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ON A

GRANT FROM THE

GLOBAL ENVIRONMENT FACILITY TRUST FUND

IN THE AMOUNT OF USD 30 MILLION

TO THE FUNDO BRASILEIRO PARA A BIODIVERSIDADE (FUNBIO)

FOR AN

AMAZON REGION PROTECTED AREAS PROJECT

ARPA

June 22, 2009

Sustainable Development Unit
Brazil Country Management Unit
Latin America and the Caribbean Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective June 19, 2009)

Currency Unit = Brazilian Real (R$)
R$ 1.95 = USD 1.0
USD 0.47= R$1.00

FISCAL YEAR
January 1 to December 31

ABBREVIATIONS AND ACRONYMS

ABEMA	Association of State Environmental Departments
AIMEX	Association of Wood-exporting Industries of the State of Pará
ANAMA	National Association of Municipalities
APAS	Environmental Protection Areas
ARPA	Amazon Region Protected Areas Project
ASMUBIP	Regional Association of Women from Pico do Papagaio
CAS	Country Assistance Strategy
CBD	Convention on Biological Diversity
CBO	Community Based Organization
CFAA	Country Financial Accountability Assessment
CIR	Roraima Indigenous Council
CMC	Conflict Mediation Committee
CMU	Country Management Unit
CNA	National Agriculture Confederation
CNEA	National Registry of Environmental Entities
CNPA	Council for Protection of Fauna
CNPT	National Center for the Sustainable Development of Traditional Populations
CNS	National Council of Rubber Tappers
COBIO	National Biological Diversity Commission
COIAB	Coordinating Body of Indigenous Organizations of the Brazilian Amazon
CONAMA	National Council for the Environment
CONTAG	National Confederation of Agricultural Workers
COP	Conference of Parties
CP	Program Committee
CSO	Civil Society Organization
CTC	Scientific and Technical Committee
CTI	Center for Indigenous Work
DAP	Directorate of Protected Areas

DIGET	Directorate of Strategic Management
DIREC	Ecosystems Directorate
DPF	Directorate of Forests
EA	Environmental Assessmen
EMBRAPA	Brazilian Agricultural Research Corporation
EMP	Environmental Management Plan
FAP	Protected Areas Trust Fund
FASE	Federation of Social and Educational Assistance Organizations
FMA	National Environmental Fund
FMR	Financial Monitoring and Procurement Report
FOIRN	Federation of Indigenous Organizations of the Rio Negro
FTC	FUNBIO's Technical Commission
FUNAI	National Foundation for Indigenous Affairs
FUNATURA	Pro-Nature Foundation
FUNBIO	Brazilian Biodiversity Fund
G7	Group of Seven
GEF	Global Environment Facility
GEFSEC	Global Environment Facility Secretariat
GIS	Geographical Information System
GOB	Government of Brazil
GTA	Amazon Working Group
GTZ	German Agency for Technical Cooperation
IBAMA	Brazilian Institute for the Environment and Renewable Natural Resources
IBDF	Brazilian Institute for Forest Development
IBGE	Brazilian Institute for Geography
IBRD	International Bank for Reconstruction and Development
ICB	International Competitive Bidding
ICM	Sales Tax
IDA	International Development Agency
IDB	Interamerican Development Bank
IMAZON	Institute for Man and Environment in the Amazon
INCRA	Land Registry Ministry
INPA	National Institute for Amazon Research
IPAM	Institute for Environmental Research in the Amazon
ISA	Socio-Environmental Institute
ISPN	Institute for Society, Population and Nature
KfW	Kreditanstalt fur Wiederaufbau
LCS	Least Cost Selection
M&E	Monitoring and Evaluation
MIS	Management Information System
MMA	Ministry of Environment
MP	Management Plan
MRE	Ministry of External Relations
MTR	Mid-Term Review

NCC	National Coordinating Committee
NEP	National Environmental Project
NGO	Nongovernmental Organization
NRPP	Natural Resources Policy Project
OEMA	State Organization for the Environment
OSCIPS	Civil Society Organizations
PA	Protected Area
PAD	Project Appraisal Document
PAE	Emergency Action Plan
PCA	Scientific Advisory Panel
PCD	Project Concept Document
PCU	Project Coordination Unit
PDA	Demonstration Projects
PDF	Project Development Funds
PDPI	Demonstrative Projects for Indigenous Peoples
PLANAFORO	Rondonia Natural Resources Management Project
PM	Management Plan
PNF	National Forest Program
PNUD	United Nations Environmental Program
POA	Annual Operation Plan
PPA	Multi-year Plan
PPDI	Flood Prevention and Protection
PPG7	Pilot Program to Conserve the Brazilian Rain Forest
PPTAL	Project for the Integrated Protection of Indigenous Amazonian Populations and Lands
PROARCO	Program for the Prevention and Control of Forest Fires
PROARPA	ARPA Coordination Unit within FUNBIO
PROBIO	National Biodiversity Project
PRODEAGRO	Mato Grosso Natural Resources Management Project
PROECOTUR	Programa Nacional de Ecoturismo
PSR	Project Status Report
QAT	Quality Assurance Team
QCBS	Selection Based on Cost and Quality
RADAM	Radar in the Amazon
RDS	Sustainable Use Reserves
RESEX	Extractive Reserves Project
RFT	Rain Forest Trust Fund
SBF	Secretariat o.'Biodiversity and Forests
SBSTTA	Subsidiary Body on Scientific, Technical and Technological Advice
SCA	Amazon Region Coordination Secretariat
SCMA	Mamiraua Civil Society
SEAIN	International Affairs Secretariat
SECEX	Executive Secretariat
SECTAM	Federation of Agricultural Workers of the State of Para
SEMA	Special Secretariat for the Environment

SIMBIO	Biodiversity Monitoring System
SISNAMA	Brazilian National Environment System
SIVAM	Monitoring System for the Brazilian Amazon
SNUC	National System of Conservation Units
SOE	Statement of Expenses
STAP	Scientific and Technical Advisory Panel
SUDBEVEA	Agency for the Development of Rubber
SUDEPE	Agency for the Development of Fisheries
TF	Trust Fund
TNC	The Nature Conservancy
TOR	Terms of Reference
UC	Conversion Units
UFPA	Federal University of the State of Para
UNDP	United Nations Development Program
URP	Representation Unit Map
USAID	United States Agency for International Development
WB	World Bank
WWF	World Wildlife Fund
ZEE	Economic-ecological zoning

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BRAZIL

Amazon Region Protected Areas Project (ARPA)

CONTENTS

1. Project Context, Global Environment Objectives and Design

The Amazon Region Protected Areas Project (ARPA) is a three phased, 10 year program designed to conserve biodiversity of global importance in Brazil's Amazon Region. The Program represents an innovative initiative in promoting a public-private partnership and participatory approach at a scale that has never been attempted before in the country. It also provides the framework to bring different levels of government, civil society and financing partners together in a coordinated and collaborative effort to address and achieve project goals and objectives.

1.1 Context at Appraisal

a. Country and Sector Background: Brazil's Legal Amazon[1] Region occupies about 5 million km^2 of land, but is occupied (at the time of the project appraisal) by only an estimated 25 million people, the majority who live in urban areas. The region represents the largest area of remaining tropical rain forest in the world (approximately 30 percent) and is estimated to contain carbon stores of around 120 billion tons. Because the area is still relatively intact, it is thought to exert a significant influence on regional and global climate. The Region has been classified into 23 ecoregions and supports biodiversity of global significance. Despite the Region's global importance it is threatened by deforestation associated with economic development dominated by agriculture expansion, ranching, logging, mining and settlement policies. Poorly planned and managed economic development in the area has contributed to increasing loss of tropical forest, degradation of watersheds and overexploitation of wildlife and fisheries. Any long-term and sustainable approach to the issue will require a reduction in poverty, provision of viable and environmentally sustainable economic alternatives and strengthening of the protection of priority ecosystems. At the time of preparation, the Brazilian government's investment in the Amazon's protected areas (PA) was limited, estimated to be less than US $3.5 million per year distributed over 30 areas.

b. Institutional Framework: The management of protected areas in the Brazilian Amazon is the responsibility of two federal institutions: the Ministry of Environment (MMA) and MMA's autonomous Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA). In 2007, a new agency, *Instituto Chico Mendes de Conservação de Biodiversidade* (ICMBio) was spun out from IBAMA and made solely responsible for the administration of federal PAs. State and municipal governments also have responsibilities for the creation and administration of PAs that fall within their respective mandates. At the State level this typically is the responsibility of an environmental line agency.

[1] Legal Amazon is a political designation for an area covering all northern states (Amazonas, Pará, Acre, Amapá, Tocantins, Roraima, and Rondônia) plus the state of Mato Grosso, and part of the Maranhão state, totaling approximately 5.1 million km^2, which include Amazon forest and transitional vegetation. The Brazilian Amazon biome designates the area covered exclusively by the Amazon biome within the country, totaling approximately 4.1 million km^2.

c. Biodiversity Conservation and Natural Resources Management: The legal context for the country's protected areas is based on Brazil's National System of Conservation Units (SNUC) law passed in July 2000. This law declared the objective of the system to be the maintenance of biological diversity and genetic resources to be achieved through the establishment of a uniform legal basis, concept and methodology for the many government agencies at all levels of government to consolidate their respective PAs. This directly led to the creation of a National System of Protected Areas designed to maintain biological diversity and genetic resources. Specifically, the new system defined the responsibility and categorization of protected areas, established rules for their management and provided for property ownership. It also recognized two broad categories of protected areas: (a) "strict protection" PAs (e.g., national parks, biological reserves and ecological stations), which are those areas created primarily for conservation objectives and prohibit the exploitation of natural resources and other productive activities; and (b) "sustainable use" PAs (e.g., extractive reserves and sustainable use reserves) that allow for the direct use and exploitation of natural resources following norms stipulated in their respective management plan.

d. Indigenous Legal Framework: In the Brazilian Amazon, the indigenous population is estimated to be 326,000. Indigenous lands cover some 946,450 km^2 which corresponds to 22 percent of the area of the Legal Amazon. The country's 1988 Constitution provides the legal framework for the recognition of indigenous people's rights to their traditional territories. The aforementioned SNUC Law established the legal framework for "traditional peoples" to participate in the establishment and management of protected areas. This includes local populations' participation (including indigenous peoples) in the creation, implementation and management of PAs and in the establishment of PA management councils.

e. The Project in the CAS: The relevant CAS at the time of appraisal focused on policies that contributed to the reduction of poverty and/or were compatible with promoting renewed economic growth but stressed the need that environmental management become an integral part of Brazil's overall development strategy. The CAS specifically recognized the significance of continued deforestation in the Amazon region and outlined a strategy that addressed the issue. It further noted that the complexity of the issue as well as identified the associated underlying factors that would need to be addressed to have any impact in arresting the loss of forest and associated biodiversity. A key element in the strategy was the identification and protection of priority ecosystems.

f. Consistency with GEF Strategic Priorities: ARPA supported GEF's Global Operational Strategy by supporting the Biodiversity Focal Area through contributing to the long-term protection of Brazil's globally important ecosystems. Specifically, the Program was in conformity with GEF's Operational Program (OP) # 3 (Forest Ecosystems) and OP # 2 (Freshwater Ecosystems) and targeted the following GEF priorities: (a) *in situ* conservation of globally unique biodiversity, (b) sustainable use of biodiversity and (c) local participation in the benefits of conservation activities.

1.2 Original Global Environment Objectives (GEO) and Key Indicators (*as approved*)

The Project Development Objective (PDO) was "to expand and consolidate the protected areas (PAs) system in the Amazon region of Brazil." The proposed Project (the Project) would be the Phase 1 of a 10-year ARPA Program (the Program). The PDO would be achieved by:

- Creating 18 million hectares (ha) in new protected areas (9 million ha of "strict protection" PAs and 9 million ha of "sustainable use" PAs);
- Consolidating the management 7 million ha of existing "strict protection" PAs in addition to 9 million ha of the newly created "strict protection" PAs;
- Establishing and operating an endowment fund to meet the recurrent costs of protected areas; and
- Establishing and operating a biodiversity monitoring and evaluation system at the protected area and regional levels.

The key performance indicators for Phase 1 were:

- 23 ecoregions in the Brazilian Amazon analyzed for identification of new PAs;
- 18 million ha of new PAs (9 million ha of "strict protection" PAs and 9 million has of "sustainable use" PAs) created;
- 7 million ha of existing "strict protection" PAs and 3 million ha of new "strict protection" PAs consolidated and managed;
- An endowment fund for financial sustainability of existing strict protection PAs established and capitalized with a minimum of US$14.5 million;
- Demonstration projects for financial sustainability of PAs implemented;
- An environmental monitoring methodology for specific PAs defined and implemented; and a
- Program Committee, Conflict Mediation Committee, and two project coordination units (one in the Ministry of Environment (MMA) and one in the Brazilian Biodiversity Fund (FUNBIO) created and operational.

1.3 Revised GEO (*as approved by original approving authority*) and Key Indicators, and reasons/justification

Not applicable.

1.4 Main Beneficiaries

The main beneficiaries identified in the PAD were those local populations that would benefit from improvements in the quality and management of biodiversity and natural resources in the Amazon region at the federal, state, municipal and local levels. The country and government were also identified as beneficiaries of national and regional benefits. Under the Project's first component, ARPA would support an on-going process to prioritize ecosystems in the Amazon region subsequent to which the Project would support the creation of PAs to conserve representative samples. The identification and implementation of sustainable use and revenue generating sub-projects would follow

through a participatory process. As a result, no quantification of beneficiaries was attempted at the time of project appraisal.

1.5 Original Components (*as approved*)

Component 1: Creation of New Protected Areas (US$ 2.2 million, corresponding to 7.3 % of GEF grant).

The main objective of the component was the identification and legal creation of new PAs in Brazil's Amazon region. It was justified on the basis that the region still has large expanses of remote and under populated areas characterized by rich biodiversity. Moreover, many of these areas are unclaimed governmental lands. This facilitates the legal creation of PAs but represents a risk to encroachment in the absence of legal designation. Combined with public awareness such an approach was thought to provide for an economically efficient means to conserve biodiversity. The approach to the component was sequential, entailing: (a) the completion of an analysis of 23 ecoregions in the Region as a precursor to the identification of priority candidate sites and the creation of new protected areas, (b) the legal creation of new PAs and (c) provision of minimal support for their establishment (i.e., demarcation, land regularization, minimal infrastructure etc.). This component contained the following sub-components:

1.1. On-going Process of Prioritization
1.2. Identification of New Areas
1.3. Establishment of New Areas

Component 2: Consolidation of Protected Areas (US$ 4.6 million, corresponding to 15.3 % of GEF grant).

The objective of this component was to provide the necessary follow-up to newly created PAs supported under Component 1 as well as existing "strict protection" PA resulting in their consolidation and long-term sustainability. Specifically, this component was designed to promote the implementation of existing and recently created PAs and their buffer zones in the Amazon region. In contrast to Component 1, a number of activities under this component were designed to be implemented in parallel, providing support to demarcate existing "strict protection" areas bringing them up to the standards of newly created PAs (demarcation), while initiating basic protection in existing and new PAs (basic protection) while the management plans were being prepared (management planning). These activities were to be supported by promoting community participation and training of different stakeholders in PA management topics, systems, and programs as well as community development sub-projects. This component contained the following sub-components:

2.1. Demarcation of Existing Areas
2.2. Basic Protection (for both existing and newly created PAs)
2.3. Management Planning
2.4. Community Participation
2.5. Training

Component 3: Long-term Sustainability of Protected Areas (US$ 17.3 million, corresponding to 57.7 % of GEF grant).

The objective of the component was to support the creation and implementation of financial management and cost recovery mechanisms required to ensure the long-term management and financial sustainability of both existing and newly created Amazon PAs. This component was based on the assumption that the government would not have sufficient resources to support the long term needs of the PAs created and consolidated under ARPA. This would be achieved primarily through the establishment of an endowment fund (FAP) for the protected areas system in the Amazon region. The component would also support a series of studies and sub-projects developed to define and test appropriate revenue-generating mechanisms in support of PA sustainability. This component contained the following sub-components:

3.1. Protected Areas Endowment Fund (FAP)
3.2. Studies and Sub-projects in Buffer Zones

Component 4: Protected Area Monitoring (US$ 2.4 million, corresponding to 8.0 % of GEF grant).

Under this component, ARPA was to establish an environment and evaluation system of PAs. Specifically, the component was to support the creation of a biodiversity monitoring and analysis system for new and existing PAs designed to contribute to improved decision-making and planning and programming through making available more accurate and reliable information and promote increased management effectiveness in project supported PAs. In addition to technical monitoring, the system would also monitor and measure the fulfillment of project objectives. This component had the following sub-components:

4.1. Biodiversity Monitoring System
4.2. Training

Component 5: Project Coordination and Management (US$ 3.5 million, corresponding to 11.7% of GEF grant).

The objective of the component was to support the overall coordination of ARPA's other components in MMA, IBAMA and FUNBIO. The component would support the set up, staffing and operational costs of the ARPA's Project Coordination Unit (PCU) housed in MMA. The component was also to finance the set up, staffing and operational costs of PROARPA (the Program coordinating unit created within FUNBIO) that was to be responsible for procurement, disbursement and financial execution, creation and operation of the FAP and the execution of several studies and sub-projects under Components 2 and 3. There were no sub-components.

1.6 Revised Components

Components were not revised during execution.

1.7 Other significant changes

Amendments to the Grant Agreement. There were two amendments processed to the grant agreement (TF-051240) with FUNBIO.

a. Change in Denomination of the GEF Trust Fund. The first amendment was signed on October 29, 2003 consisting of: (a) a proposed adjustment to the Grant Agreement in response to the recent approval taken by the Executive Directors of the Bank to re-denominate the GEF Grants in Special Drawing Rights to United States Dollars; and (b) a simplification in the audit reporting requirements of the Bank. The changes were relevant to Section 1.01 (b), Section 2.01. 4.01 (a), (b), (c) and Schedule 1 of the Grant Agreement.

b. Changes to Increase Efficiency in Project Implementation. A second amendment was signed on September 10, 2004 in response to a request from FUNBIO to: (a) change the title of the Grant recipient (Section 7.01); (b) amend Schedule 1 of the Grant Agreement to (i) redefine incremental costs to include shipment costs and salaries of the Recipient's staff employed for purposes of working in project coordination and management activities (table set forth in paragraph 1); (ii) modify the requirement to submit "draft" management plans to the Bank for approval prior to a withdrawal under Sustainable Use Subproject and Revenue Generation subcomponent by eliminating the word draft (paragraph 3 (b) (i)); (c) amend Schedule 3 by making changes in use of individual consultants (Schedule 3, Part C.3 of Section II); and (d) amend Schedule 6, paragraph 1(e).

Extension of Project Closing Date. The extension of closing date was signed on June 4, 2007 in response to a request from FUNBIO, changing the closing date of June 30, 2007 to December 31, 2008 (Section 2.03). This was required to disburse all GEF grant funds and achieve the global objectives and was approved by the Country Director. The project was also granted a grace period until April 30, 2009.

Planning for Budget Shortfalls. In preparing the final Annual Operating Plan (POA) for the project (an 18 month budget to cover the period to July 2009) the PCU together with FUNBIO confirmed that available funds were insufficient to cover all the activities proposed in the initial 2008 draft POA. As a result a rationalization and prioritization of resources for the remaining period was required and adjustments were made in the POA. In addition, residual GEF resources originally destined to support IBAMA's *Sistema de Monitoramento Ambiental para Unidades de Conservação* (SIMBIO) under Component 4 - Monitoring, were reallocated to cover projected short falls in recurrent costs that were the main instrument for PA implementation, due to the flexibility of ARPA's independent financial mechanism, which gave PA staff the ability to respond in "real time" to the challenges posed by the magnitude and isolation of the Amazon Region.

2. Key Factors Affecting Implementation and Outcomes

2.1 Project Preparation, Design and Quality at Entry

The Program's origins can be traced back to Brazil President Cardoso's April 1998 announcement to conserve at least 10 percent of all of the country's forest types as a national priority. This provided the basis to conceptualize ARPA and prepare a request for funding to support project preparation provided through a GEF Block B grant which became available in April 1999. An Advisory Committee to oversee project preparation was established. The Committee comprised the World Bank and principal government ministry and NGO project sponsors, including MMA/IBAMA and the WWF. To elaborate the proposal, the Committee, in turn, created a task force composed of MMA, IBAMA, WWF, the World Bank, and environmental specialists. Local groups, NGOs, and aid agencies consulted during this initial organizing phase included FUNATURA, USAID, ISPN, the Nature Conservancy (TNC), the British Council, Grupo de Trabalho da Amazonia (GTA), Rede Brasil de Bancos Multilaterais, GTZ, UNDP, and Instituto Socio Ambiental (ISA).

In addition, the proposal was submitted for comments to social organizations in the Amazon (GTA, CNS, CONTAG, COIAB, and ASMUBIP) and to FUNBIO's Board which has a broad NGO representation. Two workshops were organized, one in Rondônia and one in Roraima, financed by the WWF/WB Alliance, to create a set of new areas and develop a methodology for public consultation during project implementation. These workshops were carried out in October and November 2000. Though no official evaluation of quality of entry was done at the time of effectiveness, preparation documents and project design were considered satisfactory.

a. Consistency. At the time of appraisal the Project was fully consistent with the priorities of the country with respect to both its main objective of biodiversity conservation and its geographical focus in the Amazon. It was also fully consistent with both GEF priorities and the Bank's CAS.

b. Soundness of the Background Analysis. The technical analysis on which the Project was designed was sound. Much of this analysis built on a number of earlier participatory activities some of which started long before the approval of the GEF preparatory grant. These included the 1990 workshop in Manaus followed by a number of priority setting exercises supported under PROBIO, a GEF supported project launched in 1996 under the auspices of MMA. These in turn provided the basis for the Macapá priority setting workshop in September 1999 that engaged representatives from civil society, NGOs, indigenous peoples and public and private sector to identify proposed candidate PAs to be supported under ARPA. After that the Macapá workshop consultations with a number of additional regional organizations that included all 9 Amazon states were also completed.

Detailed guidance provided in the PAD reflected the depth of this analysis particularly with respect to the process and criteria guiding the evolution of PAs and the role of public consultation in this process. The analysis of institutional and operational issues was less robust than the technical analysis, but the unique conditions characteristic of the Amazon, were taken into account during project implementation. These conditions included: (a) the cost "premium" for the provision of "goods and services" including their transport, (b) the lack of supply of locally based providers of same "goods and services" including contractors to build infrastructure and its significance to meeting Bank procurement requirements, (c) the low capacity at both the project and PA levels and (d) the low relevance of revenue generating sub-projects to ARPA supported PAs in the Amazon. Finally, despite FUNBIO's successful record in implementing an earlier GEF project, the "learning curve" was underestimated for the procurement of goods and services.

***c. Adequacy of Project Design*.** The Project had a long and at times difficult preparation reflecting the complexity of issues and underlying factors associated with conservation of biodiversity in the Amazon. These issues revolved around: (a) defining the respective roles of government and the private sector particularly with respect to Finance and Treasury; an issue that was further complicated with a change of government; (b) criteria (and associated government commitments) required to be met before PAs pass between phases of creation and consolidation; and (c) turnover in project preparation coordinator (5 coordinators in life of project preparation). However, these initial difficulties were eventually overcome. The initial problems in defining the roles of MMA and FUNBIO were solved, and their partnership was the underlying driver of much of ARPA project success. The consolidation criteria were defined with a strong methodology in the initial stages of implementation and the Coordination Unit experienced personnel stability through most of the implementation phase.

In light of the nature, scale and complexity of issues associated with supporting any significant effort to conserve large stands of Amazon, the multi-phase program approach using well-defined "triggers" to determine the passage between phases was a sound model. In addition to the logistical constraints faced in working in the Region other factors that should have been given fuller consideration in determining the Project's scope, scale and calendar of activities included the novelty of the project's public-private sector approach, lack of experience and local knowledge of working in the Amazon among some of the institutional stakeholders and the number and layers of institutions participating in the Project. Though the 4 year project duration was a Government requirement for externally funded projects, project design should have been adapted to accommodate this requirement.

At the component level, project design was logical and relatively easy to discern consisting of support for the on-going process of prioritization of PAs sites followed by their creation (component 1), consolidation and institutional strengthening to ensure their long–term technical sustainability (component 2), creating a financial management mechanism that would ensure their long term financial sustainability (component 3), monitoring and evaluation of the results of on-the-ground efforts to conserve biodiversity and overall project progress (component 4) and project management (component 5). The

sequencing of project components while sound assumes all project outcomes and outputs derived from preceding activities would be achieved according to plan. This rarely happens in practice and delays associated with establishment of the teams in the executing agencies, change in government and low procurement capacity immediately began to affect progress in other activities across several components located further "downstream" in the process. Related to this issue of sequencing was confusion in attempting to discern discrete phases (i.e., end points) of what is in effect a continuum in process of creation and consolidation of a PA.

The inclusion of "sustainable use" PAs later in project preparation contributed to a number of changes in project design (e.g., new Bank safeguard policies were triggered and adjustments in project budget), which added delays in the project preparation schedule. However, the inclusion of "sustainable use" PAs was fundamental for ownership by project stakeholders.

d. Assessment of Risks. Risk identification and severity assessment was comprehensive and generally accurate. Risks that were identified that later manifested themselves during project implementation were: (a) degree of government support following elections, (b) counterpart financing, (c) instability of financial markets, (d) complexity of environmental and project monitoring, and (e) institutional complexity contributing to delays in implementation. The mitigation measures proposed in the PAD varied in their relevance and effectiveness as described below.

e. Lessons Learned From other Projects. Project design reflected a number of experiences derived from previous projects supported by the Bank and other donors in Brazil. Critical inputs incorporated into ARPA design derived from these projects included: (a) the approach to strengthening PAs in Brazil, (b) the importance and means to encourage public participation in project design and implementation, and (c) a number of "lessons learned" derived from the creation of the financial mechanism associated with the earlier GEF supported FUNBIO project and for the protected areas fund established under the Mexico protected areas project (SINAP). ARPA design benefitted from an international workshop held in the Galapagos Islands in June, 2000. A Brazilian delegation comprised by government, civil society and academic sector representatives joined a group of 40 international professionals from Latin America to discuss the establishment of and endowment fund for protected areas within the design of ARPA. Among the experts, were the directors of two of the most successful protected areas endowment funds in the world (FMCN, Mecio and Profonanpe, Peru).

2.2 Implementation

The Amazon Region Protected Areas (ARPA) program has been considered by many international organizations as the world's largest tropical forest conservation program. ARPA was set as an ambitious 12-year effort to ensure comprehensive protection of the Brazilian Amazon. To accomplish this goal, the Brazilian government partners with international financing organizations to create a system of well-managed strict preservation areas and sustainable use reserves.

The first phase of ARPA began in 2003 and ended in 2008. ARPA has doubled the amount of the Brazilian Amazon under strict protection – from the 3.2% (12 million ha) at the start of the project[2] to over 25 million ha today. The addition of another 10 million ha in sustainable use areas meets two societal needs in Brazil – conserving biodiversity and providing improved livelihoods for traditional forest dwellers.

The ARPA project has successfully engaged 5 state governments (Mato Grosso, Acre, Tocantins, Rondônia and Amazonas) in creating and managing their own state PAs and strengthening their state environmental infrastructure. Other states all worked with the federal government (at different levels of commitment) to create new federal protected areas and sustainable use PAs. ARPA's efforts to institutionalize the political will and increase support for conservation goals as part of the mandate for state governance is an important contribution to state capacity in the Amazon.

ARPA managed to work during its first phase implementation in an high profile national and global setting, often facing very difficult political and social conditions. As such it has tackled some of the most formidable concerns in ecosystem protection today: enforcement of environmental laws in remote areas; the needs and aspirations of rural people for improved livelihoods; and the valuing and funding of conservation activities against a wider backdrop of ongoing resource exploitation. ARPA in its first phase has built the capacity of key partner organizations to address these issues through their work implementing this complex project in numerous protected areas across the Amazon.

Project implementation can be divided into three stages defined by the following characteristics: (a) a two year start up stage that was largely focused on staffing up and training in the executing agencies (PCU and FUNBIO), establishing project agreements with State and other line government agencies, executing institutions learning how to work together, and a change of government (2003/2005); (b) a two year period where procurement, disbursement and institutional arrangements began to come together when ARPA reached its operational peak, reaching significant results in the field, especially in the creation of new areas (2005/2006); (c) the creation of ICMBio and a 4-month strike that slowed previous implementation pace. ICMBio's role was consolidated and the project returns to its previous implementation mode. But close to the end of the year, financial shortfalls forced a prioritization of project supported activities. (2008/2009).

In order to overcome some of the administrative challenges, ARPA developed several innovative internet-based systems to track protected area management status (SisARPA) and allow partners to track procurement requests and other financial transactions ("Cerebro"). Joining these innovations is the much praised "*conta vinculada*" or "conjoined account" that allows a direct flow of resources from FUNBIO to protected area managers. This system avoids the problems often inherent in a government bureaucracy while providing ready accountability through an efficient receipt and documentation system. Given that numerous other Amazonian environmental projects managed by government agencies have been unable to successfully expend funds in a regular and sustained way on site, the *conta vinculada* is an essential contribution to

2 World Bank, Project Appraisal Document (PAD) p 6.

ARPA success. In contrast to so many other programs, ***95% of GEF funds were expended*** – in large part thanks to this administrative innovation.

Government Turnover and Reorganization. At an institutional level, over the 6 year implementation period the Project experienced two election cycles and the associated delays involving changes in personnel and processes. This was particularly significant with the first changeover in government bringing in a new party that had no previous involvement with ARPA's preparation. Despite the creation of a transition team to facilitate turnover of the project between the two governments, the loss of personnel in the final days of the Cardoso government contributed to the absence of critical decision-making and appears to have been a major factor in contributing to the delay in reaching effectiveness. Reorganization of government also affected project implementation. This consisted first of a restructuring of MMA in 2004 and the shift of the PCU to a new institutional home followed by the establishment of ICMBio in 2007. The latter had a much more significant impact on the Project due to a strike that effectively stopped public sector operations for a period of 4 months. At the level of personnel, the project suffered near continuous turnover in MMA/IBAMA (later ICMBio), the PCU and in project supported PAs. In the latter case, this was due primarily to poor selection criteria, lack of a human resources policy in ICMBio and the often difficult field conditions characteristic of Amazon PAs. Finally, there was a change in project coordinators late in project implementation coming at a critical time when additional effort was required to meet Project output and outcome indicators.

Government Staffing. Successive supervision missions continued to express concerns over the lack of permanent ARPA counterparts in MMA and the initial level of staffing in the PCU and the State executing agencies (OEMAS). Similar concerns were also expressed with respect to the low levels of staffing in project supported PAs. Very few if any of the newly created PAs met the 5 person minimum required by the project to pass to the "consolidated" stage and qualify for FAP funding. In fairness to the government, two public *concursos*[3] were held in 2002 and 2008 respectively to hire staff for the national system of federal areas; in the latter case 2008 80 % of 210 environmental analysts are projected to go to Amazon PAs. At the time of the Mid-Term Review (MTR), the mission called for a staffing plan in support of future allocation of staff but this apparently was never forthcoming. In part, lack of sufficient human resources on government side reflected GOB fiscal constraints particularly in 2005 and 2008.

Procurement. Bank procurement requirements and their relevance to the unique conditions characteristic of the Amazon was of continual concern particularly at the field level. In addition to contributing to delays in some cases reportedly taking up to two years, a number of cases were cited as evidence for the provision of "goods and services" required to be sourced from elsewhere in Brazil due to the low number of service providers in the Region, which resulted on occasion in equipment purchased that proved to be inappropriate for local needs. In response, much credit should be given to FUNBIO,

[3] *Concursos* are official competitive selection processes for governmental employment.

the Bank and other donors in developing the *conta vinculada* which provided an efficient mechanism to cover local operating costs which are particularly problematic in the Amazon (e.g., purchase of fuel and materials, covering costs of meetings, etc.) and provided a significant incentive by empowering local personnel. FUNBIO's low capacity at the beginning of the project, to support the levels of procurement called for by the project following Bank guidelines (and those of other donors that were often in variance with each other) in a challenging environment contributed to delays in the initial years of project implementation.

Institutional Coordination. Failure to achieve effective and fluid arrangements among all the institutional partners was a major constraint identified in the MTR that affected initial project implementation. This had been flagged as a substantial risk at the time of the appraisal and was largely borne out. Mitigation measures to reduce risk identified at the time were to specify respective institutional responsibilities in the respective implementation agreements, prepare POAs early to provide for adequate inter-institutional consultation, and close monitoring by the Bank and other donors. These were futher sthengthened by a number of adjustments in part based on recommendations stemming from the MTR. These included the establishment of ARPA focal points, the creation of thematic, inter-institutional working groups, monthly coordination meetings involving all the institutional stakeholders and development of an internal communications strategy. The executing agencies adopted many of these recommendations which appeared to result in increased communication and coordination particularly in the project's later years.

Financial Shortfalls and Uncertainty in FAP. FAP's assets were affected by the October 2008 world wide fall in equity markets. Nevertheless, the German government committed an additional EUR10 million donation to FAP, currently awaiting Brazilian government approval, which will raise achievement rate of the capitalization goal to 115%. A number of actions are in place to address the issue of low FAP capitalization; these include implementation of the Prioritization and Investment Strategy for investment in Amazon PAs. This was a significant output and was formally adopted by ICMBIO to be used as a tool to guide future MMA investment in Amazon PAs. A second measure entailed a study to explore the potential for the capture of additional resources (outside of FAP) to support ARPA in future phases. This would complement sub-component 3.2 that supported the testing of other sustainable financing mechanism at the level of the PA.

2.3 Monitoring and Evaluation (M&E) Design, Implementation and Utilization

***a. M&E design*.** ARPA's Phase 1 Project treated M&E through the inclusion of a dedicated component (Component 4: Protected Area Monitoring). The objective of the component was to support the establishment of a biodiversity monitoring system and analysis for new and existing PAs that would be used to improve the decision-making process and planning and programming by making available more accurate and reliable information on management effectiveness of the PAs. It was designed to monitor both "core" biodiversity variables and "selected" related but indirect variables (e.g., soil erosion, urban growth, road construction, etc.). Monitoring indicators of social development outcomes would also be part of the activities included in this Component.

Moreover, the project's PCU also realized that a system to track ongoing operational activities and financial expenditures would be essential for project successful implementation. Operational monitoring and environmental monitoring reached different levels of success during implementation. While operational monitoring had remarkable achievements, environmental monitoring achieved intermediate results.

b. Operational Monitoring*:* Two systems were developed for operational monitoring: SisARPA and CEREBRO. SisARPA, developed by the PCU, evolved from WWF's tracking tool to capture key information on PA management activities. Thanks to the SisARPA system, the UCP generates annual reports with data sets per PA on benchmarks such as equipment availability, infrastructure, level of development and implementation of Management Plans, level of formation of the Local Councils, level of Basic Protection Plans for newly formed PAs, level of signage and status of land tenure studies and resolution of PA boundaries. The SisARPA process is ultimately a somewhat subjective one as the percentage of completion of each benchmark is an estimate provided by the PA managers. At the same time, they are trained in the system, have guidance for determining comparable levels, and many managers are there for a number of years, providing more fine tuning for the system and the PA "score".

The CEREBRO system was developed by FUNBIO to provide transparency among all the partners. It allows everyone to review the status of procurement requests, see when items were shipped, and understand how requested "goods" are being grouped for purchase. CEREBRO has expedited high levels of program expenditure in Phase 1 and deserves very high marks for also being clear on what next steps need to be done – and by who – and report quickly on the ongoing use of the conta vinculada per PA. CEREBRO's weakness in Phase 1 was the inability to produce a variety of quick reports that allow comparison of expenditure pattern across PAs etc. The UCP, FUNBIO, and other partners have now delineated what types of reports are needed and a CEREBRO 2.0 is expected to be released with much improved reporting capacity in mid 2009.

c. Environmental Monitoring: In an effort to ensure greater objectivity and build MMA capacity the PAD requested that a separate technical M&E unit be established independent of the Project Coordination Unit. Originally, in IBAMA, this unit became part of ICMBio in 2007. Their mandate was to "establish a biodiversity monitoring and evaluation system at the protected area and regional levels."

ICMBio chose 5 "strict protection" ARPA PAs for developing monitoring pilots, with the later addition of a sustainable use PA (Reserva Extrativista Lago Capanã Grande, from Amazonas). In 2005 a set of biodiversity indicators were selected for on-the-ground studies. From 2006 to 2008 a number of inventories, ecological studies and surveys were done. Many of the results reported are population census data of key species. Other research was done on water quality/turbidity/temperature etc, and automatic weather stations measuring precipitation, etc. were installed in two PAs.

To assemble the research teams and data, the monitoring and evaluation program has focused on partnerships (e.g., with the Agência Nacional de Águas and the Program for

Biodiversity Research within the Ministry of Science and Technology). The team's effective use of partnerships and outside researchers is one of the highlights of ICMBio's effort.

While the above has value, the actual application of the protocols has proven too expensive and time consuming to be considered a replicable methodology across PAs or even for ongoing monitoring in the same PA. Thus, the field applications to develop a prototype of an effective monitoring and evaluation methodology have not proven effective in Phase 1.

While a system-wide M&E approach for biodiversity monitoring was not effectively developed by ICMBio, there are many effective field examples being undertaken at the PA level. Many PA managers have taken it upon themselves to use satellite updates from the Instituto Nacional de Pesquisas Espaciais (INPE) to monitor hot spots and other deforestation activity within their PAs. Providing training for all ARPA PA managers to take advantage of this INPE resource is a potential cost-effective monitoring approach for the PA level. Using INPE data in all PAs, and coordinating that data analysis on system wide basis is an opportunity for Phase 2.

As a whole the operating systems for monitoring and evaluating are meeting the needs of the ARPA partners. The bigger issue of adequately monitoring biological conservation is a conundrum for most large projects. While a large system-wide effort has not produced a cost-effective methodology to date, there are a number of efforts happening at the local scale that provide real promise for more effective biodiversity monitoring and evaluation in Phase 2.

***d. M&E utilization*.** SisARPA and CEREBRO provide invaluable information for project management and planning. They are used by project partners almost on a daily basis and are key elements of project implementation and coordination. Biodiversity monitoring was not as widely used during Phase 1, but in the areas where it is being carried out, it is an important tool for PA planning and decision making.

2.4 Safeguard and Fiduciary Compliance

The project complied with World Bank safeguard policies as identified in the PAD: (i) OD 4.01 Environmental Assessment, (ii) OP 4.36 Forestry, (iii) OD 4.20 Indigenous Peoples and (iv) OP 4.1230 Involuntary Resettlement.

***a. Environmental Safeguards*.** No significant adverse environmental issues were identified in ARPA's first phase. Under OP 4.01, in the project's environmental analysis it was noted that no adverse impacts on the environment would occur under Components 1, 4 and 5. Under Component 2 however it was noted that the consolidation of parks and reserves and the management of the buffer areas around the parks and reserves would likely result in a limited number of sustainable-use activities for the concerned communities. Similarly under component 3, two activities were identified as having possible adverse environmental impacts, albeit minimal. These were pilot sub-projects to

test income generating activities for PAs and recurrent activities supported under the endowment fund created under the project.

Most community development and revenue generating sub-projects were contracted late in the Project and are still on-going. Many of these were capacity building activities and did not entail any impact in the field. Where there were field activities, the Project's mitigation measures proved effective. Those included in project design were: (a) *a priori* approval of management plans by the Bank; (b) capacity building; (c) screening procedures to ensure that activities did not violate Bank safeguard policies; (d) specification of eligibility criteria in the project's Operational Manuals that excluded certain activities (e.g., roads); and (e) sustainable use activities that would have to be approved by the PC.

Since the only PA met the qualifying criteria to enable it to "graduate" to FAP funding for recurrent costs did so very late in the project, this was not a factor in Phase 1.

The inclusion of "sustainable use" PAs flagged application of OP 4.36 Forestry policy. However, there was no forest management activities conducted during project implementation, therefore making mitigation measures unnecessary.

***b. Social Safeguards*.** No significant adverse social impacts occurred under the Project. Under OD 4.20 Indigenous Peoples, the basic principle that was adopted in project design and implementation was no support would be given to PAs that overlap with existing Indigenous Lands or any other types of indigenous areas not yet fully identified or demarcated. Components 1 and 2 of the Project were thought to be most relevant to OD 4.20. To ensure that the aforementioned principle was applied during the creation and consolidation of PAs, an extensive consultation and public participation process leading to the development of an Indigenous Peoples' Strategy was supported in project preparation and continued in its implementation.

Under OP 4.12 Involuntary Resettlement to address those possible cases where human presence might be incompatible with conservation objectives of a possible project supported PA a Process Framework was developed that would provide the necessary guidance for the preparation of resettlement plans when and if they became necessary.

At the time of the MTR, the mission noted that the previously cited frameworks were in place and operating. Nevertheless, with the participation of new stakeholders in the Project (e.g., new incoming staff in MMA/ICMBio and staff from State OEMAS that had recently signed project agreements) additional training was provided in the use of the framework.

Finally, a permanent Conflict Mediation Committee (CMC) was established as a condition of effectiveness for the purpose of aiding the Project in negotiating and proposing potential solutions to social issues related to the creation and implementation of PAs and acting as forum for the discussion and resolution of issues related to tradition populations existing inside "strict protection" PAs. The CMC was never convened,

arguably an indicator that no significant social issues were encountered in this phase 1 of the Project.

c. Fiduciary Compliance

Financial Management
Except for presenting FMRs with delays, FUNBIO complied with all other financial conditions stated on article IV, section 4 of the said Grant Agreement. During project execution FM arrangements have improved, as detailed below and currently are considered Satisfactory. The risk associated to the project was kept as Moderate.

Procurement
FUNBIO experienced initial difficulties in following procurement procedures, due to its inexperience in dealing with Bank's rules and the inherent difficulties of projects in the Amazon. However, FUNBIO's procurement performance improved remarkably during implementation, due to a larger and better qualified procurement staff and to the growing institutional experience on Bank's and Brazilian Government's procurement rules. Ex-post reviews were conducted by the LC5 procurement team for all project Fiscal Years and confirmed that procurement in the Project was being handled in accordance with the agreed procedures. The project had only one minor case of misprocurement. Procument was rated Moderately Satisfactory.

2.5 Post-completion Operation/Next Phase

The ARPA Project is the first phase of a 3 phase, 10 year program. The first phase was scheduled to be completed in 4 years but was extended by 18 months. Specific triggers were incorporated into program design that had to be met prior to proceeding to the project's second phase. These were the: (a) creation of a minimum of 9 million hectares of new PAs, (b) consolidation of 4 millions hectares of existing "strict protection" PAs and (c) the establishment of an endowment fund, capitalized and meeting performance benchmarks, as described in the indicators matrix. All triggers were met and (a) and (b) were greatly surpassed

Planning for the preparation of ARPA's second phase began in mid 2007. It was agreed at that time that the ARPA's goal, objectives and approach as described in the PAD remained relevant to the project's next phase, with improvements to the M&E and production subprojects components. It was agreed at the time a study was warranted to evaluate the financial implications of supporting newly created "sustainable use" PAs on FAP. Other studies to support preparation of the ARPA's 2nd phase were identified and a timetable prepared. In anticipation of soliciting additional GEF funds a Project Identification Form (PIF) was prepared in early February working on a nominal figure of US$ 20 – 30 million of GEF grant funds. These activities were followed up most recently in a multi-stakeholder workshop held in Brasilia in March 2009. By the time of the workshop, the environment had changed significantly from the situation at the initiation of discussions. New factors that needed to be considered included: (a) the effects of the financial crisis on both the FAP and GEF and their respective resource base; (b) the relevance of GEF's RAF policy on resource availability in GEF V; (c) the

likely shortfall in project resources to bridge the period between the two phases; (d) government counterpart; and (e) the coming elections and their impact on changes in personnel. Project partners are currently meeting regularly to discuss aspects of the preparation of Phase 2. These meetings are attended by MMA, FUNBIO, donors, states and civil society representatives.

3. Assessment of Outcomes

3.1 Relevance of Objectives, Design and Implementation

During President Lula's second term there have been a number significant decisions taken that were supportive of (and in some cases influenced by) ARPA that demonstrated the relevance of the project's objectives to the country and have contributed to creating a sound, enabling environment for the Program's 2nd phase. These include: (a) the 2003 approval by the President and all governors of the North Region of the Sustainable Amazon Plan (PAS) that identifies the improvement of Amazonia's provision of global environmental services as one of its 6 objectives[4]; (b) a December 2006 CONABIO resolution establishing national biodiversity goals, objectives and targets to be achieved by 2010, including the protection of 30% of the Amazon biome; (c) the 2007 creation of the ICMBio which will provide an increased public profile for and focus on the management of federal protected areas; and most recently (d) ICMBio's 2008 public *concurso* to hire an additional 140 administrative and 210 technical staff of which some 80 % of the latter are projected to go to the Amazon Region as environmental analysts; a large portion to the PAs, given the significant increase in their number as a result of ARPA. This will represent a major input to reaching ARPA's minimum personnel criterion for PAs to receive funding by FAP. Finally, as another excellent example of the relevance and harmony of the project's objectives and implementation with the country's priorities, ARPA was a major contributor to and will benefit from the development and adoption of the Amazon Biodiversity Conservation and Investment Strategy and Map[5] by MMA which will provide a critical tool in prioritizing candidate PAs under the second phase.

The Bank's 2008-2011 Country Partnership Strategy (CPS) for Brazil is fully supportive of a subsequent ARPA phase 2. The CPS includes the Amazon Partnership Framework which outlines a full-service partnership. The Framework identifies four main themes that included working in the management of large protected and indigenous areas. In addition to calling for the continuation of ARPA, the Framework also identified the expansion and/or consolidation of state protected areas as an indicative example of possible

[4] The other five objectives are: (i) reduction of rural poverty and increase in social protection; (ii) continued reduction in the structural deforestation rate; (iii) improvement of basic services, especially in rural communities; (iv) designing major infrastructure projects which address social and environmental aspects while supporting regional and national growth; (v) supporting indigenous and traditional communities' ways of life.

[5] Available at http://www.mma.gov.br

activities that could be supported as a component of sector wide state loans during the CPS period. The mobilization of grant funds (including GEF) will continue to be a major tool in the implementation of the CPS.

3.2 Achievement of Global Environmental Objectives

Rated: Satisfactory.

The stated PDO was "to expand and consolidate the protected areas (PAs) system in the Amazon region of Brazil." The PDO was fully realized. This was assessed through evaluation of the four phase 1 objectives and associated results presented in the PAD's Logframe.

Expansion of PAs. The Project made a significant contribution to an increase in the number and area of PAs in Amazon. Specifically, 13 "strict protection" PAs totaling 13.2 million ha and 30 "sustainable use" PAs totaling 10.8 million ha were created under ARPA's 1st phase. This far surpassed the expected results estimated in the PAD of 18 million ha of new PAs (9 million ha of "strict protection" PAs and 9 million ha of "sustainable use" PAs) created (see table 1 for list of PAs created under ARPA).

Table 1: Protected Areas established under ARPA

PA Name	Year Established	State	Type	Size ha	Managing Agency	Decree
Parque Estadual Cristalino I e II	2000	MT	Strict Protection	59.01	Mato Grosso Envir Sec.	Decree 1471 09/06/2000
Reserva Extrativista Alto Tarauacá	2000	AC	Sustainable Use	179.602	ICMBio - Federal	
Parque Nacional da Serra da Cutia	2001	RO	Strict Protection	283.807	ICMBio - Federal	Decree w/n 01/08/2001
Parque Estadual do Xingu	2001	MT	Strict Protection	138.893	Mato Grosso Envir Sec.	No creation document registered in CNUC
Reserva Extrativista Rio Cautário	2001	RO	Sustainable Use	75.124	ICMBio - Federal	Decree w/n 07/08/2001
Reserva Extrativista Barreiro Das Antas	2001	RO	Sustainable Use	106.111	ICMBio - Federal	Decree w/n 07/08/2001
Reserva Extrativista Baixo Juruá	2001	AM	Sustainable Use	187.98	ICMBio - Federal	Decree w/n 01/08/2001
Reserva Extrativista Auatí-Paraná	2001	AM	Sustainable Use	146.941	ICMBio - Federal	Decree w/n 07/08/2001
Parque Nacional Montanhas Do Tumucumaque	2002	AP	Strict Protection	3,865,119	ICMBio - Federal	Decree w/n 22/08/2002
Parque Estadual Igarapés Do Juruena	2002	MT	Strict Protection	109.279	Mato Grosso Envir Sec.	Decree 5438 12/11/2002
Reserva Extrativista Cazumbá-Iracema	2002	AC	Sustainable Use	748.905	ICMBio - Federal	Decree w/n 19/10/2002
Reserva Extrativista Do Rio Jutaí	2002	AM	Sustainable Use	275.512	ICMBio - Federal	Decree w/n 16/07/2002
Reserva Extrativista Maracanã	2002	PA	Sustainable Use	30.642	ICMBio - Federal	Decree w/n 13/12/2002
Reserva de Desenvolvimento Sustentável Piagaçu Purus	2003	AM	Sustainable Use	1,005,279	Amazonas Envir Sec.	No creation document registered in CNUC
Reserva Extrativista Catuá-Ipixuna	2003	AM	Sustainable Use	215.415	Amazonas Envir Sec.	No creation document registered in CNUC

Parque Estadual Chandless	2004	AC	Strict Protection	693.975	ACRE Envir Sec.	Decree 10.670 02/09/2004
Reserva Extrativista do Lago do Capanã Grande	2004	AM	Sustainable Use	304.309	ICMBio - Federal	Decree w/n 03/06/2004
Reserva Extrativista Riozinho do Anfrísio	2004	PA	Sustainable Use	736.104	ICMBio - Federal	Decree w/n 08/11/2004
Reserva Extrativista Verde Para Sempre	2004	PA	Sustainable Use	1,288,546	ICMBio - Federal	Decree w/n 08/11/2004
Estação Ecológica da Terra do Meio	2005	PA	Strict Protection	3,373,131	ICMBio - Federal	Decree w/n 17/02/2005
Parque Nacional da Serra do Pardo	2005	PA	Strict Protection	445.394	ICMBio - Federal	Decree w/n 17/02/2005
Parque Estadual Guariba	2005	AM	Strict Protection	70.364	Amazonas Envir Sec.	Decree 98884 25/01/1990
Parque Estadual Sucunduri	2005	AM	Strict Protection	788.257	Amazonas Envir Sec.	No creation document registered in CNUC
Reserva de Desenvolvimento Sustentável Itatupã-Baquiá	2005	PA	Sustainable Use	64.441	ICMBio - Federal	Decree w/n 14/06/2005
Reserva de Desenvolvimento Sustentável Rio Amapá	2005	AM	Sustainable Use	214.132	Amazonas Envir Sec.	No creation document registered in CNUC
Reserva de Desenvolvimento Sustentável Uacarí	2005	AM	Sustainable Use	623.934	Amazonas Envir Sec.	Decree 25039 01/06/2005
Reserva de Desenvolvimento Sustentável Bararati	2005	AM	Sustainable Use	111.101	Amazonas Envir Sec.	No creation document registered in CNUC
PA Name	**Year Established**	**State**	**Type**	**Size ha**	**Managing Agency**	**Decree**
Reserva de Desenvolvimento Sustentável Aripuanã	2005	AM	Sustainable Use	218.505	Amazonas Envir Sec.	No creation document registered in CNUC
Reserva Extrativista Riozinho da Liberdade	2005	AC	Sustainable Use	348.238	ICMBio - Federal	Decree w/n 17/02/2005
Reserva Extrativista Mapuá	2005	PA	Sustainable Use	66.383	ICMBio - Federal	Decree w/n 20/05/2005
Reserva Extrativista Ipaú-Anilzinho	2005		Sustainable Use	55.834	ICMBio - Federal	Decree w/n 14/06/2005
Reserva Extrativista Arióca Pruanã	2005	PA	Sustainable Use	59.355	ICMBio - Federal	Decree w/n 16/11/2005
Parque Nacional do Juruena	2006	MT-AM	Strict Protection	1,957,100	ICMBio - Federal	Decree w/n 05/06/2006
Parque Nacional do Rio Novo	2006	PA	Strict Protection	538.119	ICMBio - Federal	Decree w/n 13/02/2005
Reserva Extrativista Rio Iriri	2006	PA	Sustainable Use	398.987	ICMBio - Federal	Decree w/n 05/06/2006
Reserva Extrativista Terra Grande Pracuuba	2006	PA	Sustainable Use	194.867	ICMBio - Federal	Decree w/n 05/06/2006
Reserva Extrativista Rio Unini	2006	AM	Sustainable Use	833.733	ICMBio - Federal	Decree w/n 21/06/2006
Reserva Extrativista Arapixi	2006	AM	Sustainable Use	133.707	ICMBio - Federal	Decree w/n 21/06/2006
Reserva Extrativista do Rio Gregório	2007	AM	Sustainable Use	477.042	Amazonas Envir Sec.	No creation document registered in CNUC
Resex Médio Purus	2008	AM	Sustainable Use	604.209	ICMBio - Federal	Decree w/n 08/05/2008
RESEX do Rio Ituxi	2008	AM	Sustainable Use	776.94	ICMBio - Federal	Decree w/n 05/06/2008
RESEX do Rio Xingu	2008	PA	Sustainable Use	303.841	ICMBio - Federal	Decree w/n 05/06/2008

Consolidation of PAs. With respect to the "consolidation" of PAs, the expected results at the end of project were to be 7 million hectare of existing "strict protected" PAs and 3

million hectares of new "strict protection" PAs. Only one existing "strict protection" PA (*Reserva Biológia do Uatuma*) covering some 938,000 ha in area had been classified as "consolidated" by the PCU as of February 2009. Nevertheless, an additional existing 7 PAs are currently in an advanced stage of consolidation together with an additional 3 existing PAs,. represent in the aggregate 6,900,000 hectares.

The Project had little problem in the "creation" of PAs. In fact, the expected results were obtained well before the end of the project (see Table 1 above). The difficulty in reaching consolidation status was based on meeting the number and thresholds of criteria established in the PAD to qualify for reclassification as "consolidated". This was in particular due to: (a) an underestimation of the time and cost associated with the preparation of (or updating of existing) management plans (up to 2 years and costs of US$ 300 – 400,000); (b) delays in procurement of equipment and services particularly with respect to infrastructure; and (c) difficulties in meeting minimum staffing requirements (a minimum of 5 staff in "strict protection" PAs), a criterion dependent of government counterpart contributions.

Establishment and Capitalization of an Endowment Fund. By the end of the Project an endowment fund was to be established and the development of the necessary financial mechanisms. In addition to its creation the fund was to be capitalized at a minimum of US$ 29 million. FAP was created and despite sharp changes in currency exchange rates and the collapse of global equity markets in late 2008, reached a capitalization of US$ 18 million prior to October. This is expected to be substantially increased as soon as the GOB approves a KfW contribution of Euro 10 million resulting in almost double the projected results. In addition to GEF and KfW, the other major contributor to FAP was WWF/Brazil (US$ 7.8 million).

M & E Methodology of Environmental Monitoring. The final objective in support of the PDO was the developing and testing of an environmental monitoring and evaluation protocol to improve the quality and reliability of information in PAs. The expected result by the end of project was a methodology for environmental monitoring defined and implemented in specific PAs. While a system-wide M&E approach for biodiversity monitoring was not effectively developed by ICMBio to date, there are a number of efforts happening at the local scale that provide real promise for more effective biodiversity monitoring and evaluation in Phase 2. There were in fact a number of protocols developed for standardizing data collection across PAs. Some field work was completed in 6 PAs (an additional PA was included beyond those identified in the PAD) and monitoring stations for automatic data collection installed, partially achieving the expected result. As a whole, the operating systems for monitoring and evaluating are meeting the needs of the ARPA partners.

3.3 Efficiency

Rating: Not Rated

At the time of appraisal there were no requirements to include calculations of economic and financial rates of returns. However, in line with GEF requirements, an Incremental Cost Analysis was prepared. Moreover, any economic analysis would be constrained due to lack of economic data from the sustainable development (sub-component 2.4) and revenue generating (sub-component 3.2) sub-projects. In the former case these were initiated late in the Project and mostly entailed training and capacity building activities. In the case of the latter, these were postponed until the next phase. Thus, no benchmark or baseline figures were established and these rates cannot be calculated precisely as of the date of the ICR.

3.4 Justification of Overall Outcome Rating

Rating: Satisfactory.

Considering that the projected achieved and even surpassed virtually all of its development objectives,(as noted in detail above) the "Overall Outcome" was rated "Satisfactory". The ARPA project is the most innovative and successful project currently strengthening the Brazilian protected area system (SNUC) in the Amazon. ARPA has doubled the amount of the Brazilian Amazon under strict protection – from the 3.2% (12 million hectares) at the start of the project to over 25 million hectares today. The addition of another 10 million hectares in sustainable use areas meets two societal needs in Brazil: conserving biodiversity and providing improved livelihoods for traditional forest dwellers.

For years there has been a sense that protected areas in the Amazon cannot be effectively managed given their size, extensive logistical complications, and the numerous threats in the area. The ARPA project has proven effective protected area creation and management can have a real impact in reducing deforestation and protecting biodiversity as well as the rights of local peoples. This project also showcases that private-public partnerships can break through long-standing bureaucratic and administrative bottlenecks creating the operational capacity to effectively support field staff.

3.5 Overarching Themes, Other Outcomes and Impacts

a. Poverty Impacts, Gender Aspects and Social Development. The Project's main activities that would have had potentially positive impacts on social development were the sustainable development sub-projects (sub-component 2.4) and revenue generating sub-projects (sub-component 3.2). In the former case these were initiated only late in the Project but several of this will be carried over into the Project's next phase. In the case of the latter the studies are just being completed and will go forward in the next phase. Moreover, the public consultation process required for PA creation and support under ARPA helps strengthening local associations and other civil society groups, as well as building ownership for environmental policies in the Amazon. ARPA's support for sustainable use PAs assures long term protection of vulnerable forest communities to potential threats brought by the expansion of the economic frontier.

b. Institutional Change/Strengthening.
(particularly with reference to impacts on longer-term capacity and institutional development)

Under ARPA's sub-component 2.4, a "capacity building" working group was established in 2006 to develop a training plan to support the building of capacity among PA managers. With assistance from GTZ, the plan was completed and implementation initiated. A number of courses were supported and included introductory courses in PA management (with WWF/Brazil and Ipe) and management of participatory processes. These courses were critical because many of the PA managers posted to Amazon PAs were biologists by training and not equipped to manage PAs and all that entails (e.g., community participation). Finally, these courses may have played a contributory role leading to the reduction of rates of attrition of PA staff recruited for Amazon PAs. Despite these successes, many of the projected activities to be supported under this sub-component were postponed until the next phase due to financial short-falls.

In addition to the above, in 2007, the PCU together with GTZ, developed a training program in 7 PAs with the objective of promoting a results-based management model based on Brazil's National Program of Excellence in Public Management and Streamlining (*Desburocratizacao*) coordinated by the Ministry of Planning (MOP). Major themes of the program included leadership, strategies and plans, civil society, information and knowledge, human resources management and results based management. Based on the initial results the program will be expanded to include an additional 9 PAs. The "mainstreaming" of MOP "best practices" in ARPA PAs will likely contribute to the long-term sustainability of project supported PAs as long as staff can be maintained and attrition reduced in these PAs.

FUNBIO was also significantly strengthend through the Project. At the onset of the Project, FUNBIO did not have any in-depth expertise to manage large scale procurement, certainly not in terms of the magnitude and scope of ARPA nor in working in the Amazon. Today, there is no other services provider that can provide the unique set of services in support of biodiversity conservation in the Region. They will be critical to the continued success of ARPA in the subsequent phases.

Finally, there is evidence that ARPA did have a significant positive influence on PA management elsewhere in SNUC through contributing to improvements in: (a) quality of POAs in MMA/PAs, (b) PA monitoring and (c) the quality of and process leading to the preparation of management plans. Arguably these achievements have laid the groundwork for the future formulation of new government policies.

***c. Other Unintended Outcomes and Impacts*.**

Three unintended impacts were identified in ARPA's 1st phase. These were:

Perverse Incentives. An unexpected impact identified in the independent project evaluation was the existence of a possible perverse incentive in project design affecting the intent and rate of PAs to "graduate" to ARPA's consolidation phase. Specifically,

under ARPA, PAs received a substantial level of support in the "creation" phase that covered investments in infrastructure and equipment. However, once meeting minimal threshold criteria project design calls for the reclassification of these PAs to a "consolidated" status under which they would then qualify for funding from FAP. However, FAP funding only covers recurrent costs, signifying a substantial reduction in resources available to the PA. Arguably this provided a disincentive to the best prepared PAs to "graduate" and rewards the less efficient PAs. The preparation of ARPA's Phase 2 is exploring possible positive incentives to PA "graduation".

Conta Vinculada. Delays in procurement continued to hamper ARPA particularly in the early years of project implementation. . Funbio and The Bank, together with the other project partners, taking into account the unique characteristics of the Region and the needs of local PA managers, identified a series of alternative procurement procedures designed to facilitate acquisition of local "goods and services" in remote areas (*conta vinculada*). The procedures included the preparation of an acquisition plan by PA teams, technical specifications and approval rules and decentralized purchasing for lower valued items through the creation of sub-acccounts directly managed by PA managers. This was unanticipated in project design and an unexpected development during the course of project implementation but proved to have substantial impact at the level of the PAs contributing to increased efficiency and improved morale.

ARPA and Climate Change. As the world looks to protect the Amazon as a globally essential carbon sink, ARPA has been an important showcase of the types of mechanisms needed to be successful. A recent study on the Amazon indicated that "the model showed that by 2050, expansion of protected areas during 2003-07 reduced 272,000 km² (27.2 million ha) in deforestation, thereby avoiding 3.3±1.1 gigatons of carbon (GT C) emissions, of which 0.4 GT C was attributable to 13 protected areas established with ARPA's support. Including an additional 127,000 km² (12.7 million ha) of new ARPA protected areas throughout 2008, the ARPA program would reduce a total of 1.4 GT C (or 5.1 GT CO2) in emissions by 2050." [6]

Related research looks at "unintended" carbon emissions from the Amazon due to climate change affecting the ecology. Models indicate reduced rainfall, increased forest fires, and "savannahization" of certain areas of the Amazon. In these models the preservation of large blocks of forest is considered an important part of preserving ongoing rainfall patterns as water will recycle more effectively in large block areas. The ARPA projects and efforts to create large PAs are seen as a critical investment in limiting "unintended" carbon emissions and maintaining high levels of ecosystem functionality.[7]

3.6 Summary of Findings of Beneficiary Survey and/or Stakeholder Workshops

(optional for Core ICR, required for ILI, details in annexes)

6 Soares-Filho et. al., p 1.

7 MMA-ARPA Atualização das Áreas Prioritarias para a Conservação ..., "The Value of Protected Areas in Avoiding Climate Change in the Amazon" by Philip M. Fearnside., INPA.

Despite the fact that no official stakeholder workshop was required to specifically evaluate the findings reported in this ICR, a series of working groups met to discuss outcomes achieved and the preparation of Phase 2. These working groups have been formed with participation of representatives from the federal and state government, and environmental and social NGOs. The fact that the country incorporated the ARPA project as a federal program of high visibility and with a lot of state and municipal support is the best assurance that the lessons learned from implementation and the project's outcomes will be fully incorporated by the government.

4. Assessment of Risk to Development Outcome

Rating: Moderate.

The risk to the Development Outcome is rated Moderate. This is due to a weighing of a number of factors. Factors contributing to moderate risk are:

Multiple Phase Program. The Project is the first phase of a three phase program with explicit triggers required to be met prior to passing to the next phase. Thus it is highly likely that PDO would be maintained with little risk during the remaining course of the ARPA Program. Moreover, there exists a substantial amount of time remaining in the Program to consolidate the achievements to date, adsorb the "lessons learned" and make any required adjustments in program design to reduce future risk to the PDO.

Continued Support of Donors. Past and future expressions of support by ARPA's main donors most recently reconfirmed in the *Discussao de Propostas para o GEF ARPA 2* workshop in Brazilia on the 12 and 13th of March demonstrates a belief in both the need for ARPA and that past and future achievements will likely be maintain after the Program ends.

Institutional Support. MMA continues to show its support for the maintenance of existing and the creation of future PAs as evidenced by its support for relevant policy tools such as the Map of Priority Areas for the Conservation, Sustainable Utilization and Sharing of Benefits of Brazilian Biodiversity established by Presidential Decree in May 2004 and the Biodiversity Conservation and Investment Strategy. Nevertheless, difficulties experienced by MMA in the Program's first phase in providing agreed on counterpart financing and staffing of Amazon PAs underline the importance of the establishment of FAP and continuing to seek its capitalization and in parallel, seek alternative sources of financing.

Climate Change. Given the growth in international interest to support efforts to mitigate the effects of climate change and the unique global role that Brazil's Amazon plays in maintaining regional and global CC processes, there will likely be a continued and diversified interest in maintaining and building on ARPA's achievements. The government created the Amazon Fund at the end of 2008 as its alternative to receive compensation for reducing CO_2 from deforestation without having to rely on market-

based mechanisms. The Amazon Fund will support the prevention, monitoring and combating of deforestation, and the promotion of conservation and sustainable use of natural resources in the Amazon. The Fund will operate through grants, focusing on the following activities: (i) forest management in public lands; (ii) management of protected areas; (iii) monitoring and enforcement of environmental laws; (iv) sustainable use of forest resources; (v) zoning and land regularization; (vi) biodiversity conservation and sustainable use; and (vii) rehabilitation of degraded areas. In this context, ARPA shall play a very important synergic role as one of the viable and consistent projects for Amazon Fund implementation, helping not only the disbursement pace of financial resources but also its conservation targets.

Despite these factors there are nevertheless challenges to be met that might extend beyond the Program's life that could affect the long-term sustainability of the PDO. These are:

FAP Assets. As documented in a recent consultant's report, FAP's assets are legally owned by FUNBIO. However, ARPA's Program Committee (PC) has sole authority over their use subject to "no objection" from the Program's main donors. Post-program institutional arrangements to manage FAP's investment will take into consideration a transitional period where FAP initial management shall be managed by PC while a detailed Operational Manual is concluded, tested and finally approved.

Changes in Financial Markets and Rates of Exchange. As amply demonstrated during ARPA's first phase, sustainable financing can be subject to substantial risk to the fluctuation of currency and global equity markets. It is a prudent strategy to embark on seeking other sources of parallel financing outside but complementary to the ARPA's endowment fund to reduce risk. This is further supported by the results of one project consultant that estimated that US$ 300 million with 5% net annual income would be required to support the long term management of ARPA "strict protection" PAs. Currently, Brazilian legislation does not allow for direct financial contributions from federal and/or state governmental budgets. However, studies carried out under the Project indicated the possibility of using environmental compensation funds as potential sources of contribution to FAP. This possibility is being explored by preparation of Phase 2.

MMA Personnel Policy. The lack of a supportive personnel policy and its contribution to contracting of poorly qualified candidates, high attrition rates and low employee morale will continue to pose a risk to long-term sustainability of PAs created in the Amazon. A human resource policy to reduce turnover and value human resources is urgently required. It is encouraging to see that MMA/ICMBio have recently began to support a number of additional measures in response to address this issue (e.g., *concursos* and internal consultations).

Permanency of ARPA Personnel. A final concern is the critical mass of highly qualified people that now exist in key institutions FUNBIO, PCU and ICMBio that are at risk of being lost to the Program's second phase; in the case of the former due to

projected gap in funding and in the case of the latter two, change in government, which may result in personnel turnover.

5. Assessment of Bank and Borrower Performance

5.1 Bank

a. Bank Performance in Ensuring Quality at Entry

Rating: Moderately Satisfactory

The Bank's overall performance during identification, preparation and appraisal of the project was moderately satisfactory. Preparation was characterized by a long but comprehensive participative consultation process. Similarly, a close and productive relationship was established with MMA, FUNBIO and the other donors. This was to prove valuable in mobilizing and maintaining the necessary support needed to achieve many of the phase 1 project's outputs. The preparation team carried out missions during this period that included visits to all Amazon states to gauge level of interest and commitment to ARPA; a key factor in reaching a high level of participation on the part of the states during project implementation. During this long and at times difficult preparation process the Bank team showed great sensitivity and sound negotiation skills. Key issues that were satisfactorily resolved during this period included reaching agreement on the role of the private sector in contributing to the creation and implementation of protected areas in the Amazon and accommodating requests for further inclusion of civil society in ARPA relatively late in project preparation. Preparation took into account fully the priorities of the CAS and relevant GEF focal area and operational program. The team also took into account previous operations in Brazil, particularly the GEF-supported FUNBIO project which was to prove crucial in the design of ARPA. The selection of a multi-phase program approach in such a large and complex area was also critical.

Nevertheless, given that government policy limiting the project's 1st phase to four years, project design should have been adjusted accordingly to reflect a less ambitious approach. An institutional analysis would also have been highly useful in identifying both the challenges that were waiting in the procuring of "goods and services" in the Amazon and FUNBIO's limited capacity at the time to be able to respond to these challenges. This might have been useful in supporting capacity building activities early in the project to reduce the delays experienced during the first two years of implementation. The design team did an excellent job in identifying risks to the project but many of the proposed mitigation measures were either not relevant and/or proved to be ineffective. Monitoring and evaluation of biodiversity was one of the project's weak points. A good deal of thought went into technical monitoring of biodiversity but the component objective and design was overly ambitious and arguably could have justified a separate project in its own right. In contrast to the detail provided on technical monitoring, there was little evidence and guidance in provided in project design with respect to the establishment of a project level M&E system. While M&E systems were

eventually developed by FUNBIO and the PCU respectively, additional preparatory work might have resulted in an integrated system that would have contributed to increased institutional cohesiveness.

b. Quality of Supervision

Rating: Satisfactory

The Bank's overall performance during supervision was satisfactory. There was considerable evidence that the Bank's reputation and credibility in Brazil was a major factor in achieving strong inter-donor participation and collaboration in the Program; a not inconsiderable task given the number of donors and respective funding priorities in such a large and ambitious program. The fact that all donors are continuing to support operations in the Program's 2nd phase is evidence of the success achieved during the 1st phase Project.

The continued involvement of one TTL throughout the Program's first phase was a significant positive factor contributing to project consistency and achievements. The Bank conducted a total of 14 supervision missions over the 6 year of life of project. As the Project began to meet the reality of supporting field operations and disbursement began to lag, to the Bank's credit the number of supervision missions increased in frequency. Joint supervision missions including the executing agencies, state governments and the donors began early in implementation and provided a highly useful vehicle for team-building and resolving of issues as they occurred. However for the most part, supervision missions were confined to Brasilia. Integrating a site visit into each mission might have provided better opportunities to assess the challenges faced in implementation of the Project in the field. ISRs could have been improved in providing additional detail on project progress and difficulties. Finally, the supervision missions could have been more resolute in ensuring that previous recommendations were enacted on by the executing agencies (e.g., meeting government commitments on staffing PAs and several of the recommendations from the MTR).

With respect to the issue of institutional cohesiveness flagged in the MTR, the Bank together with other donors, requested a number of adjustments that led over time to increased communication and coordination. The team was also proactive in supporting a grant amendment to extend the Project at an appropriate time when it became likely this would be required. Similarly, preparations for the project's second phase began sufficiently early to provide for adequate consultation and discussion.

The Bank's environmental safeguard policies and accompanying frameworks were fully satisfied accompanied by periodic evaluation for compliance and supported with training of local teams. There was no need to turn to the Project's Conflict Mediation Committee (CMC) which arguably could be attributable to the high degree of public consultation in during the preparation process and reduction of risk of conflicts.

Finally, there were considerable difficulties with respect to meeting the Bank's procurement requirements particularly due to the lack of suppliers in the Amazon region

and the associated delays and occasional purchase of equipment that proved not to be suitable Amazon conditions (e.g., the purchase of Mercury vs. Yamaha outboard engines). This was not unique to ARPA and was cited in other relevant projects in Brazil (e.g., PROBIO ICR). However to the credit of the Bank team, the Bank did show flexibility in agreeing to the adoption of the *conta vinculada*; an innovative approach that provided local PA managers increased flexibility in meeting local recurrent costs (e.g., purchase of fuel) without being subjected to lengthy procurement requirements.

c. Justification of Rating for Overall Bank Performance

Rating: Moderately Satisfactory.

In consideration of the ratings for preparation and supervision (above), the overall rating is considered moderately satisfactory.

5.2 Borrower

a. Government Performance

Rating: Satisfactory

Brazil's Ministry of Environment (MMA) through the General Coordination entity composed of the Secretariates of Coordination of the Amazon Region and Biodiversity and IBAMA was responsible for the Project's overall government institutional coordination and articulation with environmental policies and projects. During the course of the project, MMA experienced significant personnel changes associated with two national elections, a re-organization and a new counterpart partner at the operational level with the creation of ICMBio in 2007. Two of these events warrant further description. After ARPA's long preparatory period with MMA staff from the Cardoso government, the change in government (and party) at the onset of project implementation contributed to significant delays (more than 8 months) in the Project's first year due to the change of interlocutors. Competing interests between the Ministry's two participating Secretariats (Secretariat for Amazon Coordination, and Biodiversity and Forests Secretariat) appeared to be an additional factor in contributing to these delays during the first two years. However, by the project's second year these issues were largely resolved and rate of implementation began to increase. However, in 2007 the creation of ICMBio resulted in considerable disruption of personnel and unrest among employees culminating in a 4 month strike that contributed to another round of delays. Despite these institutional changes and at times associated turmoil, MMA proved to be a substantial partner. MMA played a key role in negotiating lands with other relevant agencies to be declared for PA designation. Moreover, they contributed significantly to the resolution of a number of issues. This included supporting two public *concursos* to hire personnel in support of SNUC and the ARPA-supported PA in the Amazon, establishment of focal points in the Ministry and participating and adopting new policy tools in which ARPA had made a significant contribution.

Nevertheless, there were also a number of areas in which MMA could have played a more effective role in supporting ARPA. These included: (a) difficulties in meeting

counterpart co-financing requirements in 2005 and again in 2008/09; (b) closely related to (a) were the difficulties in staffing ARPA PAs with adequate numbers of personnel needed to meet criteria to qualify for FAP funding; (c) failure to establish an adequate system to track counterpart co-financing and provide the accompanying documentation (despite repeated requests from the donors since the onset of the Project); (d) reluctance to establish fulltime focal points in the relevant Ministry's Secretariats that would have contributed to increased project impact both in terms of advancing field activities as well as "mainstreaming" project innovations and "lessons learned;" and (e) not using the Project's committees and panels, particularly the Program Committee and Scientific Advisory Panel, to greater effect.

b. Implementing Agency or Agencies Performance

Rating: Satisfactory

PCU. The PCU had an executive function and provided a critical link between the PC and ARPAs'executing agencies. Among its many functions were supporting, monitoring and in some cases executing Project activities and ensuring that the technical administrative and financial procedures of the Bank were followed. In addition, it reviewed PA-specific POAs and prepared the consolidated POA and was also to provide the secretariat for the Project's various committees and panels. Once staffed, the PCU worked effectively though, together with MMA/ICMBio and FUNBIO, could have developed a more cohesive inter-institutional working relationship. This was despite the shifts in institutional "homes," experiencing high turnover of staff and undergoing a change in coordinators in 2008 at a critical time in bring the Project to a successful closure.

FUNBIO. At the start of project implementation, FUNBIO was staffed by a highly qualified team of professionals, managed conservation trust funds and had a strong Board. It did not have in-depth (or backroom) expertise to manage large scale procurement, certainly not in terms of the magnitude and scope of ARPA nor in working in the Amazon. ARPA represented a major challenge, one that required contracting and training a large team and time was required to "climb the learning curve." As a resulted the Project suffered substantial delays in procurement particularly in the project's early years until a trained team was in place. Moreover, it created a major division on FUNBIO's highly esteemed Board of Directors that eventually resulted in a reorganization of FUNBIO at the behest of the donors that contributed to further delays. To some extent these delays were inherent to the Project, particularly with respect to following the Bank procedures as well as those of other donors and the unique conditions faced when working in the Amazon. Today, there is no other services provider that could provide the unique set of services in support of biodiversity conservation in the Amazon. They will be critical to the continued success of ARPA in the subsequent phases.

In term of creating and managing FAP, in face of the magnitude and rapidity of the global crash in markets there seems little that FUNBIO could have done to mitigate the risk after its occurrence. To FUNBIO's credit, by their own initiative in 2007 they had

already initiated activities directed at developing a strategy to identify and capture other sources of financing outside of FAP in support of ARPA PAs.

Not all of the sustainable development sub-projects supported under sub-component 2.4 were completed by the date of the ICR. Results and "lessons-learned" from those that were completed apparently are not available and have not been shared with ARPA's other institutional partners. FUNBIO's did not complete any of the revenue generating sub-projects included under sub-component 3.2; an activity that started late in the Project and was suspended as the life of project came to closure.

OEMAS. The OEMAS varied in their degree of participation and support for ARPA. In some cases, States were quite active demonstrated through progress on the ground in their support for candidacy of state PAs to be included in ARPA including their management and strengthening of infrastructure and provision of equipment. In other cases support was lacking. Typical constraints included lack of available counterpart financing, weak institutions, antiquated institutional structure and processes and in some cases overt political pressure.

c. Justification of Rating for Overall Borrower Performance

Rating: Satisfactory

Overall borrower performance is considered "Satisfactory" given the level of government commitment during the project's tenure to provide the funding for execution, satisfactory performance of the line agencies in spite of the extensive institutional changes and managerial turn over experienced in the period, and including the high levels of results obtained and the high sustainability of impacts generated. There were no cases of corruption, or safeguards violations during the project's tenure.

6. Lessons Learned

Wide General Application

Lesson 1: The validation of participatory concepts and processes during preparation is fundamental to support implementation of a complex project. ARPA's extensive participative consultation during project preparation contributed to the development of an extensive experiential data base that provided the basis to develop a detailed methodology that was included in the project design documents. This proved to be highly useful to guide participative activities in support of PA creation during the Project's implementation. These "win-win" situations where activities and processes supported during design can actually provide, following their refinement, detailed guidance in implementation should be used more often in the future and expanded to include other critical processes and procedures that will be faced by executing bodies (e.g., environmental assessment, preparation of operational manuals etc.). Nevertheless, ARPA could have further benefited from an earlier engagement of CSOs in project preparation.

Lesson 2: Never underestimate the logistical challenges of working in remote regions. Like all project locales, the Amazon is a unique region that presents a highly challenging environment to work in, particularly in the conservation of biodiversity where many of the candidate sites are in the more inaccessible areas. Add to this a low and sparsely distributed population with few service providers and difficulties in launching any effort that requires extensive public participation, preparation of management plans, purchase of equipment, construction of infrastructure and the associated communications, processes and procedures that accompany these activities are bound to occur. It is almost always more cost-efficient to factor in local characteristics in project design even at additional cost in time and resources, than attempt mid-course corrections as they develop in implementation. Preparation of ARPA 2 incorporates this lesson in project design. Of particular relevance is to ensure to factor in "premiums" in terms of costs and time over similar operations elsewhere in the country to better gauge project costs and calendars to reduce risk of overestimating the achievement of outcomes and outputs during project implementation.

Project Specific

Lesson 3: Although biodiversity conservation problems are complex, project design can be simplified to fit local capacities and pace of implementation. While ARPA's program design was the right approach to address the magnitude and complexity of issues and underlying factors needed to create PAs in the Amazon, it was overly-ambitious in its expectations for the first phase of the Project. Multiple institutions and layers of government and sectors ranging from biodiversity conservation, social development to funds management and comprehensive monitoring, while arguably justified for a Program with this PDO, are rarely successful at least when attempted simultaneously particularly when constrained by time limitations. Add to this the reality of working in the Amazon and a government imposed requirement to complete the 1st phase Project in four years and the situation is ripe to experience one or more setbacks. In this case these were the partial achievement of stated project outcomes and outputs, an extension of project closure and postponement of some project activities into the next phase. Fortunately, none of these changes threatened the long term outcome of the multi-phase program (though it is likely that the end of program will have to be extended as well).

Lesson 4: Environmental funds' capitalization plans need regular updates. ARPA's trustfund was the first of its kind to be established in Brazil. The fund was designed to address financial shortfalls from the public purse to cover the recurrent costs of PAs. However, ARPA's successful efforts to create so many new PAs, particularly "sustainable use" PAs, was not anticipated in the initial trustfund design. But only now, after almost six years of implementation, solid financial records are available with data that can serve as a basis for projecting expending needs for PAs, thus allowing more regular updates of the need based on the number of PAs entering the ARPA system and benefiting from the trustfund revenues.

Lesson 5: Adaptive and innovation management can determine the degree of success. The adaptation of ARPA project design has proven to be fundamental for a

project at such large scale, which prevented the usual problems with large bureaucratic implementation efforts. ARPA's innovative aspects such as the public-private institutional arrangements and the *conta vinculada* have been extraordinarily effective in dramatically accelerating implementation in the field, with increased agility in creating new PAs, staffing new PAs, and moving funds to the PA managers for on-the-ground work. The *conta vinculada* was a breakthrough at least in the environmental management in Brazil and not only resolved "real world" issues faced everyday by PA managers but provided an important incentive and degree of empowerment that served to increase morale. This concept came out of thorough analysis and discussion among ARPA's partners and impact justified the time investment to reach the right solution.

7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners

a. Borrower/implementing agencies

Comments Received from Ministry of Environment (MMA)

The ARPA Program is considered one of the most important component of the Brazilian effort to combat deforestation and to conserve biological diversity and ecological process in the Amazon.

Created in 2002 ARPA is coordinated by the Brazilian Ministry of Enviroment and implemented by the Chico Mendes Biodiversity Conservation Institut (ICMBio), the Amazon States and the Brazilian Biodiversity Fund (Funbio).

ARPA is the largest existent program for the conservation of protected areas and has the challenge of protecting 50 million ha of the Amazon tropical forest in 10 years.

With financial resources coming from the Global Environment Facility (GEF), World Bank, WWF.Brasil, the Kreditanstalt fur Wiederaufbau (KFW) and the German Agency for Technical Cooperation (GTZ), ARPA has completed the execution of the first phase of the program (2003-2008) with a strong track record of success and innovations.

The innovative management arrangements and the adequated synchronization established between policies and donated resources, as well as the decentralized execution were the elements that contributed to reach the goals of the program's first phase

It is important to highlight that part of these innovations were pushed by the need to adopt the rules and apply the recommendations made by the donors, in special by the WB. Innovations which effectively contributed to the establishment of conservation units supported by the program.

Nowadays ARPA reaches approximately 32 million ha on conservation unit in the Amazon distributed in 62 conservation units (federal and states), and new goals were establish for the second phase of the program: the total area to be protected through the program will increase from 50million ha to 60million ha.

The continuation of WB support to the Arpa Program is fundamental to the continuity of this program.

Comments received from FUNBIO:

Funbio participation on the Arpa Project was a major institutional task. After 5 years of ARPA implementation Funbio has improved and changed in many different aspects, it gave Funbio the opportunity to master a complete new expertise with large scale procurement in remote areas and was Funbio's first project with strict conservation. Funbio also learned how to manage large scale projects with complex institutional arrangement including different donors, and government agencies from federal, states and civil society organizations.

One of the most important aspects of ARPA was the cooperative work achieved by such different institutions, that was the strength that made possible overcome the huge challenges ARPA faced on its design and initial phase. There were not few problems in the lifetime of ARPA, some external to our will and others created by the complexities of such a project, however, all obstacles were addressed and most of them solved, the ones that persist are still subject to debate and we hope to solve them with creative approaches in the next phase. The overall results of ARPA were much more than we expected with a considerable impact on the worldwide creation of new protected areas since 2003. Many lessons were learned and applied on its first phase and a lot will be done in the next one, management innovations are already being implemented in other projects, like in the Atlantic Forest Conservation Fund, Probio II and GEF Pollinators. Although ARPA has had a great deal of success, all partners seek continuous improvement in management and technical aspects. Concerning the World Bank role we acknowledge the importance of the flexibility given on the Conta Vinculada mechanism but we could have more improvements on procurement flexibility, especially with regional processes instead of national due to Amazon logistical constraints and lack of a well established economy to provide goods and services in the way defined by the Bank. Also a faster consultant selecting/hiring processes could be of some importance. Finally, we would like to thank all Bank staff involved in ARPA, we know we asked a lot of difficult questions and brought a lot of "solutions" different from the business as usual and that required a lot of work to this staff to react and reply, but not many projects like ARPA were made before and that requires creativity and, in some cases, boldness. For that and for believing in Funbio's capacity to learn and surpass its own limitations we are thankful and hopeful the second phase will be as rich, as challenging and as successful as this first one.
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b. Cofinanciers

Comments r*eceived from KFW* .

We would like to thank the World Bank for inviting us to share our views on the ARPA Program as a contribution to this Implementation Completion Report.

On behalf of the German government, KfW Development Bank has been co-financing the first phase of ARPA through a grant of EUR 22.6 million. A further EUR 10.0 million grant has been made to Funbio for the Protected Areas Fund (FAP). Technical Cooperation to the ARPA program is delivered by GTZ through its Tropical Forest Program on behalf of the German Government with focus on institutional strengthening and instruments for monitoring and management of the program.

The ARPA Program is a highly ambitious undertaking by the Brazilian government and the Brazilian states in the Amazon region, with strong support from civil society organizations and international partners. It has significantly contributed to the expansion and consolidation of the Protected Areas (PAs) network in the Amazon region, by supporting the creation and implementation of more than 60 PAs, protecting more than 34 million hectares of tropical rainforest in the Brazilian Amazon – almost the size of Germany. With 24 Million hectares created, the ARPA program has effectively created one third of all new protected areas worldwide since 2003. Thus, the Program has contributed significantly to the CBD's goal to expand PAs as an effective mean to the conservation of biodiversity.

The impacts of ARPA are significant: As studies demonstrate, PA play an important role in containing deforestation in the Brazilian Amazon, thus reducing greenhouse gas emissions and protecting natural habitat and ecosystems. Apart from its effective results on the ground, ARPA has induced changes and innovations in effective protected areas management and in the way biodiversity conservation is perceived locally in several regions of the Brazilian Amazon.

We consider the following factors key to the Program's success:

- Strong political commitment to the Program's objectives from the federal and the state governments;
- Its participatory approach to planning, implementation and monitoring of Program activities, involving governmental institutions, civil society and local communities;
- Strong support from national and international partners, including World Bank, WWF Brazil and German Development Cooperation (KfW and GTZ);
- Its innovative and efficient implementation structure, envolving the Brazilian NGO Funbio as the implementation agent of the Program;
- Clear, quantitative objectives that are directly linked to effective biodiversity conservation and emission reductions.

ARPA has been particularly successful in supporting the creation of new PAs, as well as in establishing the Protected Areas Fund FAP as a long-term financing mechanism. In addition, major progress has been made in strengthening the management of PAs, through the creation of local PA councils, the development of management plans, capacity building and the implementation of new tools for PA management. Also, the establishment of an efficient implementation mechanism via Funbio can be considered a

major achievement and a best practice example regarding implementation of huge scale projects in the Brazilian Amazon.

However, other components have not been reaching its expected results: The implementation of a biodiversity monitoring is still at an initial stage, and only a limited number of income-generating projects for local communities has effectively been implemented. While the FAP has been successful in meeting its capitalization targets, he still lacks a more solid institutional structure as well as adequate operational procedures for funding of PAs.

One of the huge challenges in the future will be the consolidation of the new PAs and to ensure a basic support for the PA network in the Amazon. Specific attention should be paid to enhance the cooperation between different categories of PAs (like state and federal PAs, indigenous lands and PAs, strict protection and sustainable use PAs). Also, the governance structure and the operational procedures of the FAP need to be revised and improved.

A second phase of ARPA is under preparation. Germany has already committed additional funds and reaffirmed its commitment to support PAs in the Amazon as an important contribution to the conservation of biological diversity and to the mitigation of climate change.

c. Other partners and stakeholders
(e.g. NGOs/private sector/civil society)

Comments received from WWF-Brasil

The WWF Network was pleased to contribute both technically and financially to the implementation of the ARPA project in its first phase. We highlight the following:

Strengths

- The joint effort of all institutions involved (IBAMA/ICMbio, MMA, World Bank, GEF, KfW, WWF, GTZ, states participating in ARPA, Funbio);
- Funbio performed especially well in developing and executing a procurement and operational logistics system to meet program needs, particularly in creating designated accounts;
- Solid results were obtained in creating protected areas;
- Solid results were obtained in consolidating protected areas and the important positive impacts associated with maintaining forest cover in protected areas;
- Solid results were obtained in raising funds for the ARPA endowment fund;
- Great steps forward in protected area management (management tools, human resources training in UC management and protected area management monitoring);
- Significant “ownership” by the Brazilian Government;

Weaknesses

- The management arrangement fails to adequately cover fundraising either for the FAP or the consolidation of protected areas
- Though worthy, the so-called community projects (component 2.3) have not been adequately internalized by UC managers or program decision-makers;
- The expenses-monitoring system (Cérebro) was unable to present adequate management reports on program execution and this became an obstacle to monitoring progress and preparing the second phase of the program;
- The lack of personnel in some protected areas was a determining factor in the unsatisfactory level of execution, especially in the first years of implementation;
- The monitoring component has failed to produce the satisfactory results which would allow the assessment of biodiversity conservation in the system of protected areas supported by the ARPA Program;

Overall Assessment

The ARPA Program may be considered a great success not only for meeting most of its goals for the first phase, but especially for its relevant contribution to forming a mosaic of protected areas in the Amazon to guarantee biodiversity conservation *in situ*, through the implementation of innovative management systems and mechanisms and also for its important contribution to the planet's climate.

Annex 1. Project Costs and Financing

(a) Project Cost by Component (in USD Million equivalent)

Components	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
Creation of new protected areas	**1.80**	**3.35**	**186%**
Consolidation of protected areas	**3.35**	**4.00**	**119%**
Long-term sustainability of protected areas	**17.60**	**14.95**	**85%**
Protected areas monitoring	**2.20**	**0.80**	**36%**
Project coordination and management	**3.15**	**4.12**	**131%**
	28.1	27.22	96%
Total Baseline Cost			
Physical Contingencies	1.40	1.40	100%
Price Contingencies	0.50	0.50	100%
Total Project Costs	30.00	29.12	97%
Preparation Grant (PDF-B)	0.30	0.29	96%
Front-end fee IBRD	1.30	1.30	100%
Total Financing Required	31.60	30.71	97%

(b) Financing

Source of Funds	Type of Cofinancing	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
Borrower		18.10	18.10	100%
Global Environment Facility (GEF)		30.00	29.12	97%
Germany: Kreditanstalt fur Wiederaufbau (KfW)		14.40	18.00	125%
Local Sources of Borrowing Country		2.50	2.00	80%
World Wildlife Fund		16.50	17.28	105%
		81.50	84.50	104%

Annex 2. Outputs by Component

Assessment of outputs was constrained in some sub-components due to an absence of quantifiable indicators.

Component 1: Creation of New Protected Areas

One of the critical objectives of ARPA was to identify and prioritize candidate PAs to be created and supported under the Project. A key tool to facilitate that process was the Map of Priority Areas for the Conservation, Sustainable Utilization and Distribution of Benefits of Brazilian Biodiversity adopted by MMA in 2007. A second strategic instrument was the production of a Conservation and Investment Strategy to identify existing and future financing needs and compare with available resources to facilitate prioritization of PAs. ARPA played a fundamental role in development of both these tools which will be critical for the Program's next phase. The legal creation (i.e., identification) of PAs was highly successful if compared to end of program indicators and in fact had achieved substantial progress from the very onset of project implementation. However following the creation of the PAs, progress slowed significantly as the Project encountered all the challenges of establishment presence in the field in remote areas of the Amazon. Using FAUC (a monitoring tool modified from the WB/WWF Tracking Tool) which tracked percentage of change against indicators demonstrated that no PA "created" under sub-component 1.2 had met all the criteria and their respective minimal percentage requirements to be considered "established" by the ICR.

Achieved outputs by subcomponent

1.1 Ongoing Process of Prioritization

Extensive and participatory priority setting of ecoregions undertaken for identification of new PAs. Led to *Map on Priority Areas to the Conservation, Sustainable Use and Sharing of Benefits from the Brazilian Biodiversity.*

1.2 Identification of New Areas

13 "strict protection" new PAs totaling **13.2** million ha created and **30** "sustainable use" new PAs totaling **10.8** million ha created. All **24** million ha of new PAs created by decrees approved and published in the official gazette.

1.3 Establishment of New Areas

24 million ha of new PAs have been decreed and demarcated with minimal infrastructure established. New PAs created and demarcated, but there are pending land regularization in a few areas.

Component 2: Consolidation of Protected Areas

Only one PA (*REBIO Uatumã*) met all the criteria and threshold limits specified by the project to considered "consolidated." 11 additional PAs were considered to be either in an advance stage of consolidation and/or were targeted as priorities representing in aggregate 6,900,000 ha in area. The preparation and approval of management plans was a significant output of this component. A second key output was the establishment of consultative councils (or its equivalent) in 33 PAs supported by ARPA.

Achieved outputs by subcomponent

2.1 Demarcation of Existing Areas,

All areas have been demarcated.

2.2 Basic Protection

Basic protection activities in place in all areas.

2.3 Management Planning

15 management plans prepared and being implemented. 33 PA Councils established.

2.4 Community Participation

Partnership and/or concession agreements with civil society being implemented in 4 PAs. Community development plans and projects prepared and implemented in two sustainable use PAs and Protection Plans prepared for 6 PAs.

Component 3: Long-term Sustainability of Protected Areas

This component achieved its main output consisting of the establishment and capitalization of the Endowment Fund despite suffering the effects of a number of external factors outside the control of the project including significant fluctuations in currency rates of exchange and the global financial crisis of late 2008. In 2007, the studies and sub-projects in buffer zones activity underwent a shift in focus that included an increase in scope to the system level. This entailed examining other options as possible sources of financing for the system of PAs including Brazil's compensation fund, the green lottery and carbon sequestration. The initiation of on-site income generating studies in support of sub-projects started late in the first phase and many are still on-going. No sub-project was contracted under this component by the end of the Project.

Achieved outputs by subcomponent

3.1 Protected Areas Endowment Fund (FAP)

Endowment fund created and capitalized to USD 23.4 million (plus EUR 10 million committed but not deposited yet). No demonstration project launched. Three financial market studies were carried out and a proposal for a large environmental compensation fund to benefit the PAs has been put forward.

Component 4: Protected Areas Monitoring

In project design this component consisted of both technical (i.e., biodiversity) and project monitoring. Under the former, this component only partially achieved its projected outputs. The creation and application of FAUC proved to be an effective monitoring tool in PCU. Similarly, the FUNBIO's M&E tool for financial management and procurement (CEREBRO) also was effective for the objectives of which it was designed.

Achieved outputs by subcomponent

4.1 Biodiversity monitoring system

Biodiversity monitoring indicators identified and under implementation on a pilot basis in selected PAs. An integrated set of Monitoring, Evaluation and Planning systems (SisARPA, CEREBRO) developed as part of the project's technical and financial planning and programming.

Component 5: Project Coordination and Management

The PCU was established and despite initial challenges involving re-organization in MMA entailing institutional displacement and periodic loss of staff, proved effective in implementation of the Project. Moreover, there were obstacles to cohesion in the Project's early years among the many institutional partners, which were later overcame. All Committees and Panels were established. The CMC was established, but the project did not receive any request that required mediation. Six State Executing Agencies participated in the Project. The Project never established formal agreements or activities at the municipal level.

Achieved outputs

Committees and coordination units fully functional. Institutional structures established and functioning at all levels.

Annex 3. Economic and Financial Analysis
(including assumptions in the analysis)

During project preparation, according to the requirements of the GEF, an incremental cost analysis was prepared. Over project implementation, a few studies were done to identify income generation mecanisms and studies on the cost of implementing protected areas in the Amazon. These were used to support the strategies for the recently created institute for protected areas in Brazil (ICMBio). No further economic and financial analysis was done.

Annex 4. Bank Lending and Implementation Support/Supervision Processes

(a) Task Team members

Names	Title	Unit	Responsibility/ Specialty
Lending			
Claudia Sobrevila	Senior Biodiversity Specialist	LCSES	TTL
Adriana Moreira	Senior Environmental Specialist	LCSRF	Co-TTL
Judith Lisansky	Senior Anthropologist	LCSES	Social
Irani Escolano	Procurement Analyst	LCSES	Procurement
Tulio Correa	Financial Management Specialist	LCSES	Financial Management
Musa Asad	Financial Specialist	LCSES	Trust Funds
Marta Molares - Halberg	Senior Lawyer	LEGLA	Lawyer
Daniel Gross	Senior Anthropologist	LCSES	Safeguards
Supervision/ICR			
Adriana Moreira	Senior Environmental Specialist	LCSEN	TTL
Susana Amaral	Financial Management Specialist	LCSFM	Financial Management
Hugo Rosa da Conceicao	Junior Professional Associate	LCSEN	
Christine Drew Dragisic	Junior Professional Associate	LCSEN	
Jose C. Janeiro	Senior Finance Officer	LOAFC	Financial Management
Daniella Ziller Arruda Karagiannis	Team Assistant	LCSRF	
Judith M. Lisansky	Sr Anthropologist	LCSSO	Social
Anemarie Guth Proite	Procurement Specialist	LCSPT	Procurement
Luciano Wuerzius	Procurement Specialist	LCSPT	Procurement
Guadalupe Romero Silva	Consultant	LCSEN	
Random Dubois	Consultant	FAO/CP	

(b) Staff Time and Cost

Stage of Project Cycle	Staff Time and Cost (Bank Budget Only)	
	No. of staff weeks	USD Thousands (including travel and consultant costs)
Lending		
FY98	n/a	6.62
FY99	n/a	8.32
FY00	14.94	90.83
FY01	14.42	79.89
FY02	30.45	129.14
FY03	15.40	51.17
Total:	80.22	382.85
Supervision/ICR		
FY03	0.99	4.52
FY04	24.55	109.44
FY05	19.71	80.15
FY06	14.54	77.76
FY07	12.49	51.04
FY08	13.37	45.11
FY09	17.24	42.11
Total:	97.88	393.25

Annex 5. Beneficiary Survey Results
(if any)

Not applicable

Annex 6. Stakeholder Workshop Report and Results
(if any)

Not applicable

Annex 7. Summary of Borrower's ICR and/or Comments on Draft ICR

To be completed

Annex 8. Comments of Cofinanciers and Other Partners/Stakeholders

PDF copies will be attached in the portal

Annex 9. List of Supporting Documents

ARPA, "Amazônia Brasileira 2007." Mapa confeccionado pelo Instituto Socioambiental e pelo Programa Areas Protegidas da Amazônia – ARPA. Representações de áreas de conservação na Amazônia Legal. Junho, 2007.

ARPA, Manual Operacional. 4 volumes.: 1) Informaçôes Gerais; 2) Princípios, Diretrizes e Procedimentos Metodológicos; 3) Procedimentos e Fluxos Gerenciais; e 4) Manual Operacional

ARPA, "Missão de Revisão do Meio Termo. Ajuda Memória 30 de janeiro a 10 de fevereiro de 2006."

ARPA, "Missão de Supervisão, 26 de abril to 04 mayo de 2004. Ajuda Memoria."

ARPA, "Missão de Supervisão, 13 a 19 de dezembro de 2007. Ajuda Memória."

ARPA, Relatório de Atividades. Setembro de 2007 a Dezembro de 2008. Versão final de janeiro de 2009. Disponível na UCP/MMA. Brasília, DF.

ARPA. Workshop de Discussao de Propostas para o GEF ARPA 2

Cabral, Rogério; Relatório Final Sobre Diagnóstico do Programa Áreas Protegidas da Amazônia (Arpa): Subsídio à Revisão de Meio Termo (RMT – 2006). Dezembro, 2007. Brasília, DF

Cabral, Rogério; Atividades Sobre Prospecção, Análise E Acompanhamento De Estudos Sobre Instrumentos De Sustentabilidade Financeira Das Unidades De Conservação De

Proteção Integral Contempladas Pelo Arpa – Programa Áreas Protegidas Da Amazônia." 4 de agosto de 2008.

Spergel, Barry; Preliminary Report on the Fundo de Areas Protegidas (FAP) of ARPA." 25 de setembro de 2008. Consultoria independente.

The World Bank, Project appraisal document, on a proposed grant From the Global Environment Facility Trust Fund in the Amount of Sdr 22.7 Million (Us$30 Million Equivalent) to the Fundo Brasileiro Para a Biodiversidad (Funbio) for an Amazon Region Protected Areas Project (ARPA)

The World Bank, Implementation Completion Report Fundo Brasileiro para a Biodiversidade for a Brazilian Biodiverstiy Fund Project (FUNBIO)

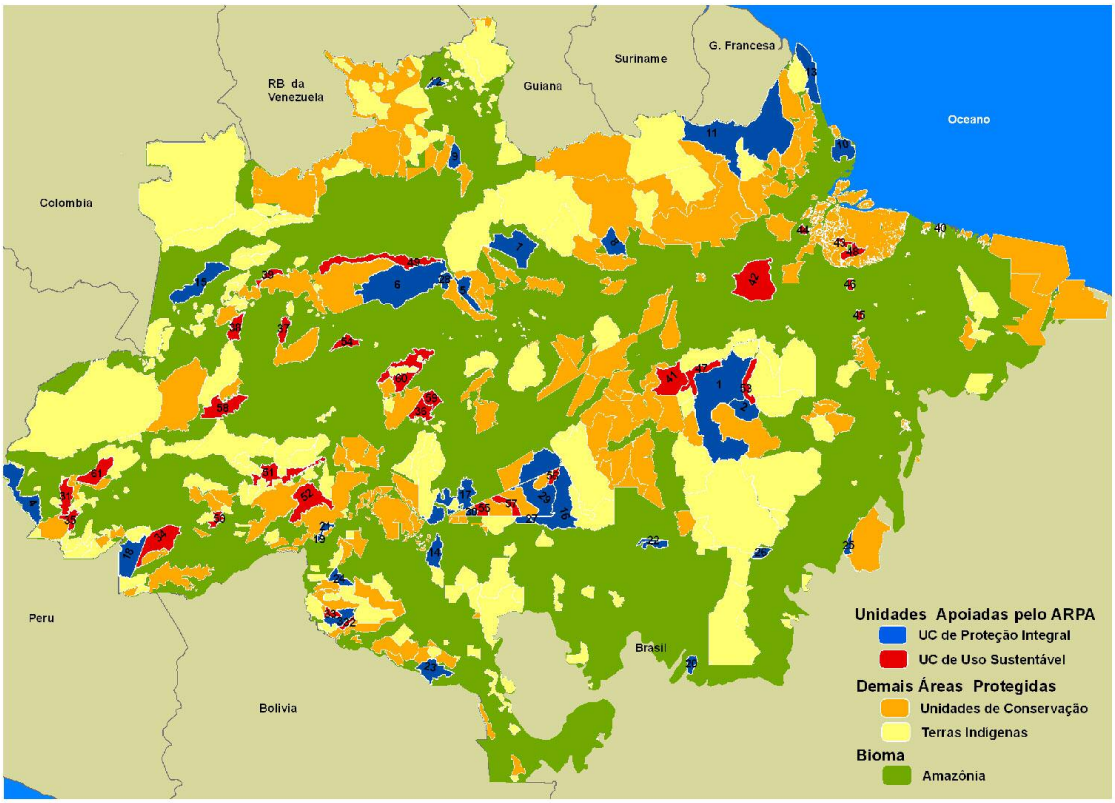
The World Bank, Implementation Completion Report Indigenous Management of Protected Areas in the Peurvian Amazon (GEF) Project, 2007.

The World Bank, Implementation Completion Report Ecomarkets (GEF) Project, 2007.

The World Bank, Implementation Completion Report Sustainability of the Nationa System of Protected Areas in Support of the First Phase of the Sustainabiltiy of the Nationa System of Protected Areas (GEF) Program, 2007.

The World Wildlife Fund (WWF) – FUNBIO, ARPA Trust Fund Prospectus, May 2008. Brasília, DF.

Unidades de Conservação apoiadas pelo ARPA



Lista das Unidades apoiadas pelo Programa ARPA

UC de Proteção Integral

1, ESEC da Terra do Meio
2, PARNA da Serra do Pardo
3, PARNA Serra da Cutia
4, PARNA da Serra do Divisor
5, ESEC de Anavilhanas
6, PARNA do Jaú
7, REBIO do Uatumã
8, REBIO do Rio Trombetas
9, PARNA do Viruá
10, REBIO do Lago Piratuba
11, PARNA Montanhas do Tumucumaque
12, ESEC de Maracá
13, PARNA do Cabo Orange
14, REBIO do Jaru
15, ESEC Juami-Japurá
16, PARNA do Juruena
17, PARNA dos Campos Amazônicos
18, PE do Chandless
19, ESEC Antônio Mujica Nava
20, ESEC do Rio Ronuro
21, ESEC Serra dos Três Irmãos
22, PE Cristalino I e II
23, PE de Corumbiara
24, PE de Guajará Mirim
25, PE do Cantão
26, PE do Xingu
27, PE Igarapés do Juruena
28, PAREST do Rio Negro - Setor Norte
29, PAREST do Sucunduri
30, PAREST do Guariba

UC de Uso Sustentável

31, RESEX Riozinho da Liberdade
32, RESEX do Rio do Cautário
33, RESEX Barreiro das Antas
34, RESEX do Cazumbá-Iracema
35, RESEX do Alto Tarauacá
36, RESEX do Lago do Capanã Grande
37, RESEX do Baixo Juruá
38, RESEX do Rio Jutaí
39, RESEX Auati-Paraná
40, RESEX Maracanã
41, RESEX Riozinho do Anfrísio
42, RESEX Verde para Sempre
43, RESEX Mapuá
44, RDS de Itatupã-Baquiá
45, RESEX Ipaú-Anilzinho
46, RESEX Arióca Pruanã
47, RESEX Rio Iriri
48, RESEX Terra Grande-Pracuúba
49, RESEX Rio Unini
50, RESEX Arapixi
51, RESEX Médio Purus
52, RESEX Ituxi
53, RESEX do Rio Xingu
54, RESEX Catuá Ipixuna
55, RESEX do Guariba
56, RDS Bararati
57, RDS Aripuanã
58, RDS Uacari
59, RDS do Rio Amapá
60, RDS Piagaçu - Purus
61, RESEX do Rio Gregorio

Fonte: Unidade Coordenadora do Programa/MMA, 2009