use if the “root causes” of biodegradation are not addressed. The project is consistent with this approach and to the extent permitted by its narrowly defined mandate will support such a strategy. “Root causes” will be addressed by a differentiated approach to protected area consolidation. And the choice of PAs is being done making use of criterion that will ensure that it supports the biodiversity preservation strategy for the Brazilian Amazon biome.

2. Project limitations must, however, be clearly understood as design is constrained by Brazil’s formal adherence to the WWF 10% program. Something can be done to address logging, slash and burn agriculture, drugs, mining, poaching, poverty, institutional malaise and other root causes of biodegradation in specific PAs and to some extent at the sub-national and Federal Government levels. But these highly complex and politically sensitive issues cannot at this time be addressed generically and frontally as we may like as this exceeds the project’s mandate and would not be feasible.

3. Such interventions are well beyond the scope of any single project, however, because their enormous time and geographic size and complexity. Achieving the proper balance between conservation and development in the Amazon region of Brasil is one of the greatest challenges faced by Brasil and, for that matter, by humankind. The proposed program, therefore, must be seen as a “building block” of a much broader strategy to ensure that the ecological integrity of this huge region is maintained for posterity. Within such a broader strategy, consolidating the set of strict protected areas is the most important cornerstone of any such strategy, and must be achieved while the opportunities to accomplish such an enormous task are reasonably good. Furthermore, the program complements a much broader set of interventions by the GOB, the Bank, and other donors, including the PPG-7 program and a set of half a dozen Bank loans whose purpose has been precisely to contribute towards a broad sustainable development strategy for the Amazon, as has been described in the text.

4. Nevertheless, it is important to note that the project takes into account the reviewers’ important points in the following manner.

a. PAs are being chosen with attention to their specific needs, richness and characteristics—including human risk--according to detailed criterion and in such a manner as to support the broad biodiversity conservation strategy for the Brazilian Amazon region. This process culminated in the Macapa workshop makes use of the most up-to-date scientific data and technologies and the process is dynamic and will be continually updated with new information.

b. Treatment of PAs will be differentiated according to their circumstances and the evaluated threats to biodiversity. Hence, high diversity areas within zones of greater population density and consequently greater threat will be treated differently and accorded different priority based upon the PA diagnosis. Operationally this means that

(i) Socio-economic and biodiversity analysis will be conducted with the help of teams of highly specialized GIS, remote sensing and other professionals to ascertain the nature and seriousness of the biodiversity threat within each PA.

(ii) Each PA Community Council will orient its work according to these results and they will be fully reflected in participatory Community Development Plans which will target specific biodiversity threats.

(iii) Financial support, studies for implementation of cost recovery mechanisms and programs to foster sustainable economic development will be allocated according to the priority of the PA and each one's peculiar needs.

(iv) Multi-purpose buffer zones will also be targeted under the project and in some instances, especially where human encroachment is most severe, the effort will be similar to what is done in *biosphere reserves*. This scope of this effort will depend upon the selected PA and there is much still to be done in terms of buffer zone diagnostic and elaboration of plans. But this work is contemplated in the project.

(v) Financial sustainability is rightfully cited as a serious problem. Significant resources are programmed to evaluate this problem in each PA, looking at revenue generation opportunities, a trust fund, and cost implications (including buffer zones).

c. The project will be highly participatory and particularly at the community level. Again, a differentiated approach will be taken according to PA characteristics. But in general Councils consisting of all local stakeholders will be convoked to oversee the PA exercise, local communities will participate in mapping and research, and development plans will need stakeholder approval. State and municipal authorities will also participate and special attention will be taken to ensure the inclusion of indigenous communities.

d. The project design recognizes the limitations of IBAMA, and its limited staffing. It is for this reason that a participatory and highly decentralized approach has been chosen that includes management partners with PA management and fund raising obligations.

e. The Mata Atlantica (and Cerrado) may still be included in this project or be the subject of a separate exercise to ensure 10% is in a PA. Also GEF and other operations are underway or being planned for these important eco-regions.

f. The social marketing/communications component will be used to identify successful models and ensure that they are disseminated within Brazil and elsewhere. The objective of this component is the replication of activities found to be successful in promoting biodiversity conservation, including PA creation.

g. Long term sustainability of biodiversity within the PAs is the ultimate objective of the project. PAs are not a panacea. But rather than being perceived as an incomplete strategy to attain biodiversity goals, PAs should be understood as the most significant opportunity ever in Brazil to make a significant impact on Amazonian biodiversity. And within the context of the PA a great deal can be done in support of a comprehensive Amazon strategy. It is hoped that building upon the work of the project and the PAs, an important environmental constituency can be strengthened and a platform established for new biodiversity initiatives that will frontally address root cause of biodegradation and further contribute to the Amazon strategy. Hence, the project is consistent with the reviewers comments both in intent and also in scope with the limits of its Government mandate.

Annex 5: Selection Process and List of Candidate Areas

1. The selection of priority areas for biodiversity conservation in the Brazilian Amazon culminated a process that began in 1990, when leading biologists convened in Manaus to develop the first and only map delineating priority conservation areas for the Amazon basin as a whole.² The map generated from the Manaus workshop indicated areas of high biological richness and/or endemism, based on a synthesis of information then known about the geographic distribution of major biological groups. The workshop also pointed out major information gaps, particularly in the less accessible interfluvial areas. As geographic information systems (GIS) technology was still in its infancy in 1990, the range of overlays that could be incorporated to generate the final map was limited. Furthermore, the criteria for selection of areas were strictly biological and did not take into account the rapid, human-induced changes that had begun to impact widespread areas of the region during the previous decade. Finally, the Manaus workshop took place before recent advances in the field of conservation biology, which provide evidence for the efficacy of conservation at larger scales such as ecoregions.³ Commonly referred to as ecoregion-based conservation, this large-scale approach is designed to incorporate key ecological processes (such as migrations and hydrological cycles) and protect against rare and/or unexpected disturbances (such as the wildfires destroying large areas of Amazon forest today).

2. Despite these limitations, the map generated by the 1990 Manaus workshop provided a critical baseline for the priority setting exercise on which this project is based. This exercise is part of PRONABIO (National Biodiversity Program), a GEF-supported project launched in 1996⁴ under the auspices of Brazil's Ministry of Environment. As part of this project, leading national scientific organizations, with the collaboration of scientists and institutions worldwide, are building comprehensive data bases of information relevant to biodiversity. With the use of GIS, the project is generating cartographic overlays showing the geographic distribution of: 1) ecoregions;⁵ 2) major biological groups; 3) existing protected areas (public and private); 4) other areas designated for low-impact use (such as indigenous lands); 5) current land use, soil type and topography; and 6) existing and planned infrastructure (such as roads, railroads, riverine transport networks, etc.). The actual process of priority setting takes place in workshops that convene both biological

² Rylands, A.B., O. Huber and K.S. Brown, Jr. 1990. *Workshop 90: Areas Prioritarias para a Conservacao da Amazonia. Mapa e Legenda, Escala 1:500.000*. Instituto Brasileiro do Meio Ambiente e Recursos Naturais Renovaveis (IBAMA), Brasilia; Instituto Nacional de Pesquisas da Amazonia (INPA), Manaus; Conservation International, Washington, D.C.

³ Ecoregions are large biological units that share similar biological and physical features, usually at an intermediate scale between biomes and ecosystems. Ecoregion-based conservation has been adopted as the conceptual framework for conservation strategies by major environmental NGOs such as the World Wildlife Fund and the Nature Conservancy. The major ecoregions of Latin America were mapped by the World Wildlife Fund and the World Bank (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 Latin America and the Caribbean*. The World Bank/World Wildlife Fund, Washington, D.C.).

⁵ In preparation for the priority setting workshop for the Brazilian Amazon region (see para. 3), the workshop organizers commissioned a reevaluation of the ecoregions defined for the region by Dinerstein et al. (1995). This reevaluation (by Jose Maria Cardoso) defined a total of 23 ecoregions, which largely conform to the region's major river basins.

and socioeconomic experts for each of Brazil's major biomes. During 1998-99, priority setting workshops took place in the Cerrado and Pantanal, the Atlantic Forest and Southern Prairies, Marine and Littoral, and the Amazon region. Future workshops are planned in 1500 for the Caatinga.

3. The priority setting workshop for the Amazon took place in Macapa, Amapa, during September 15-25, 1999. The workshop and prior preparations were coordinated by a consortium of NGOs, including the Socioenvironmental Institute (ISA), the Amazon Working Group (GTA), Conservation International of Brazil, the Institute for Man and Environment in the Amazon (Imazon), the Institute for Environmental Research in the Amazon (Ipam), and the Institute for Society, Population and Nature (ISPN). A total of 226 participants were involved in the workshop (see complete list of participants and affiliated organizations at <http://www.socioambiental.org/bio/index.htm>), including representatives from governmental agencies (federal, state and municipal), non-governmental organizations, social movements, public and private research institutions, businesses and the press. Among the scientists present were specialists widely recognized for their biological and/or socioeconomic expertise in the Amazon region.

4. During the first day, the workshop convened 12 thematic groups. Six of the groups focused on major biological taxa: plants, mammals, birds, reptiles and amphibians, invertebrates (primarily insects), and aquatic biota (primarily fish). Three additional groups focused on present and potential threats to conservation, including current land uses, existing and planned infrastructure, and highly threatened ecosystems that provide critical ecological services. The final three groups focused on opportunities for conservation: existing protected areas, areas designated for indigenous peoples and other traditional populations, and areas appropriate for low-impact businesses such as ecotourism. Coordinated by a leading expert in the corresponding thematic area, each group generated a map showing areas of critical importance. In the case of the six groups focusing on biological taxa, these corresponded to areas of high species richness and/or endemism. Gap analysis was used to designate areas of likely importance but where further field research is needed. The remaining six groups mapped areas corresponding to significant threats or opportunities.

5. During the second and third days, the workshop participants were divided into seven regional groups: 1) the basins of the Negro and Branco Rivers; 2) the Guiana Shield; 3) the floodplains along the main channel of the Amazon and Solimoes Rivers; 4) the basins of the Jurua, Purus and Acre Rivers; 5) the lower basins of the Xingu, Tapajos and Madeira Rivers; 6) the upper basins of the Xingu, Tapajos and Madeira Rivers; and 7) the basins of the Araguaia-Tocantins Rivers and Maranhao. These divisions correspond to or incorporate: 1) major river basins; 2) major ecoregions; 3) existing or planned infrastructure; and 4) major land-use threats such as cattle ranches, soybean plantations, settlement projects, gold mines or timber extraction.

6. Within each region, the groups identified and categorized areas of biological importance according to the degree of overlap of priority areas for each biological taxon defined on the previous day. The highest degree of importance was given to areas with the greatest degree of overlap (4 or more taxa), the second highest to areas overlapped by three taxa, and the third highest to areas overlapped by two taxa. Other areas insufficiently known but considered likely to be biologically significant were also mapped. Using these strictly biological criteria, a total of 524 areas were nominated as priorities for conservation.

7. In addition to biological criteria, the areas identified as significant for their threats or environmental services were also used to add a socioeconomic dimension to the priority setting exercise. It appears from the workshop summary of results, downloaded from the Internet site cited in this annex, that degree of importance for environmental services, "degree of stability" or connectivity (i.e., insertion within or linkage to existing protected areas or indigenous lands), and "degree of instability" (i.e., proximity to threats such as infrastructure development or advancing agricultural frontier) were also used in the priority setting process,

but the weight that these factors were given in relation to the strictly biological criteria is not clear. According to a project preparation document produced by WWF-Brazil,⁶ it appears that two of these factors—environmental services and proximity to threats—were each given a weight of one, and that the workshop’s final rating of nominated areas incorporated overlap of major taxa (maximum of three points), environmental services (maximum of one point), and proximity to threats (maximum of one point). This would generate a maximum total of 5 points. As a result, the nominated priority areas were given a score of 1-5 points: 1) new areas identified by the regional groups (1 point), 2) areas insufficiently known but of probable importance (2 points), 3) areas of high importance (3 points), 4) areas of very high importance (4 points) and 5) areas of highest importance (5 points).

8. Additional criteria used for priority setting included the size of the nominated areas and ecoregion representation. Each priority area had to have a minimum area of at least 500,000 ha, and at least 10% of the area of each of the 23 ecoregions defined for the Brazilian Amazon (see footnote 3) had to be included within the priority areas. Through use of the criteria described in para. 7 and these additional criteria, the final number of priority areas selected was reduced from 524 to 379.

9. During the last two days of the workshop, the results of the thematic and regional groups were synthesized onto a single map showing priority areas for conservation in the Brazilian Amazon (see map of entire region, with links to more detailed subregional maps, at: <http://www/socioambiental.org/bio/index.htm>). For each of the 379 priority areas selected, the workshop participants then provided detailed information on its location, principal biological characteristics, principal environmental services generated, degree of connectivity, proximity to threats, and recommended actions (i.e., protection, recuperation, sustainable use of natural resources, need for further studies, etc.).

10. The results of the Macapa workshop provided the conceptual foundation for the Project Concept Document prepared by the Brazilian Government in collaboration with WWF-Brazil. To determine priorities for action during the first phase of the project (years 1-4), the WWF- Brazil document cited above (see reference in footnote 5) proposes an additional set of criteria based on two maps generated during the Macapa workshop: 1) current land uses by municipality, and 2) areas altered by human activities. Using these maps, the priority areas were classified according to the percentage affected by human activities (“grau de pressao antropica”): 1) below 15% (1 point), 2) 15-39% (2 points), 3) 40-64% (3 points), 4) 65-85% (4 points), and 5) above 85% (5 points). These grades, which exclusively reflect human pressures, were added to the grades previously assigned to each selected area during the workshop, generating a grading of urgency for the project’s first phase: 1) low (2-4 points), 2) medium (4-6 points), 3) high (6-8 points), and 4) very high (above 8 points). Of the Brazilian Amazon region’s 23 ecoregions, a total of 12 contain at least one area characterized by very high urgency. These 12 ecoregions—all of which are located along the southern portions of the Amazon or within the more accessible river basins—are targeted for activities during the project’s first phase.

⁶ “Criteria for Priorization of Areas Proposed for Creation of New Protected Areas” (in Portuguese), WWF-Brazil.

Annex 5-A: List of Candidate Areas

#	Candidate Areas	Ecological Information	Socioeconomic Information	Threats to Areas and Communities
1.	AX021	<p>Area: 415,000 ha. Ecoregion: Madeira/Tapajós Moist Forest State: Rondônia.</p> <p>Area of extreme biological importance, with great bird, mammal, reptile, amphibian, and aquatic diversity. This area would connect several indigenous and conservation areas, thus creating a large block of protected areas.</p>	<p>Southern and Eastern Amazon</p> <p>This sub-region is part of the expanding agricultural front of soybean and cattle ranching. It is highly accessible, and it is currently undergoing rapid landscape transformation. Many financial groups and interests originating from southeastern Brazil migrate from this region into the Amazon region. This large macro-zone incorporates many well-developed areas, where urban-industrial economies are advanced. It also incorporates areas that have been highly degraded due to deforestation and extensive cattle ranching. Production predominates over conservation in this extensive space that forms the southern and eastern Amazon region.</p>	<p>Southern and Eastern Amazon</p> <p>The major threat to biodiversity in this area is the disordered expansion of economic activities that have been happening since the 1970s. More than 90% of the 600,000 km² that have already been deforested in the region are located within this area. The Ministry of Environment's (MMA) political action is focused on reducing the instability of the land occupation processes. Social issues are a priority in this region, and this entails the maintenance of numerous small-scale producers established by INCRA or who settled spontaneously. This maintenance involves initiatives such as: a) providing urban centers with agrarian industries and services; b) building access roads to ensure the transport of products to markets (thus diminishing the dependency on middlemen) and reduced rural-to-urban migration; and c) ensuring that producers, in turn, respect the law to maintain 50% of their properties forested and to recover areas designated for permanent conservation.</p>
2.	AX027	<p>Area: 98,000 ha. Ecoregion: Madeira/Tapajós Moist Forest State: Rondônia.</p> <p>Located in the Parecis Mountain Chain this area is highly diverse (mammals, birds, reptiles), and of extreme importance to conservation. This area connects to area number 1 above, creating an even larger block of protected area.</p>		

3.	AX048	<p>Area: 31,000 ha. Ecoregion: Purus/Madeira Moist Forest, Monte Alegre Várzea State: Rondônia</p> <p>Located in the Rio Madeira, this area is of extreme biological importance. There are very few protected areas in floodplain regions, and the aquatic biota in this area is very rich and endangered due to population pressures.</p>		
4.	AX049	<p>Area: 31,000 ha. Ecoregion: Madeira/Tapajós Moist Forest, Monte Alegre Várzea, Purús Madeira Moist Forest State: Rondônia/Amazonas</p> <p>Located at the division between Rondônia and Amazonas states, this area has a high level of diversity, particularly birds, mammals, reptiles, amphibians and vegetation types. It also complements candidate area number 3 described above.</p>		
5.	AX050	<p>Area: 40,000 ha. Ecoregion: Purus/Madeira Moist Forest State: Rondônia</p> <p>Bordering Amazonas state, this area has a high diversity of flora and fauna. It is considered an area of extreme importance for conservation, especially due to its high aquatic biodiversity. The area would protect a floodplain region, and it forms a block with an existing strict-use protected area.</p>		

6.	BX001	<p>Area: 2,476,000 ha. Ecoregion: Mato Grosso Tropical Dry Forests State: Mato Grosso</p> <p>This area is very important in terms of environmental services and aquatic biodiversity. The headwaters of major rivers are located in this region, and it has little representation within existing protected areas.</p>		
7.	BX008	<p>Area: 515,000 ha. Ecoregion: Tapajos/Xingu Moist Forests State: Mato Grosso</p> <p>This area is of high biological importance, especially for birds, reptiles, and amphibians. The site is next to an indigenous territory, which forms a large block of protected area.</p>		
8.	BX021	<p>Area: 157,000 ha. Ecoregion: Xingu/Tocantins-Araguaia Moist Forests State: Para</p> <p>Area of extreme biological importance, located near a highway with a high degree of human occupation. Besides protecting important biological resources, the site would also serve as a buffer zone for the indigenous territory located on the south border.</p>	<p>Central Amazon</p> <p>This sub-region is crossed by the new development corridors, which extend from the heart of Pará state to the future highway connecting Porto Velho and Manaus. This means that this region is likely to experience rapid economic growth, especially due to activities such as soybean production, which is already transported to export markets via the Madeira river. Soybean production may eventually occupy the areas currently used for cattle ranching along the Cuiabá-Santarém highway. The amount of forested areas and indigenous lands is considerable in this region, which makes it even more susceptible to expansion.</p>	<p>Central Amazon</p> <p>Potential threats in this area are likely to materialize over the short term. Political actions should focus on promoting and facilitating conservation efforts, and on contributing to complementary forms of production and conservation. This should be attained by the following measures: a) ecological and economic zoning (ZEE) along the development corridors, followed by monitoring and strict enforcement; b) rapid demarcation, monitoring and protection of indigenous lands and UCs; c) a new model of protection for UCs, with the support and participation of surrounding populations; d) incentives for products generated by traditional populations, taking advantage of the economies of scale generated by the development corridors; and e) development of environmental management in urban areas within these corridors. Special protection will be provided for the extensive forested areas in the northern region of Pará, between the corridors under development in Amazonas and Amapá states, with the participation of the local population.</p>

9.	BX061	<p>Area: 108,000 ha. Ecoregion: Tapajós/Xingu Moist Forests, Madeira/Tapajós Moist Forests State: Pará</p> <p>Area of extreme biological importance and of high value for environmental services. Its location along the Madeira River contributes to the conservation of an important aquatic habitat.</p>		
10.	BX063	<p>Area: 227,000 ha. Ecoregion: Madeira/Tapajós Moist Forests State: Pará</p> <p>Despite its location in an area of high human occupation, this site is very important for the conservation of aquatic habitats. It also connects three existing protected areas.</p>		
11.	BX064	<p>Area: 2,390,000 ha. Ecoregion: Mato Grosso Troical Dry Forests, Madeira/Tapajós Moist Forests State: Mato Grosso</p> <p>Area of extreme importance for the conservation of biodiversity. It has a high diversity of mammals and birds. It contains the headwaters of the Aripuanã River, and it connects four indigenous territories, creating one of the largest blocks of protected areas.</p>	Southern and Eastern Amazon	Southern and Eastern Amazon
12.	BX065	<p>Area: 58,000 ha. Ecoregion: Tapajós/Xingu Moist Forests</p>	Central Amazon	Central Amazon

		<p>State: Pará</p> <p>Area of extreme biological importance, and of high value for environmental services. It presents high diversity and endemism of bird species.</p>		
13.	JU008	<p>Area: 304,000 ha. Ecoregion: Iquitos Várzea, Southwestern Amazonian Moist Forests State: Acre/Amazonas</p> <p>On the border of the states of Acre and Amazonas, this area has one of the few remnants of white sand savanna. It has a high degree of endemism, and great plant diversity. This site also connects the Serra do Divisor National Park to three indigenous territories.</p>	<p>Western Amazon</p> <p>This sub-region still depends on river transportation and extractive economies. The presence of indigenous populations and military forces is very strong there. Manaus is the great frontier capital, located between the northwestern transportation corridor and the extensive forested areas of the Greater Amazon Basin.</p>	<p>Western Amazon</p> <p>In the entire Amazon region, this sub-region is the least threatened in terms of biodiversity conservation. Yet despite the presence of extensive areas of intact forests, indigenous territories and UCs along the frontiers, in contrast to the situation in the other sub-regions the central part of Amazonas state is relatively devoid of UCs and indigenous territories. Monitoring is the key word for policy action in this sub-region, in which the contribution of the Monitoring System for the Brazilian Amazon (SIVAM) will be crucial. The long-term protection of this subregion will depend on: a) the rapid establishment of the Central Amazon Ecological Corridor; b) the pertinence of participating or not in the carbon market proposed by the Kyoto Protocol; c) the problem of increasing density of indigenous populations in the outskirts of urban centers.</p>
14.	JU067	<p>Area: 65,000 ha. Ecoregion: Iquitos Várzea, Southwestern Amazonian Moist Forests State: Acre</p> <p>Ecoregion of extreme biological importance, with high plant and mammal diversity. The protection of aquatic resources in this area is imperative.</p>	<p>Southern and Eastern Amazon</p>	<p>Southern and Eastern Amazon</p>

15.	JU068	<p>Area: 45,000 ha. Ecoregion: Southwestern Amazonian Moist Forests State: Acre</p> <p>Area of extreme importance for biological conservation, as well as for the protection of aquatic resources and habitats. This area and site 15 above are highly threatened by the opening of a highway to the Pacific.</p>		
16.	RN038	<p>Area: 195,000 ha. Ecoregion: Japura/Solimões-Negro Moist Forests State: Amazonas</p> <p>Area with a high degree of invertebrate diversity and endemism. The area is contiguous to two strict-use, and one direct use, conservation areas, increasing the size of an existing block of protected areas.</p>	Eastern Amazon	Eastern Amazon
17.	TO001	<p>Area: 215,000 ha. Ecoregion: Tocantins-Araguaia/Maranhão Moist Forests State: Pará</p> <p>Located on Brazil's coastal zone, this area is of extreme biological importance. It has high species diversity for birds, reptiles, amphibians, and mammals. It is also extremely important for the conservation of marine species and their habitat. Because of its location, it is under high anthropic pressure.</p>	Central Amazon	Central Amazon

18.	TO004	<p>Area: 1,701,000 ha. Ecoregion: Tocantins-Araguaia/Maranhão Moist Forests State: Maranhão</p> <p>Despite being located inside an area of Environmental Protection (APA), this important area is not protected. APAs constitute a very "loose" category of direct-use protected area, and high human pressure on this site is causing habitat destruction. It is an area of extreme biological importance, with high bird, mammal, reptile, and amphibian diversity.</p>	Southern and Eastern Amazon	Southern and Eastern Amazon
19.	TO008	<p>Area: 371,000 ha. Ecoregion: Tocantins-Araguaia/Maranhão Moist Forests State: Pará</p> <p>Area of extreme biological importance, with high plant, mammal, reptile, and amphibian diversity. This site is located inside a highly developed area, which is undergoing rapid habitat destruction.</p>	Central Amazon	Central Amazon

20.	TO012	<p>Area: 123,000 ha. Ecoregion: Tocantins-Araguaia/Maranhão Moist Forests State: Maranhão</p> <p>Area of great relevance for environmental services, and of extreme importance for biodiversity conservation. It is located in a highly occupied area, adjacent to three indigenous territories. It is a strict-use protected area.</p>	Southern and Eastern Amazon	Southern and Eastern Amazon
21.	TO42	<p>Area: 671,000 ha. Ecoregion: Mato Grosso Tropical Dry Forests, Xingu/Tocantins-Araguaia Moist Forests State: Tocantins/Mato Grosso/Pará</p> <p>Area of extreme biological importance, located next to a strict-use and a direct use protected area. Its importance for the conservation of aquatic systems is recognized, as well as its highly important environmental services. It also has a high degree of plant and bird diversity.</p>		

22.	TO051	<p>Area: 933,000 ha. Ecoregion: Tocantins-Araguaia/Maranhão Moist Forests State: Pará</p> <p>Area of high bird diversity and endemism. It is well- recognized for its biological importance, representing one of the last remnants of primary forests in the region.</p>		
23.	VZ027	<p>Area: 72,000 ha. Ecoregion: Madeira/Tapajos Moist Forests State: Amazonas</p> <p>Area of great importance for the maintenance of ecological processes. Located at the North end of a block of protected areas, this site would increase the biodiversity protection of this region.</p>	Central Amazon	Central Amazon
24.	VZ031	<p>Area: 1,331,000 ha. Ecoregion: Madeira/Tapajós Moist Forest, Tapajós/Xingu Moist Forest, Monte Alegre Varzea, Uatuma-Trombetas Moist Forest, Gurupá Várzea State: Pará</p> <p>Extremely important site for the conservation of floodplain resources. Aquatic ecosystems are poorly represented within protected areas, and the Santarém region is well known for its high species diversity.</p>		

Annex 6: List of Existing Protected Areas to be supported under the project

Annex 5: Selected Existing Protected Areas for Phase I Summary of Ecology, Social and Institutional Assessment, and Management-Infrastructure-Threats

1. National Park Jau - PNJ DL 1.4 DV 3.6		
Ecology	Social and Institutional Assessment	Management, Infrastructure and Threats
<p>Extension: 2.272.000 ha. Creation Decree: 85.200 de 24.09.80</p> <p>The PNJ is located in the Municipalities of Novo Airão e Barcelos – AM and it is the largest strict conservation PA in Brazil. The PNJ has dense forest of lowlands, bush plains, open and dense forest plains. The PNJ was established on Pleistocene refuges of high biodiversity.</p>	<p>Novo Airão has a population of 14.024 inhabitants and Barcelos 11.035 inhabitants (1991). Novo Airão lost 40% of its population between 1970 and 1980. During the 80s, registered the highest population growth rates in the State of Amazonas (2.9%). Barcelos has a more modest population growth rate of 2.1%. Novo Airão has small furniture factories and there are 10 ship ports. Economic activities concentrate on extractivism, subsistence agriculture; poor husbandry, small-scale commercial fisheries; and the tourism sector is permanently growing. The capture and sell of ornamental fish, which has a potential impact on the PNJ and it is the most significant activity.</p> <p>There are no conflicts with indigenous people in PNJ regarding to land tenure and land use.</p> <p>The Municipalities, Councils, INPA, FUA, IPAAM, EMAMTUR, IDA, and the Port Authorities are the institutions with potentiality to be partners in the management of the PNJ. The Foundation Vitória Amazônica is currently working in partnership with IBAMA in the consolidation of the PNJ, mainly in the implementation of the participatory Management Plan and participatory environmental education activities in and outside the PNJ.</p> <p>There are 143 families (886 people) currently living within the NPJ, that depend on the PNJ natural resources. The inhabitants of the PNJ buffer zone practice subsistence agriculture (banana, pupunha e mandioca), and the extraction of wood for domestic consumption, construction of rudimentary houses and small boats.</p>	<p>The PNJ has sufficient infrastructure and equipment financed by PNMA 1. The staff includes 3 contracted park guards. The PNJ receives resources from the PNMA 1 (Consolidation component) and it is included in the PAs, to be consolidated, with resources from the Parks and Reserves Project MMA/PPG7. The PNJ Management Plan was concluded in 1997. In general terms, the PNJ is well preserved. 98,3% of the total areas are returned land belonging to the State of Amazonas; however, there are private properties (31 land titles, covering 38.693,6 ha.) and untitled land of indigenous populations. Other threats include the clandestine extraction of timber; extraction of cipó-titica, cipó-timbó, sorva, copaiba oil; clandestine operation of fishing boats; capture of ornamental fish; and uncontrolled tourism.</p> <p>The PNJ is not yet demarcated (200-km need demarcation) and the existing signaling is not sufficient.</p> <p>A growing concern and threat to the PNJ is the increase of uncontrolled tourism in and around the Park. In the region, many tourism companies' operations are not compatible with the conservation efforts in the PNJ.</p>

2. Ecological Reserve Juami-Japura - ERJJ		
3. Ecological Station Juami-Japura - ESJJ DI: 0.1 DV: 3.0		
Ecology	Social and Institutional Assessment	Management, Infrastructure and Threats
<p>ERJJ. Extension: 265.000 ha. Creation Decree: 88.542 of 21.07.83</p> <p>ESJJ. Extension: 572.650 ha. Creation Decree: 91.307 of 03.06.85</p> <p>The REJJ and the ESJJ are administrated as a single unit. They are located in the mouths of the Puruê e Mapara rivers, include the basin of the Juami river, and the southern part of the Japurá river in the Municipality of Japurá-AM. The areas cover the forest of igapó; firm land forest and plain formations, clear and dark water rivers. The areas and inhabited by a number of endangered species.</p>	<p>The largest town in the region is Japurá (o Limoeiro), with a population of approximately 11.000 people from which roughly 50% is urban. The economy of the region is based on subsistence agriculture, artisan and commercial fishery, and on the income generated by local civil servants. The exploitation of gold was an important activity, but has declined since 1995.</p> <p>The indigenous community of the Mapari in the Mapari River, the Indigenous Land Paraná of Boá-boá, and the community of Apaporis in the Apaporis River are mestizo communities engaged in subsistence fishery and agriculture along the rivers' shores.</p> <p>The organization of the civil society in the region is limited; environmental NGOs are not registered in the region. The organizations in the area include the Association of Fishermen of Japurá; Youth Pastoral Organization; the Union of Rural Workers of Japurá; and the Citizens Association of Limoeiro. The Federal Police and the Army are interested in patrolling the PAs close to the Colombian Border.</p>	<p>The ERJJ and ESJJ lack Management Plans and infrastructure, however, both are well preserved.</p> <p>These PAs do not receive financing from the PNMA 1, but are included as PAs to be consolidated with resources from the Ecological Corridors Project. There is no staff in the PAs and they are managed from Manaus. The EEJJ is not demarcated and there are no signaling.</p> <p>There are private properties within the PAs estimated in 6.000 ha. and there is no land conflict with indigenous communities around the PAs.</p> <p>The major threats include artisan fishery, commercial fishery by boats from Manaus, extraction and traffic of valuable minerals, and gold washing in the rivers delimiting the PAs (until 1995).</p>

4. Ecological Station Anavihanas - ESA - DI: 2.2 - DV: 3.0		
Ecology	Social and Institutional Assessment	Management, Infrastructure and Threats
<p>Extension: 350.018 ha. Creation Decree: 86.061 of 02.06.81</p> <p>The ESA is located in the municipalities of Manaus and Novo Airão, AM. The ESA covers forests of igapó, dense forest of firm land, plains, vegetation of caatinga-gapó, chavascal, fluvial and lakes ecosystems. This PA has a number of endangered species.</p>	<p>The major town in the area is Novo Airão, close to the Manaus market, which concentrates the economic activities in the region. The municipality of Airão has approximately 80% of its territory under some restricted use category and the indigenous territory of Waimiri-Atroari.</p> <p>When the Management Plan was concluded the offer of beds in the region around the PA reached 590, including a number of hotels in the jungle. Novo Airão has also small furniture and shipyards. The rest of the economy is based on extractive activities, subsistence agriculture, poor husbandry and small-scale commercial fishery.</p> <p>The ESA has financial problems. Families living within the PA were compensated and relocated. However, after two years many returned. Currently, 40 people are living within the PA they are grouped in the Community of Cauxi. They are engaged in subsistence activities such as fishery, hunting, and agriculture (mandioca).</p> <p>The indigenous land of Waimiri-Atroari (2.585.000 ha) is a mestizo community settled along the riversides.</p> <p>The following institutions are visible in the region: Council of Novo Airão; The Port Authority; IPAAM; INPA; Foundation of the University of the Amazonas; EMAMTUR; IDAM; Foundation Vitória Amazônica; and the Institute of Ecological Research -IPE</p>	<p>ESA receive financial resource from the PNMA 1 and is included within the PAs to be consolidated with support of the Ecological corridors Project of PPG7. The Management Plan was concluded in 1998. The ESA is, in general term, well preserved.</p> <p>The ESA has infrastructure and equipment resulting from investments of the PNMA 1. The ESA has a manager, based in Manaus, supported by 6 IBAMA staff.</p> <p>The major threats are: extraction of wood and other forestry products; hunting, fishery, capture of quelônios; extraction of pebble and sand for construction, tourism to the islands; and the intensive traffic in the Negro river, without control of potentially contaminating loads.</p> <p>A major concern is the increasing uncontrolled tourism and the changes in the traditional customs of the population, which abandon their traditional activities to be exclusively engaged in the extraction of wood for construction for the Manaus market.</p> <p>Commercial fishery will represent a future threat because the ESA consist of islands and has no demarcation and the signaling is deficient.</p> <p>There are no land use/tenure conflicts with the indigenous communities around this PA.</p>

5. Ecological Station Jari – ESJ DE 1.8 DV 3.4		
Ecology	Social and Institutional Assessment	Management, Infrastructure and Threats
<p>Extension: 207.370 ha. Creation Decree: 87.092 of 12.04.82</p> <p>The ESJ is located in the municipalities of Mazagão – AP and Almerim – PA. The ESJ is formed by a vegetal formation of hummed tropical forest, and some areas are covered with cultivated forest along the rivers.</p>	<p>The Jari Celulose Company is based in this region. Its activities include forestry, pulp production, agriculture and mining. These activities override traditional activities of subsistence farming and extractivism. The contact of these two different approaches is visible through the non-planned urbanization around the Monte Dourado, where the company is based. The company is a service center and utilizes the surplus labor attracted to the region.</p> <p>The indigenous land of Waiãpi by the Paru de Este River is the closest indigenous community, about 150 km from the ESJ. There is no land conflict with the communities around the PA.</p> <p>The State Secretary of Environment of Amapá, CEMA, is the natural partner for the consolidation of the ESJ. The Municipalities and the Councils are also potential partners.</p>	<p>The ESJ is well preserved; however, it has no Management Plan.</p> <p>The existing infrastructure in the ESJ is not sufficient, and the PSJ lacks control posts. IBAMA has allocated two staff in the ESJ, and the ESJ manager resides in the Capital. Additionally, there are two contracted park guards assigned to this PA.</p> <p>The ESJ does not have financial problems, and there are no inhabitants within the PA. The ESJ do not require demarcation since all its limits are natural.</p> <p>The inhabitants around this PA collect nuts (castanha-do-pará) within the ESJ on a seasonal basis. Human presence in this area is low.</p>

6. Biological Reserve Uatumã – BRU – DI: 1.6 – DV: 2.8		
Ecology	Social and Institutional Assessment	Management, Infrastructure and Threats
<p>Extension: 560.000 ha. Creation Decree: 99.277 of 06.06.90</p> <p>The BRU is located in the Municipalities of Presidente Figueiredo, São Sebastião of Uatumã and Uruará – AM. The dominant vegetation is dense ombrófila forest of firm land.</p>	<p>The closest urban center to the BRU is the Vila Balbina, which is the administrative town of the electricity company ELETRONORTE. The town of Presidente Figueiredo is the major income source. The town receives the taxation on mining paid by the Mineração Tabocas Company.</p> <p>The tourism sector is gaining economic importance in the region. Sport and commercial fishery in the Balbina lake is an attractive location for the nearby population of the BRU.</p> <p>Subsistence agriculture, poor husbandry and extractivism generate small surplus; however, these activities are attractive to a large number of poor people.</p> <p>The BRU is close to two large projects of exploitation of natural resources: the Hydroelectric of Balbina of ELETRONORTE, and the Tin Mine Pitinga which belongs to Mineração Tabocas. In the eastern part of the BRU there are minerals such as limestone, gipsita, and iron.</p> <p>Northeast to northwest of the BRU a large indigenous territory encompass this PA. This territory includes the indigenous lands of Waimiri-Atroari, Trombetas Nhapuera and Nhaundá-Mapuera. The relations with the Waimiri-Atroari are smooth and this facilitates the control process of the BRU.</p> <p>The ELETRONORTE is supporting the implementation and management of the reserve in financial and logistical terms. Additionally, the Institute of Agricultural Development of the Amazonas (IDAM), which is implementing agroforestry projects around the BRU, offers extension services and rural credit to over 800 rural farmers in the region.</p>	<p>The BRU do not receive financial resources from the PNMA 1, however, BRU is included in the Ecological Corridors Project supported by PPG7. The BRU is well preserved and in implementing a Management Plan which was concluded in 1997. The BRU is part of a special PAs mosaic, which includes the indigenous lands of Waimiri-Atroari and Trombetas-Japurá, and also the Municipal PA of Urubuí, and the PA Caverna of Maroaga.</p> <p>The BRU does not have immediate financial problems. However, 188 km of its perimeter are straight lines, which lack demarcation, and the existing signaling is not sufficient.</p> <p>The BRU does not have infrastructure but is well equipped. It has three staff assigned to the PA, five park guards contracted with resources from environmental compensation. Consequently, the BRU is well protected and there is no register of land use or management conflicts.</p> <p>Finally, the indigenous program Waimiri-Atroari (PIWA) groups a number of organizations that support the Waimiri-Atroari. The program could be an important partner to implement coordinated conservation actions and synergy between the PA and the indigenous territory. The ongoing shared management of the financial resources, resulting from the environmental compensation, between ELETRONORTE, IBAMA and the Community Association Waimiri-Atroari (ACWA) is an innovative successful model, with replication potential elsewhere.</p>

7. Ecological Station de Niquia - ESN - DE: 2.2 - DV: 3-4		
Ecology	Social and Institutional Assessment	Management, Infrastructure and Threats
<p>Extension: 286.600 ha. Creation Decree: 91.306 de 03.06.85</p> <p>The ESN is located in the Municipality of Caracaraí-RR. The ESN has vegetal formations of dense ombrófila forest, savanna fields, firm land forest, semidecíduas transitional forest and riverside forest. The ESN has a substantial number of endangered species.</p>	<p>The southern part of the State of Roraima was, until recently, extensively occupied by human settlements. Land was abundant and of easy accesses. The scattered population was engaged with subsistence fishery, hunting and extractivism. The only urban center of importance in the region is the town of Caracaraí.</p> <p>The paving of the road BR174 Manaus and Boa Vista resulted in a population increase at regional level and increased pressure on indigenous communities and natural resources.</p> <p>The land around this PA is notoriously inappropriate for low-tech agriculture, however, the INCRA continues to issue land titles and approving human settlements.</p> <p>The institutions with potential to contribute to the consolidation of this protected area include the Center for Ecological Studies of the Federal University of Roraima, which students are currently undertaking research activities in other PAs; INCRA, for its participation in land titling projects in the region; the Council of Caracaraí, second town of the State; the State Department of Environment (DEMA/SEPLAN). The State of Roraima, to date, does not have any State PA, however, there are projects that could be related to the ESN.</p>	<p>The ESN lacks a Management Plan. The ESN is part of a federal block of 4 adjacent PAs, with a total area of 945.131 ha. The ESN is well preserved.</p> <p>The ESN does not have immediate financial problems. And there are no inhabitants within this PA. About 34 km of the PA perimeter are straight lines without demarcation and signaling.</p> <p>The ESN has neither infrastructure nor equipment. This protected area has only one staff and one manager who lives and work in the town of Boa Vista.</p> <p>The current threats include frequent illegal hunting and fishery, and the capture of quelônios.</p> <p>The NSE is neighbor to the southwest part of the indigenous territory of Yanomami, and there is no land conflict with the indigenous communities around this PA.</p>

8. Biological Reserve de Tapirapé –BRT- DI- 1.9- DV- 3.0		
Ecology	Social and Institutional Assessment	Management, Infrastructure and Threats
<p>Extension: 103.000 ha. Creation Decree: 97.719 de 05.05.89</p> <p>The BRT is located in the Municipality of Parauebas – PA. This PA has dense Amazon forest with a high concentration of chestnuts.</p>	<p>The BRT is located in one of the most complex regions in Brazil in terms of appropriation of natural resources and land structure. The disputes over mineral deposits between the CVRD and the miners, and the land disputes between large farmer owners and farm workers have not been resolved yet. The Mine of Carajás of the CVRD, functions as a modern enclave, linked to global markets and occupies a large area within the consolidating agricultural frontier. As a result of the mining cycles in Serra Pelada and other small towns such as Parauebas, Curionópolis. The unemployment rates are very high, since large farms utilize only a limited amount of labor; thus, the resulting unemployed get organized in order to occupy land perceived as non-utilized or not protected. However, there is no perspective of social conflict in the region with relation to land use in the short-term.</p> <p>Immediate to the RBT, in the south, is the indigenous territory of Xicrim of Cateté, and the indigenous territory of Apyterewa is located to the northeast. More distant, in the northwest, is the indigenous territory of Parakanã.</p> <p>The BRT since its creation has been supported by from the Vale of Rio Doce Company.</p>	<p>Two different PAs are adjacent to the BRT, forming a regional area of environmental preservation: the national Forest of Tapirapé-Aquiri and the Environmental Protection area of Igarapé Gelado.</p> <p>The RBT has a Management Plan (1991) and, in addition, has an emergency action plan completed in 1995. The BRT receives support from the PNMA.</p> <p>The BRT was established on lands previously occupied and lately returned by the Union. There are no inhabitants within this PA and the immediate financial needs have been addressed. The BRT is demarcated and there are 15 signaling plates. The condition of these plates in unknown.</p> <p>The BRT has basic infrastructure, constructed with resources from the PNMA. However, the available equipment is insufficient. Staff is limited to only two staff from IBAMA. Both reside at the Reserve.</p> <p>Occasionally, wood extractors visit the BRT. In 1999, a group of land-less people settled in the BRT. The struggle to obtain land and the resulting conflicts are intense; and the risk of illegal settlements is high. Nevertheless, there is no land conflict with the indigenous communities settled around this PA.</p>

9. Biological Reserve Rio Trombetas – BRRT DL 3.0 DV 3.8		
Ecology	Social and Institutional Assessment	Management, Infrastructure and Threats
<p>Extension: 385.000 ha. Creation Decree: 84.018 de 21.09.79</p> <p>The BRRT is located in the Municipality of Oriximiná – PA. The Reserve consist of firm land forest, cultivated forest and aquatic vegetation of fluvial and lake environments. This PA contains the highest known concentration of Amazon tortoise (<i>Podocnemis Expansa</i>) and therefore, the most extensive reproduction area too.</p>	<p>The Bauxite Mine of the Rio do Norte Mining Company (MRN) dominates economic activities in the region. This mega-project, linked to the aluminum international market overrides a large number of informal activities of appropriation of natural resources. Mining, collection of nuts (castanha-do-Pará), and subsistence fisheries and agriculture.</p> <p>There is also a small urban market, which utilizes the unskilled labor available around the mine. The rudimentarily of the Mine’s employment conditions result in additional pressure on natural resources.</p> <p>There are black communities, descendent from the “quilombolas”, ex-slaves, that have been isolated for centuries and currently live from a sustainable exploitation of products such as the castanha do pará (nuts). Approximately 60 families live within this PA, and the closest indigenous territories include the Nhaundá-Mapuera in the northwest and the Cuminapanema-Urucuriana in the northeast.</p> <p>The MRN is currently collaborating with the management of the BRRT. The Municipality of Oriximiná, and its Council are also viable partners for the conservation of the Reserve. Other potential institutions include the SECTMA do Pará, the Museum Paraense Emílio Goeldi, and the INPA.</p>	<p>The BRRT neighbors the Flona Saracá-Taquera, and the BRRT received most of the resources from the PNMA in Brazil. In general terms, this PA is well preserved. However, there are small-degraded overpopulated areas. The BRRT has a Management Plan.</p> <p>Between 20.000 to 25.000 ha. of the BRRT have not been expropriated yet. Also, there are traditional communities living within this PA. There are lands that have not been incorporated to the Union’s Patrimony yet. Only 587 meters require demarcation.</p> <p>The BRRT has sufficient infrastructure and is well equipped. This PA has 6 staff which are supported by 11 park guards, provided by the Rio do Norte Mining Company, to undertake protection and control work.</p> <p>Few families of traditional people live within the Reserve. They collect nuts (castanha) and also collaborate with the protection of this PA. There are also incursions of castanha collectors, hunters and fishermen from around the PA.</p> <p>The MRN is a permanent environmental risk for the Reserve. For instance, support barriers have been broken in the past causing serious environmental damage. Besides, the increasing traffic of large ships used to transport mineral is a permanent threat.</p> <p>There is no land conflict with the communities around this PA.</p>

10. National Park Serra da Mocidade – NPSM		
Ecology	Social and Institutional Assessment	Management, Infrastructure and Threats
<p>Extension: 350.960 ha. Creation Decree: S/n de 29.04.98</p> <p>The NPSM is located in the Municipality of Caracará – RR. Four types of vegetation are contained within the limits of this Park: gramíneo-lenhosa plains, forested plains, opened sub-mountain ombrófila forest and dense ombrófila sub-mountain forest. Besides, there are zones of complex mosaics between the plains and the ombrófila forest.</p>	<p>The NPSM neighbors the indigenous territory of the Yanomami, in the south-southeast.</p> <p>The southern part of the State of Roraima was, until recently, extensively occupied by human settlements. Land was abundant and of easy accesses. The scattered population was engaged with subsistence fishery, hunting and extractivism. The only urban center of importance in the region is the town of Caracará.</p> <p>The paving of the road BR174 Manaus and Boa Vista resulted in a population increase at regional level and increased pressure on indigenous communities and natural resources.</p> <p>The land around this PA is notoriously inappropriate for low-tech agriculture, however, the INCRA continues to issue land titles and approving human settlements.</p> <p>The institution with potential to contribute to the consolidation of this protected area include the Center for Ecological Studies of the Federal University of Roraima, which students are currently undertaking research activities in other PAs; INCRA, for its participation in land titling projects in the region; the Council of Caracará, second town of the State; the State Department of environment (DEMA/SEPLAN).</p>	<p>The PNSM has no Management Plan. This PA is part of a Federal block of 4 adjacent PAs, with a total area of 945.131 ha. The PNSM is well preserved.</p> <p>The NPSM has no immediate financial problems. However, there is a need to incorporate its land to the Union’s Patrimony. This PA has neither demarcation nor signaling.</p> <p>The NPSM has neither infrastructure nor equipment. This protected area has only one IBAMA staff and a manager who lives and works in the town of Boa Vista.</p> <p>The current threats include frequent illegal hunting and fishery, and the capture of quelônios, especially during the spawning period.</p> <p>There is no land conflict with the indigenous communities around this PA.</p>

11. Ecological Station de Maracá- Jipiôca – ESMJ DE 2.4 DV: 3.6		
Ecology	Social and Institutional Assessment	Management, Infrastructure and Threats
<p>Extension: 72.000 ha. Creation Decree: 86.061 de 02.06.81</p> <p>The BSMJ is located in the Municipality of Amapá. About 30% of its area are islands and mangroves. The rest of the area is a flood field with small thick bush islands.</p>	<p>Demographic density is low. The population in the main land is engaged with subsistence farming and fishery. Because of the maritime environment of the surrounding islands this is a region apt for commercial fishery.</p> <p>There are neither indigenous populations nor caboclos (indigenous people with higher urban influence) communities next to the reserve and along the rivers.</p> <p>The Environment State Secretary of Amapá, CEMA, is a natural partner for the consolidation of the ESMJ. The municipalities and the Councils are also potential partners. Because the ESMJ is formed with oceanic island, its receives support from the Port Authority and the Brazilian Navy.</p>	<p>This PA lacks a Management Plan, and apparently, the ESMJ is well preserved.</p> <p>Now, the ESMJ is in the last stage of the compensation process; and there is only one last landowner, and there are no other inhabitants in the islands. The ESMJ has not been demarcated, since it is mostly formed with oceanic islands.</p> <p>The existing infrastructures, as well as, the equipment are in poor conditions.</p> <p>The PA chief resides and works in Macapá. The additional two IBAMA staff alternate between the management base in Amapá and the ESMJ. Four contracted guards work at the ESMJ.</p> <p>The major threat is the region's fishing boats and their crews staying in the islands. They hunt and occasionally cause small fires.</p>

12. Biological Reserve de Lago Piratuba – BRLP DI: 1.0 DV: 1.4		
Ecology	Social and Institutional Assessment	Management, Infrastructure and Threats
<p>Extension: 395.000 ha. Creation Decree: 84.914 of 16.07.80</p> <p>The BRLP is located in the Municipalities of Amapá-AP and Tartarugalzinho-AP. In terms of vegetation it is an area of pioneer formation – marine influence, mangroves, fluvial influence, alluvial vegetation. The BRLP was established on Pleistocene refugees of high biodiversity.</p>	<p>Demographic density is low. The population in the main land is engaged with subsistence farming and fishery. There are cattle (buffalo) ranches around this PA. These ranches practice extensive methods of husbandry.</p> <p>There are no indigenous populations in the area. However, there are caboclo communities along the rivers.</p> <p>The Environment State Secretary of Amapá, CEMA, is a natural partner for the consolidation of the BRLP. The Municipalities and the Councils are also potential partners. The Champion Cellulose Company is located in the region, and is collaborating with CEMA to establish environmental management projects in the area. The Champion Co. could be a key strategic partner for the consolidation of the BRLP.</p>	<p>This PA lacks a Management Plan.</p> <p>A large extension of land of approximately 80.000 ha. will have to be expropriated in order to regulate the financial situation of the BRLP. Furthermore, the Village of Tabaco is located south of this PA. Accurate information regarding the number of occupants is not available.</p> <p>The BRLP has not been demarcated yet; 83 km of its perimeter are straight lines to be demarcated.</p> <p>The existing infrastructures, as well as, the equipment are in poor conditions.</p> <p>A BRLP has 6 IBAMA staff including of PA chief who works and resides in Macapá. The 5 IBAMA staff alternates the surveillance of the Reserve. There are also 4 guards as contracted from private surveillance company.</p> <p>The surrounding Vila Tobacco communities are mainly engaged with subsistence fishery.</p> <p>A major impact on the ecosystem in the BRLP is the extensive method used for husbandry in the ranches located in the not expropriated part.</p>

Annex 7: Institutional and Legal (SNUC-Law) Frameworks for the Management of Protected Areas in Brazil; and Project Complementarity

Institutional Framework

The management of protected areas in the Brazilian Amazon Region includes key governmental institutions under the Ministry of Environment (MMA): the National Council for the Environment (CONAMA) and the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA); the State and Municipal governments also participate in the management and administration of PAs. In recent years, the GoB has also promoted the involvement of the Brazilian society in general, in conservation issues. Through meetings and workshops, local communities and their representatives are now taking a more active part in all stages of the planning and implementation of protected areas, frequently carried out through partnerships between the Government institutions, NGOs, and other institutions and organizations of the private sector.

The MMA is the central instrument within the Brazilian National Environmental System (SISNAMA). The MMA responsibilities include the planning, coordinating, supervising, and controlling of activities related to the National Environment Policy; and the preservation, conservation and rational use of renewable natural resources. The MMA is also responsible for articulating and coordinating the actions of the integrated policy for the Amazon Region, including the improvement of the quality of life of the population of the Amazonia. Under the MMA is the National Council for the Environment (CONAMA). The CONAMA was established by Law no. 6.938 of 1981 and is a key stage in the control of environmental impact. CONAMA is also responsible for the establishment of norms, criteria and standards related to the control and maintenance of the quality of the environment, with a view to the rational use of natural resources.

The IBAMA was created in 1989 by the Law no. 7.735 of February 22, 1989. It is the central executive agency for Brazilian environmental policy. IBAMA took over the functions of a number of institutions such as the Brazilian Institute for Forest Development (IBDF), the Agency for the Development of Fisheries (SUDEPE), the Agency for the Development of Rubber (SUDBEVEA), and the Special Secretariat for the Environment (SEMA). IBAMA has financial and administrative autonomy and its mission is to carry out national environmental policies aiming to conserve and restore environmental quality for the present and future generations. Key mandates related to PA management include: (a) maintenance of the integrity of Areas of Permanent Preservation and legal reserves; (b) control and management of fisheries in Brazilian waters under the State jurisdiction; (c) control and management of the use of forest resources; (d) monitoring of the conservation status of Brazilian ecosystems, species, and the genetic heritage of the country; (e) promotion measures for the protection and management of the Brazilian fauna and flora; (f) promotion of research, information, and scientific and technical development in environmental administration and management; (g) facilitation and promotion of access to, and the sustainable use of, natural resources; (h) analyze the status and the prospect for the improvement of environmental planning. The basic structure of IBAMA is complex; it comprises different Advisory Directorates and several Advisory Councils. Amongst the latest is the National Council for Protected Areas (CNUC) which is in charge of establishing the policies and guidelines for the creation, the establishment and the use of PAs. Other key advisory councils include the National Council for the Protection of Fauna (CNPA) in charge of wildlife protection and management, and the Scientific and Technical Committee (CTC) responsible for the promotion of research and technology development, and the evaluation of the research and the technical outputs of IBAMA.

The major problems encountered by IBAMA, as well as, in state and municipal environmental agencies, related to PA management include: (a) PAs are numerous and small, less than 100,000 ha, where it is difficult to maintain genetically viable populations of the larger, wide-ranging species such as top predators. Moreover, the institutional resources of IBAMA are insufficient to manage effectively a large number of small units; (b) strictly protected areas lack personnel in terms of number and skills. On

average, there is one IBAMA employee for every 27,5 60 ha. of protected areas. IBAMA has 575 employees for the administration of strictly protected areas and only 20% have a higher education. For the National Forests (direct use), there are 195 employees and only 15% of them have higher education. Together, these employees represent about 13% on the IBAMA staff; (c) PAs have limited access ways, insufficient means of transport, and lack infrastructure and equipment.; and (d) Lack of structure within the legal framework that regulates PAs. Thus, the approval of Draft Law no. 2.892/92 for the definition and regulation of a National System of Protected Areas (SNUC) is vital.

Under the on-going decentralization of the GoB, the State and municipal governments are becoming active partners in the management of natural resources and PAs. However, they still have limited capacity and require of significant institutional strengthening inputs. The participation of the States and the Municipalities will be addressed by supporting state and municipal protected areas. Thus, the project will ensure the State and the Municipal governments participate in the different stages of the selection and creation of new PAs. This include decentralized activities such as: (a) participation in the consultation and technical process for the selection and the establishment of the new PAs; (b) participation in the different activities included in the process of obtaining the legal Decrees that create the new PAs; (c) direct execution of the activities involved in the consolidation of PAs, including the allocation of resources to selected States and Municipalities to implement activities related to the consolidation of PAs; (d) development and establishment of financial compensation mechanisms to compensate for the loss of areas with potential for agricultural production; (e) the signature of concession agreements with MMA/IBAMA for the establishment and management of new PAs, (f) participation in the design, development and cofinancing of community development plans and projects based on sustainable management of natural resources at State and municipal levels to benefit communities in and around PAs.

Protected Areas Development

There have been significant efforts in Brazil to expand the protected areas system, even though strictly protected areas cover only 2.6%, and protected areas for direct use cover 5.5%, to give a total of 8.1% of the area of the country. This is somewhat overestimated because many Environmental Protection Areas (APAS) overlap with other categories. Even so, this demonstrates a considerable effort on behalf of *in situ* conservation of Brazilian biodiversity.

Strict conservation of Protected Areas (Areas de Uso Indireto) include National Parks (PARNAS), Biological Reserves, Ecological Reserves, Ecological Stations and Areas of Relevant Ecological Interest. Protected Areas of direct use (Areas de Uso Direto) include: Areas of Environmental Protection Areas (APAS), National Forests and Extractivist Reserves. It is also important the large number of conservation areas administered and protected by the states, which number 451 and cover an area of 29.8 million ha. Some of these areas are large, such as the Sustainable Development Reserve of Arnana of 2.35 million ha. This reserve, along with the Reserve of Mamiraud, the Jaii National Park, the Anavilhanas Ecological Station, the Rio Negro State Park and the Environmental Protection Areas of the Right and Left Banks of the Rio Negro, make a continued total protected area of 8,567,908 ha. The largest area of protected tropical forest in the world. The largest state protected areas are in the north, where seven state protected areas are over one million ha. For instance, the Island of Marajo Environmental Protection Area, Pari, with 6 million ha. is the largest. In the south, state protected areas are more numerous but on the whole considerably smaller. There are also some systems of protected areas at the municipal level which are administrated by the local Environment Secretariats. Universities and research institutes also maintain areas reserved for scientific and experimental purposes as well as for conservation; for example the Adolfo Bucke Forest Reserve (10,000 ha) in Manaus, which is administered by the National Institute for Amazon Research -INPA, and the IBGE Ecological Reserve (1,260 ha), in Bmsflia.

Some non-governmental conservation organizations also own and administer reserves and sanctuaries. The Biological Station of Caratinga (880 ha) in the east of the state of Minas Gerais, is administered by the Biodiversitas Foundation. Likewise, the Salto Morato Natural Reserve of 1,716 ha in the east of the

state of Parana is administered by the Boticifio Foundation. Besides, FUNATURA maintains a chain of wildlife sanctuaries throughout the country. By establishing partnership agreements, IBAMA supports the training of PA technicians in methodologies to add economic value to natural resources and several case studies has been completed. Scientific research within PAs of strictly protected has increased significantly, to the extent that IBAMA has establish the a Research Unit within the Department of Protected Areas (DEUC).

In recent years, recognition has been given to the importance of conserving the landscapes of areas adjacent to protected areas. Measures specifically concerning this aspect are now taken into account in the management plans for the protected areas, as determined in Resolution no. 13, of December 6, 1990, of CONAMA. A number of new Environmental Protection Areas important for the conservation of biological diversity are in the process of being created by the Federal Government. They include the Serra de Fitapaba (1,592,000 ha), the Delta do Parnaíba (318,000 ha), the Chapada do Araripe (1,500,000 ha) and Ibirapuita (318,000 ha).

Legal Framework and the SNUC Law

The SNUC Law aims at updating and consolidating the principles and guidelines concerning the application of public policies in relation to *in situ* conservation of biological diversity and PAs. The SNUC Law has been in Congress since 1992 and was recently passed by the House of Representatives on June 10, 1999. The SNUC Law objective is to regulate the Article No. 225, inserts I, II, III and VII of the Federal Constitution, constituting the National System of Protected Areas. Once the new SNUC Law is finally approved by the Senate and published in the Official Gazette will eliminate the existing contradictions and overlaps of the current legislation supporting protected areas in Brazil. The following table provides an overview of how Brazilian PA legislation is dispersed in different legal instruments.

Overview of the Dispersion of PA Legislation in Brazil in relation to Management and Use Categories					
Instrument (Law)	Date	Article	Management Category	Use Category	Objective
1. Law no.4771 Forest Code	15.09.65	Art. 5, Line a	National, State and Municipal Parks; Biological Reserves	Indirect	To safeguard exceptional natural; attributes and scientific purposes
		Art. 5, Line b	National, State and Municipal Forests	Direct	For economic social and technical purposes
2. Law no. 5197 Wildlife Protection Law	30.01.67	Art. 5, Line a	National, State and Municipal Biological Reserves	Indirect	Prohibits hunting, use and the introduction of species of flora and fauna except on scientific basis
3. Decree no. 84017	21.09.79	Art. 1, Paragraph 1, 2, & 3	National Parks	Indirect	Establishes norms and regulations
4. Law no. 6902	27.04.81	Art. 1, Paragraph 1, 2, & 3	Ecological Station	Indirect	Protection of natural environment, research and environmental education
		Art. 9, Lines a, b and c	Environmental Protection Areas	Direct	Establishes norms, and limiting and prohibiting activities
5. Decree no. 88351	01.06.83	Art. 30	Ecological Stations	Indirect	Subordinates to CONAMA that may harm biota in surrounding areas to protected areas
6. Decree no. 89336	31.01.85	Art. 1	Ecological Reserves	Indirect	Areas of permanent preservation cited in the Art. 18 of the Law No. 6939 of 31.01.81
		Art. 2	Areas of Relevant Ecological Interest	Direct	For the protection of rare species of regional biota
7. Law No. 7804	18.07.89	Art. 9, Clause VI	Extractivist Reserves	Direct	Creates Extractivist Reserves occupied by social groups and permits the sustainable exploitation of natural resources.
8. Decree No. 98897	30.01.90	Arts. 1, 2 & 3	Extractivist Reserves	Direct	Regulates Extractivist Reserves
9. Decree No. 1298	27.10.94	Art. 1, Clauses I, II & III; Art. 2, a, b and c.	National Forests	Direct	Regulates National Forests

The Proposed SNUC Law aims to improve a wide range of institutional aspects, to ensure uniformity of legal concepts, procedures and methodologies, and to provide an operative legal basis to the numerous governmental agencies responsible for the consolidation of PAs at the municipal, state and federal levels. Its overall objective is to contribute for the maintenance of biological diversity and genetic resources in national territory and jurisdictional waters. More specifically, the SNUC Law objectives (specified in Chapter 4 of the Proposed SNUC Law) could be summarized in the following key categories:

Protection/Preservation of (a) Endangered species; (b) natural ecosystems' diversity; (c) natural and undisturbed landscapes of notable scenic beauty; (d) important aspects regarding geology, geomorphology, speleology and archeology; and (e) natural resources relevant for the subsistence of traditional populations.

Restoration of (a) natural ecosystems diversity; (b) hydrological and edaphic resources; and (c) degraded ecosystems.

Sustainable development based on: (a) natural resources management, (b) conservation principles and practices, (c) social and economic valuation of biological diversity, (d) respect, valuation and promotion

of traditional population's knowledge and culture, (e) promotion of means and incentives for scientific research, studies and environmental monitoring; and (f) promotion of environmental education, nature recreation and ecotourism.

The SNUC Law's guidelines (Chapter 5 of the Proposed SNUC Law) which will be supported by the project cover the following eight aspects: (1) Mechanisms and procedures for society's engagement in the establishment and revision of national policies related to PAs; (2) Effective participation of local populations in the establishment, implementation and management of PAs; (3) Support and cooperation of the public and private sectors for studies, scientific research, environmental education, recreation, ecotourism, management, monitoring and other activities relevant to the establishment and maintenance of PAs; (4) Incentives for local populations and private organizations to establish and manage PAs within the national system; (5) Economic sustainability and administrative autonomy for the PAs; (6) Establishment and management of PAs implemented in accordance with policies governing the management for land and surrounding waters, taking into account local socioeconomic conditions and requirements; (7) Adequate compensation for traditional populations that depend on existing natural resources within PAs; and (8) Financial resources for proper management of PAs, once they are established, so that they can fulfill their objectives.

Project complementarity to improve the legal framework

The proposed Project to Consolidate and Expand Protected Areas (PAs) in the Brazilian Amazon represents one of the largest conservation efforts worldwide. It was conceived by the Brazilian Institute for the Environment and Renewable Resources (IBAMA) at the Ministry of Environment. The project will play a key role in improving and expanding the application of the existing laws, guidelines and mechanisms for the management of the National System of Protected Areas (SNUC), in the Amazon region. This project, in addition to supporting a wide institutional aspects, adopts innovative management strategies to strengthen the legal framework for local autonomy and participation. It actually represents a landmark for conservation in Brazil, strengthening the legal and policy foundations for concrete and effective conservation actions.

The following tables summarize and illustrate key complementarity aspects of the project in relation to the creation, establishment and consolidation of PAs.

I. CREATION OF NEW PROTECTED AREAS		
Current scenario without SNUC	Scenario with SNUC approved	Project complementarity/improvement
<ul style="list-style-type: none"> • Macro-scale, “top-down” approach, based on office studies that are not participatory; • Little or no knowledge about land tenure and socioeconomic factors at local and regional levels, and local populations; • No provision of funds for the eventual acquisition of private lands, compensation for land improvements and reallocation of local populations; • No assessment of socioeconomic and political (also institutional) impacts; • Implementation process ignores the possibility of mosaic design; • Land occupation plans at municipal and state levels do not take buffer areas into account and involve little or no participation from municipalities, states and civil society; • No definition regarding a management council, thus perpetuating centralized forms of administration; • No financial incentive or compensation mechanisms from the Federal government to states and municipalities; • Guidelines established by the latest edition of IBAMA’s Decree no. 77-N (published in June 22, 1999) emphasize the need for technical assessment studies and land tenure diagnosis. IBAMA’s decree also requires that draft documents declaring the area destined to dispossession as public utility are prepared. Finally, the decree requires a map specifying the limits of the area, with an accompanying descriptive analysis; • It is only possible to know what is included in a new PA after demarcation. 	<ul style="list-style-type: none"> • Chapter 22 states: (1) The need to indicate and justify the different management categories; to identify the organization responsible for the new area’s management; and to define target traditional populations in the case of extractive reserves (Resex), reserves for sustainable development (RDS) and national forests; (2) The need for previous technical studies and public consultations, except in the case of ecological stations and biological reserves (there are, however, no definitions regarding appropriate scales, no predicted evaluation of socioeconomic impacts with corresponding compensation programs and no specified forms of public consultation, although there are indications about the need to inform local populations and other stakeholders). • Chapter 23 foresees contracts granting the use of areas destined to Resex and RDS, specifying prohibitions and restricted conditions regarding natural resource uses. • Chapter 24 anticipates the establishment of buffer zones and ecological corridors—except for areas of environmental protection (APAS) and private reserves of natural heritage (RPPNs)—which should be declared at the moment of their creation or subsequently. • Chapter 26 defends the establishment of mosaics (several types of continuous PAs) with integrated management. • Chapter 42 foresees plans for compensation and/or reallocation of local populations, when their presence is incompatible with specific management strategies. This should be carried out through negotiations to ensure adequate livelihood conditions for the affected population. • Chapter 56 refers to the reallocation of local populations or the redefinition of the management category in areas that have already been created and are irregularly occupied. 	<ul style="list-style-type: none"> • To be developed in public scale, involving experts and interested NGOs; • Designates macro areas that are identified according to biological and geographic criteria and previous sector studies, taking into account the opinion of experts and NGOs (component 1); • Produces expeditious and interdisciplinary diagnosis at local scales (component 3) aiming at: (i) proposing local management alternatives and defining the best design for the correct insertion of new PAs, taking into account eventual existing projects and land occupation processes in the region; (ii) evaluating socioeconomic impacts and presenting proposals for its compensation, as well as designing eventual reallocation and compensation plans; (iii) identifies and evaluates the profile of target populations, as well as land tenure patterns, indicating possible solutions; (iv) identifies and evaluates the potential for actual land/resource use; (v) management and administration of the area, taking into account other sector agendas responsible for or interested in the processes of territorial planning and occupation as well as the organizational capacity of the regional civil society; • Adopts the idea of mosaics as a concrete possibility in the design of new PAs, providing for the solution of eventual land use conflicts; • Defends all forms of public consultation, including public hearings with participation of the affected local population for mediation and negotiation of conflicting interests, before reaching the final decision, and including EE’s e Rebio’s; • Defends the execution of a detailed official register of the agrarian property mesh, with mapping of the real state and other occupations as well as their title holders, also including benefactresses evaluation and juridical study for the acquisition of lands before the legal implementation of new PAs, with support from the state agrarian land agencies and INCRA; • Physical demarcation of the new PAS as a consequence of land acquisition processes that are previously studied and legally resolved

II. ESTABLISHMENT OF NEW PROTECTED AREAS		
Current scenario without SNUC	Scenario with SNUC approved	Project complementarity/ improvement
<ul style="list-style-type: none"> • Slow implementation of management plans, by initial gathering of secondary data without a vision regarding human induced processes and the institutional matrix in buffer areas; • Absence of methodological guidelines for the design and implementation of management plans (except for Parks – Decree no. 84017/79); • Implementation centralized by IBAMA; • Inadequate infrastructure allocation, disregarding the real land use potential in the areas; • Absence or inadequacy of plans for control and surveillance / no control regarding access to the areas; • Lack of legal dispositions imposing the implementation of the proposed management plans for PAs where direct use is permitted; • Lack of knowledge concerning bordering, public, private remnants or otherwise unused areas, which should be added to the PA but are then excluded from the dispossession process; • Revision of management plans, which should occur every 5 years, is constantly postponed. 	<ul style="list-style-type: none"> • Chapter 28 foresees the establishment and implementation of management plans within a maximum of 5 years after the creation of PAs. In areas designated for direct use, this should be carried out with the participation of local populations. • Failure to consider the logistic strategies for territory control. • Failure to define guidelines for its implementation.(is this related to territory control? text unclear in Portuguese) • Failure to define deadlines for the implementation of management councils and/or units. 	<ul style="list-style-type: none"> • Defends two phases: (i) <u>Emergency phase</u>: focused on signaling boundaries and controlling access to the area, with the support of parallel environmental education programs for neighboring communities, which will occur simultaneously to the physical demarcation of the area. This phase also includes the nomination of a consultative council for any type of PA; (ii) <u>Definition phase</u>: focused on the development of guidelines based on data gathered via technical interdisciplinary studies that were implemented previously, before the PAs creation. This phase includes a detailed diagnosis regarding the areas' potentials and weaknesses. These studies and diagnosis should serve as a basis for the PA's internal zoning and management plan, which should be carried out within 6 months; • Selection of indicators for the monitoring of PAs (component 5) • Immediate review of the management plan based on the monitoring (conclusive) data. • Consolidation of management plans in PAs designated for direct use or in mosaics, through the editing of adequate legal documentation; • Juridical and institutional studies for restricting human activities that impact buffer areas.

III. CONSOLIDATION OF NEW PROTECTED AREAS (Operation and administrative and financial management)		
Current scenario without SNUC	Scenario with SNUC approved	Project complementarity
<ul style="list-style-type: none"> • Administrative, technical and financial management of PAs centralized by IBAMA; • Few PAs have financial and administrative autonomy (such as the National Park of Tijuca) and are individually responsible for their own management; • Lack of knowledge regarding the importance of the PAs by the local communities, and lack of adequate environmental education programs and scientific research. When available, educational/research programs do not include aspects of economic benefits; • Lack of alternative programs for the economic development of local populations, such as ecotourism, which are based on the presence and value of the PAs; • Absence of marketing programs, as well as skilled technical teams to deal with this issue; • Inconsistency of the existing legislation for fundraising, which is based on decrees and/or resolutions with no power of law (such as IBAMA's decree n° 90-N, of September 2, 1994, which regulates the use of images), or is otherwise unregulated (such as Rouanet's Law- regarding income tax deductions). 	<ul style="list-style-type: none"> • Prevision for assembling consultative councils related to the PAs designated for indirect use. According to Chapter 29, these councils should include representatives of the society, states and municipalities. Chapter 30 establishes that the council's administration should be the responsibility of a third party, by means of legal contracts or agreements. • Chapter 33 requires payment for the use of any resource within the area, including image rights • Chapter 36 stipulates that all enterprises liable for environmental licensing should pay a percentage calculated by the agency granting the license. 	<ul style="list-style-type: none"> • Proposal for juridical and institutional studies that can serve as a basis for legal institutional arrangements, which might be required for proper management of the PAs, including (component 6); • Proposal for juridical and institutional studies that can serve as a basis for fundraising (component 4); • Proposal for juridical and institutional studies aimed at devising incentive and compensation mechanisms from the Union to the states and municipalities, and also for the private sector.

The proposed SNUC Law is now at the Federal Senate Level, after having gone through several public consultations involving the Brazilian Society. It has also gone through all the thematic Commissions of the Deputies Chamber. The Federal Government through MMA and IBAMA, is supporting and pushing the process. MMA and IBAMA are confident that the final approval of the SNUC Law will speed up with the approval of the project.

International Cooperation in Support of Protected Areas

Lending programs and technical international cooperation are the main source of funding for protected areas. They also receive considerable funding, however, from the State, for the expropriation of land, as well as for their maintenance and management. In addition, protected areas benefit from visitor's fees, and from concessions to exploit forest products and sub-products in the case of the National Forests and Extractivist Reserves. Visitors to National Parks total 5.98 million from 1994 to August 1997.

From 1991 to 1996, the protected area component of the National Environment Program (Programa Nacional do Meio Ambiente - PNMA), was the largest source of funding for federal protected areas. A part of Brazil's share for this component was financed by a donation from the German development Bank Kreditanstalt für Wiederaufbau - KfW. Funding from the Treasury and KfW, and a loan from The World Bank enabled PNN4A to finance programs for 45 strictly protected areas and five Environmental Protection Areas, in various states. From 1991 to 1996, PNMA invested US\$ 25.69 million in protected areas. Furthermore, another important achievement has been the establishment and upkeep of the physical infrastructure and the purchase of equipment for protected areas, involving investments in 1996 and 1997 of about US\$ 12.6 million through the PNMA.

The Inter-American Development Bank -IDB, USAID, WWF, and the governments of France and Canada have provided funds directly to non governmental organizations working in the areas surrounding protected areas, in general involving programs for rural cooperativism extension and environmental education. Some of these international programs include (a) The Fundagao Museu do Homem Americano received US\$2 million from the IDB, for programs in the Serra da Capivara National Park, Piaui; (b) The Foundation Pro-Natureza - FUNATURA received US\$500,000 from the IDB for the establishment of four Private Natural Heritage Reserves - RPPN in the Cerrado; (c) The European Union provided US\$254,770 for the elaboration of the management plan for the Anavilhanas Ecological Station, Amazonas; (d) SOS Amazonia received US\$700,000 from USAID and the Nature Conservancy for the elaboration of the management plan for the Serra do Divisor National Park, Acre; and (e) In 1997, The International Tropical Timber Organization - ITTO is financing a 5-year project for sustainable management in the Tapajos National Forest, Pari.

In February 1997, the Inter-American Development Bank - IDB and the Government of Bahia set aside approximately R\$ 2 million for the creation of the Serra do Conduru State Park (8,400 ha), near the Una Biological Reserve, in southern Bahia. This was the result of collaboration with the Department of Forest Development of Bahia, and resulted in the doubling of the protected area in the region, which holds a world record for plant species richness, with 454 tree species recorded in a single hectare.

Since 1992, the Overseas Development Administration - ODA, the European Union and the Wildlife Conservation Society, New York, have contributed around US\$ 5 million to the Mamirauá Sustainable Development Reserve, Amazonas (a state protected area). ODA expects to invest a further US\$4 million between 1997 and 2001.

Many of the advances in the conservation of the biological diversity of Brazil have been the result of international partnerships, a good example is the Pilot Program for the Brazilian Tropical Forests - PPG-7 (Programa Piloto para Protecao das Florestas Tropicais do Brasil). In this program, some of the most important aspects have been the establishing and equipping of protected areas in the Amazon Forest, implemented through the Subprogram for Protected Areas and Management of Natural Resources, which involves projects for biodiversity conservation and the sustainable use of natural resources. By the third trimester of 1997, of the US\$273.16 million already invested or ear-marked for the PPG-7, a little more than US\$50 million was allocated to this subprogram: US\$ 9.4 million for the Extractivist Reserve component; US\$22.7 million for the Indigenous Lands and US\$18.7 million for Forest Management.

**Annex 8: Financial Data:
Table 1: Phase I Financing Plan**

Component	Total Cost (US\$ millions)	% Total	GEF (US\$ millions)	GOB (US\$ millions)	PPG7 (US\$ millions)	Other donors (US\$ millions)	% of GEF financing
1. Creation of New Protected Areas	21,6	34,3	8,7	6,7	6,2	0,0	40,3
2. Consolidation of Existing Protected Areas	15,2	24,1	6,5	4,9	3,8	0,0	42,8
3. Financial and Legal Mechanisms	15,0	31,7	10,0	5,0	0,0	5,0	50,0
4. Monitoring and Evaluation	2,9	4,6	2,0	0,9	0,0	0,0	69,0
5. Project Coordination	1,5	2,4	1,0	0,5	0,0	0,0	66,7
TOTAL	63,0	100,0	30,0	18,0	10,0	5,0	47,6

Annex 8
Table 2: ARPA Financing Plan (10 years)

Component	Years 1 to 4	Years 5 to 10	Total
1. Creation of New Protected Areas	23,4	65,6	88,0
2. Consolidation of Existing Protected Areas	15,2	24,8	40,0
3. Legal and Financial Mechanisms	15,0	40,0	60,0
4. Monitoring and Evaluation	2,9	12,1	15,0
5. Project Coordination	1,5	4,5	6,0
Total	63,0	147,0	210,0

Annex 8

Table 3. MMA's financing plan (2000-2003) and allocation to the current project

Programa	Projeto/Atividade	Total PPA	Disponível para o Projeto Expansão de Áreas Protegidas	
		R\$	R\$	US\$ ⁽¹⁾
Parques do Brasil	Proteção de UC	48.334.994	21.880.000	12,431,818
	Gestão e Manejo	23.192.279	5.352.064	3,040,945
	Apoio ao Ecoturismo	6.183.495	257.645	146,389
	Estudos para valoração de UC	1.132.725	-	-
Amazônia Sustentável	Expansão e Consolidação de Áreas Protegidas na Região Amazônica	15.724.998	4.300.000 ⁽²⁾	2,443,182
Total		R\$ 94.868.491	R\$ 31.789.709	US\$ 18,062,334

¹ Dólar americano à R\$ 1,76 (14/02/1500)

² Apenas para o ano 1500.

Outras Fontes de Recursos direcionados para UC

Programa	Total (US\$)	Disponível para o Projeto Expansão de Áreas Protegidas		Participação Financeira	
		Projeto/Atividade	Total (US\$)	Recursos Externos	Recursos Nacionais
PP-G7 Corredores Ecológicos	26,514,584 (Corredor Central da Amazônia)	Criação, Planej. e Manejo de UC	7,792,000.00	100%	-
		Monitoramento Ambiental e Apoio a Fisc. e Vigilância	3,151,900.00	100%	-
PNMA II	30,000,000	UC Federais	1,300,000.00	50%	50%
PROECOTUR	13,800,000	Implantação de UC Federais	850,000.00	100%	-
		Criação/Implantação de UC Estaduais	950,000.00	100%	-
Total (US\$)			14,043,900.00	90%	10%

TABLE 4: FINANCIAL RESOURCES SPENT IN A REPRESENTATIVE SAMPLE OF AMAZON PROTECTED AREAS FROM 1995 TO 1999.

Unidade de Conservação	Recursos Orçamentários GOB					Recursos PNMA				Subtotais por UC
	1995	1996	1997	1998	1999	1995	1996	1997	1998	
1 - Parque Nacional do Jaú	0	0	826.08	17,505.71	5,294.11	74,049.45	42,881.45	78,642.57	25,679.34	244,878.70
2 - Parque Nacional do Pico da Neblina	14,903.01	24,000.00	7,280.08	6,405.71	5,288.23	0	0	0	0	581,411.80
3 - Reserva Biológica do Abufari	0	0	1,989.00	10,299.88	6,647.05	127,839.36	10,881.54	60,159.06	108,940.72	326,756.60
4 - Reserva Biológica de Uatumã	6,356.44	9,156.00	3,500.00	11,675.00	1,764.70	0	0	0	0	32,452.14
5 - Estação Ecológica de Juami-Japurá	0	0	0	9,012.00	49,440.00	0	0	0	0	58,452.00
6 - Reserva Ecológica de Juami-Japurá	0	0	0	0	0	0	0	0	0	0
7 - Reserva Ecológica Sauiim Castanheira	0	0	0	9,136.36	1,617.64	0	0	0	0	10,754.00
8 - Estação Ecológica de Anavilhanas	0	0	3,257.42	15,900.00	5,294.11	72,185.51	84,874.60	47,894.85	96,491.00	325,897.50
9 - Estação Ecológica Jutai Solimões	0	0	0	4,965.00	1,617.64	0	0	0	0	6,582.64
10 - Parque Nacional do Cabo Orange	4,1197.59	36,885.00	15,114.24	19,292.00	3,557.64	0	0	0	0	121,046.50
11 - Reserva Biológica do Lago Piratuba	10,067.21	10,067.21	10,183.34	12,107.00	3,748.82	0	0	0	0	46,173.58
12 - Estação Ecológica Maracá-Jipioca	0	28,114.00	6,196.13	7,483.40	5,108.82	0	0	0	0	46,902.35
13 - Estação Ecológica do Jari	18,539.80	21,556.00	9,357.87	11,238.11	4,575.88	0	0	0	0	65,267.66
14 - Parque Nacional da Serra do Divisor	8,435.16	18,500.00	4,231.80	0	19,397.64	0	0	0	0	50,564.60
15 - Estação Ecológica do Rio Acre	12,804.50	18,600.00	1,850.00	0	1,764.70	0	0	0	0	35,019.15
16 - Reserva Biológica do Gurupi	7,433.37	9,300.00	17,864.10	7,800.00	5,000.00	0	0	0	0	47,397.47
17 - Estação Ecológica do Iquê	5,754.77	0	0	7,988.55	4,411.76	0	0	0	0	18,155.08
18 - Parque Nacional do Amazonas	22,500.00	25,830.00	7,547.96	14,850.00	4,411.76	0	0	0	0	75,139.72
19 - Reserva Biológica do Rio Trombetas	0	0	3,600.00	10,100.00	1,647.05	264,247.67	97,480.07	27,033.19	0	404,108.00
15 - Reserva Biológica Tapirapé	1,788.88	2,800.00	8,198.86	11,125.00	2,258.82	15,971.56	0	17,762.64	3,500.00	68,405.76
21 - Estação Ecológica de Maracá	2,392.00	4,392.00	1,849.98	10,084.00	8,235.29	42,679.60	71,777.06	44,134.09	2,400.00	187,944.00
22 - Estação Ecológica de Caracarái	4,873.10	5,900.00	12,529.68	9,500.00	4,705.88	0	0	0	0	37,508.66
23 - Parque Nacional de Monte Roraima	4,419.00	5,750.00	14,800.74	7,800.00	4,705.88	0	0	0	0	37,475.62
24 - Estação Ecológica de Niquiá	3,250.00	3,250.00	16,241.93	8,500.00	7,352.94	0	0	0	0	38,594.87
25 - Parque Nacional da S. da Mocidade	0	0	0	0	0	0	0	0	0	0
26 - Parque Nacional do Viruá	0	0	0	0	35,664.11	0	0	0	0	35,664.11
27 - Parque Nacional de Pacaás Novos	11,726.38	15,646.00	14,784.10	8,500.00	3,529.41	0	0	0	0	54,185.89
28 - Reserva Biológica do Guaporé	15,978.05	28,100.00	6,749.80	21,063.32	5,740.00	0	0	0	0	77,631.17
29 - Reserva Biológica do Jari	7,096.00	10,000.00	7,651.42	10,405.60	5,764.70	0	0	0	0	40,917.72
30 - Parque Nacional do Araguaia	13,398.66	12,456.00	0	36,172.61	6,888.23	36,596.14	119,982.32	44,373.49	28,900.00	298,767.50
Subtotais por ano	212,913.90	290,302.15	180,604.50	298,909.30	738,967.60	638,569.30	427,877.00	319,999.90	265,911.10	3,374,054.80

- Obs:
1. Não estão incluídos gastos com o pessoal lotado nas unidades de conservação, bem como despesas com vigilância e limpeza;
 2. Os valores estão em US\$ 1.00, sendo que as taxas de câmbio empregadas foram: US\$ 1.00/R\$ 1,00 (1995-1998) e US\$ 1.00/R\$ 1,70 (1999);
 3. No ano de 1999 não houve repasse de recursos do PNMA.



Importante: o MMA estará investindo, no âmbito do Projeto e durante o ano de 1500, em torno de US\$ 1,7 milhão em atividades de campo voltadas para a criação das seguintes UC de uso indireto: Parque Nacional do Irixi-Xingu, no Estado do Pará, com extensão aproximada de 3 milhões de ha; PN do Apuniã e Reserva Biológica do Capitaria, ambas no Estado de Rondônia, com 104 mil ha e 5.250 ha, respectivamente; e outras UC, ainda em definição, junto aos estados e municípios da região

Table 5: Amazon Region Protected Areas Program, Phase I: Estimated Project Costs (in US\$ Million) - GEF contribution

Component 1: Creation and Establishment of New Protected Areas		10,500.00
I. Investment Costs		
A. PA Creation of new PAs		1,295.00
	1. Preliminary Environmental Assessment	120.00
	2. Participatory assessment and popular consultation	120.00
	3. Institutional consultation	55.00
	4. Land registration, imagens, mapping, topographic surveys, financial evaluation	650.00
	5. Definition of extension, limits and management category	100.00
	6. Land use conflict resolution strategy	150.00
	7. Preparation of Creation Decrees (5.000 each PA x20)	100.00
B. Ongoing demarcation and establishment of new PAs		7,200.00
	1. Implementation of land use conflicts strategies	100.00
	2. Implementation of concession agreements	50.00
	3. Demarcation of 15 PAs (50.000 each PA x15)	750.00
	4. Elaboration of Management Plans (150.000 each PA x10)	1,500.00
	5. Construction of infrastructure and equipment (350.000 each PA x10)	3,500.00
	6. Structuring, establishment and support to PA Management Councils	300.00
	7. Training	1,000.00
C. On-going prioritization process		430.00
	1. Information gathering, processing, analysis and reporting	100.00
	2. Priorization of ecoregions and representativity analysis	60.00
	3. Elaboration of mosaics and mapping	100.00
	4. Incorporation of social consultation results	100.00
	5. Approval process	50.00
	6. Evaluation	20.00
II. Recurrent Costs		
A. Operating costs		1,575.00
Component 2: Consolidation of Selected Existing Protected Areas		6,500.00
I. Investment Costs		
A. Consolidation of existing PAs		5,705.00
	1. Construction or improvement of infrastructure and equipment	3,000.00
	2. Demarcation and delimitation	500.00
	3. Staff training and administrative management tools	200.00
	4. Development or improvement of Management plans	1,350.00
	5. Development and establishment of concession agreements	55.00
	6. Community Organization, participation, development plans and support to management councils	500.00
	7. Implementation of revenue generating mechanisms	100.00
II. Recurrent Costs		
A. Operating costs		795.00
Component 3: Financial and Legal Mechanisms for the Sustainability of PAs		10,000.00
I. Investment Costs		
A. Establishment of the Trust Fund		7,100.00

	1. Structuring and establishment of the trust fund	100.00
	2. Trust fund grant	7,000.00
	B. Establishment and development of revenue-generation instruments	1,350.00
	1. Participatory design of innovative income generating instruments and implementation strategy	100.00
	2. Design and implementation of 10 income generating projects	1,250.00
	C. Concession of the establishment of revenue generating projects	25.00
	1. Design and implementation of concession agreements	25.00
	D. Development of law awareness and implementation of legal framework	250.00
	1. Legal gap analysis and draft amendments	50.00
	2. Institutional consultation and networking	100.00
	3. Training and workshops	100.00
	II. Recurrent Costs	
	A. Operating costs	1,500.00
	Component 4: Biodiversity Monitoring and Evaluation	2,000.00
	I. Investment Costs	
	A. Biodiversity monitoring and evaluation (BM&E)	1,700.00
	1. Equipment and design of a BM&E system (hardware and software)	150.00
	2. Establishment and operation of the BM&E system	1,250.00
	3. Training and collaboration agreements	130.00
	3. M&E system for project components	120.00
	5. System evaluation	50.00
	II. Recurrent Costs	
	A. Operating costs	300.00
	Component 5: Project Coordination and Management	1,000.00
	I. Investment Costs	
	A. Establishment of the Project Coordination Unit (PCU)	1,000.00
	1. Equipment and furniture	50.00
	2. Staff and training	950.00
	3. Audits	160.00
	II. Recurrent Costs	
	A. Operating costs	0.00
	TOTAL ESTIMATED PROJECT COSTS (investment and recurrent costs, including contingencies)	30,000.00

Map showing existing PAs and Candidates Areas in the Amazon Region.

