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The World Bank

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Report No:

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED GRANT
FROM THE GLOBAL ENVIRONMENT FACILITY TRUST FUND

IN THE AMOUNT OF US$18.2 MILLION

TO THE

FUNDO BRASILEIRO PARA A BIODIVERSIDADE (FUNBIO)

FOR THE

MARINE PROTECTED AREAS PROJECT

February 13, 2014

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

CURRENCY EQUIVALENTS

(Exchange Rate Effective February 13, 2014)

Currency Unit	=	BRL Brazilian Real
BRL 1.00	=	US$ 0.41.
US$01.00	=	BRL 2.41.

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

ARPA	Amazon Region Protected Areas Program
CBD	Convention on Biological Diversity
CIRM	Inter-ministerial Commission for Resources of the Sea
CONAMA	National Environmental Council
COP	Conference of the Parties
CPS	Country Partnership Strategy
CG	General Coordination
DAP	Department of Protected Areas, MMA (*Diretoria de Áreas Protegidas)*
DiBio	Department of Biodiversity Monitoring, Evaluation and Research, ICMBio
DiSat	Department for Socio-Environmental Actions and Consolidation of Protected Areas, ICMBio
DIMAN	Directorate for Creation and Management of Protected Areas, ICMBio (*Directoria de criacao e manejo de unidades da conservacao)*
EMP	Environmental Management Framework
EOP	End of Project
FUNBIO	Brazilian Biodiversity Fund
FUNAI	National Foundation for Indigenous Peoples
GEF	Global Environment Facility
GOB	Government of Brazil
GOOS	Ocean and Climate Observation System
ICMBio	Chico Mendes Institute for Biodiversity Conservation (*Instituto Chico Mendes de Conservação da Biodiversidade)*
IBAMA	Brazilian Institute of Environment and Renewable Natural Resources
IBRD	International Bank for Reconstruction and Development (World Bank)
IPAPs	Indigenous Peoples Action Plans
IPPF	Indigenous Peoples Planning Framework
LEPLAC	Brazilian Continental Shelf Survey Plan
MIS	Management and Information System
MMA	Ministry of Environment
MME	Ministry of Mines and Energy
MPA	Marine Protected Area

MPCA	Marine and Coastal Protected Area
NGO	Non-Governmental Organization
PA	Protected Area (Unidade de Conservação - UC)
PETROBRAS	Petróleo Brasileiro S.A.
PNAP	National Protected Areas Plan
PNGC	National Coastal Management Plan
PNMA	National Environmental Program
POA	Annual Operation Plan
PROBIO	National Biodiversity Program
PROMAR	Marine Mentality Program
PRONABIO	National Program of Biological Diversity (*Programa Nacional da Diversidade Biológica*)
PSRM	Sectorial Plan for Resources of the Sea
ORAF	Operational Risk Assessment Framework
OSCIP	Public Interest Civil Society Organization
RAMSAR	Convention on Wetlands of International Importance
REVIMAR RF	Evaluation, Monitoring and Conservation of Marine Biodiversity Program Resettlement Framework
SBD	Standard Bidding Documents
SBF	Secretariat of Biodiversity and Forests, Ministry of Environment
SECEX	Executive Secretariat, Ministry of Environment
SNUC	National System of Protected Areas
UCP	Project Coordination Unit
UGP	Project Management Unit
WB	World Bank

Regional Vice President:	Hasan Tuluy
Country Director:	Deborah L. Wetzel
Sector Director:	Ede Jorge Ijjasz-Vasquez
Sector Manager:	Emilia Battaglini
Task Team Leader:	Adriana Moreira

Brazil
Marine Protected Areas Project

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Marine Protected Areas Project (P128968)

PROJECT APPRAISAL DOCUMENT

LATIN AMERICA AND CARIBBEAN

LCSEN

Report No.: PAD341

Basic Information			
Project ID P128968	EA Category B - Partial Assessment		Team Leader Adriana Goncalves Moreira
Lending Instrument Investment Project Financing	Fragile and/or Capacity Constraints [ ] Financial Intermediaries [ ] Series of Projects [ ]		
Project Implementation Start Date 03-Nov-2014	Project Implementation End Date 31-Oct-2019		
Expected Effectiveness Date 31-Oct-2014	Expected Closing Date 31-Oct-2019		
Joint IFC No			GEF Focal Area Biodiversity
Sector Manager Emilia Battaglini	Sector Director Ede Jorge Ijjasz-Vasquez	Country Director Deborah L. Wetzel	Regional Vice President Hasan A. Tuluy

Borrower: Brazilian Biodiversity Fund - FUNBIO			
Responsible Agency: Ministry of Environment - MMA			
Contact:	Paulo Rogério Gonçalves	Title:	Director
Telephone No.:		Email:	paulo.goncalves@mma.gov.br
Responsible Agency: Instituto Chico Mendes de Conservação da Biodiversidade - ICMBio			
Contact:	Giovanna Palazzi	Title:	Director
Telephone No.:		Email:	giovanna.palazzi@icmbio.gov.br

Project Financing Data(in USD Million)					
[ ]	Loan	[X]	Grant	[ ]	Guarantee
[ ]	Credit	[ ]	IDA Grant	[ ]	Other

Total Project Cost:	117.86	Total Bank Financing:	0.00
Financing Gap:	99.66		

Financing Source	**Amount**
Borrower	0.00
Global Environment Facility (GEF)	18.20
Total	18.20

Expected Disbursements (in USD Million)

Fiscal Year	2015	2016	2017	2018	2019	2020	0000	0000	0000
Annual	2.20	4.00	6.00	5.00	1.00	0.00	0.00	0.00	0.00
Cumulative	2.20	6.20	12.20	17.20	18.20	18.20	0.00	0.00	0.00

Proposed Global Environmental Objective(s)

The Project's Global Environmental Objective (GEO) is the same as the Project's Development Objective (PDO), namely, (a) to support the expansion of a globally significant, representative and effective Marine and Coastal Protected Area (MCPA) system in Brazil and (b) identify mechanisms for its financial sustainability.

Components

Component Name	**Cost (USD Millions)**
Component 1 - Creation and Implementation of Marine and Coastal Protected Areas	12.29
Component 2 – Identification and Design of Financial Mechanisms to Support the MCPAs System	2.50
Component 3 – Monitoring and Evaluation	2.50
Component 4 - Project Coordination and Management	0.91

Institutional Data

Sector Board

Environment

Sectors / Climate Change

Sector (Maximum 5 and total % must equal 100)

Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %
Agriculture, fishing, and forestry	General agriculture, fishing and forestry sector	100		
Total		100		

☑ I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this project.

Themes

Theme (Maximum 5 and total % must equal 100)

Major theme	Theme	%
Environment and natural resources management	Biodiversity	60
Environment and natural resources management	Other environment and natural resources management	40
Total		100

Compliance

Policy

Does the project depart from the CAS in content or in other significant respects?	Yes [ ]	No [X]
Does the project require any waivers of Bank policies?	Yes [ ]	No [X]
Have these been approved by Bank management?	Yes [ ]	No [ ]
Is approval for any policy waiver sought from the Board?	Yes [ ]	No [X]
Does the project meet the Regional criteria for readiness for implementation?	Yes [X]	No [ ]

Safeguard Policies Triggered by the Project	**Yes**	**No**
Environmental Assessment OP/BP 4.01	**X**	
Natural Habitats OP/BP 4.04	**X**	
Forests OP/BP 4.36	**X**	
Pest Management OP 4.09		**X**
Physical Cultural Resources OP/BP 4.11	**X**	
Indigenous Peoples OP/BP 4.10	**X**	
Involuntary Resettlement OP/BP 4.12	**X**	
Safety of Dams OP/BP 4.37		**X**
Projects on International Waterways OP/BP 7.50		**X**
Projects in Disputed Areas OP/BP 7.60		**X**

Legal Covenants

Name	**Recurrent**	**Due Date**	**Frequency**

Description of Covenant

Conditions	
Name	**Type**
Operational Manual	Approval
Description of Condition	
Project Operational Manual, including fiduciary management, satisfactory to the World Bank adopted	
Name	**Type**
Grant Agreement	Effectiveness
Description of Condition	
Execution and delivery of Grant Agreement with World Bank by FUNBIO	
Name	**Type**
Subsidiary Agreements	Effectiveness
Description of Condition	
Implementation Agreements between FUNBIO and MMA, ICMBio, and IBAMA to carry out the parts of the project under their respective jurisdictions	
Name	**Type**
Subsidiary Agreements	Effectiveness
Description of Condition	
Petrobras Grant Agreement with MMA and FUNBIO	

Team Composition

Bank Staff

Name	Title	Specialization	Unit
Alberto Coelho Gomes Costa	Senior Social Development Specialist	Social Specialist	LCSSO
Tanya Lisa Yudelman	Consultant	Consultant	AFTN3
Adriana Goncalves Moreira	Senior Environmental Specialist	Team Lead	LCSEN
Mariana Margarita Montiel	Senior Counsel	Senior Counsel	LEGLE
Patricia Miranda	Senior Counsel	Senior Counsel	LEGOP
Cassia Coutinho Barreto	Consultant	Consultant	LCSAR
Guadalupe Romero Silva	Consultant	Consultant	LCSEN
Agnes Velloso	Consultant	Environmental Specialist	LCSEN
Michele Martins	Program Assistant	Program Assistant	LCC5C
Frederico Rabello T. Costa	Senior Procurement Specialist	Senior Procurement Specialist	LCSPT

Sofia De Abreu Ferreira	Counsel	Counsel	LEGEN
Maria Joao Pagarim Ribei Kaizeler	Financial Management Specialist	FM Specialist	LCSFM
Sofia Keller Neiva	E T Temporary	Team Assistant	LCSSD

Non Bank Staff

Name	Title	Office Phone	City

Locations

Country	First Administrative Division	Location	Planned	Actual	Comments
Brazil	Rio Grande do Norte	Estado do Rio Grande do Norte	X		
Brazil	Pernambuco	Estado de Pernambuco	X		
Brazil	Paraiba	Estado da Paraiba	X		
Brazil	Para	Estado do Para	X		
Brazil	Maranhao	Estado do Maranhao	X		
Brazil	Ceara	Estado do Ceara	X		
Brazil	Alagoas	Estado de Alagoas	X		
Brazil	Sergipe	Estado de Sergipe	X		
Brazil	Sao Paulo	Estado de Sao Paulo	X		
Brazil	Santa Catarina	Estado de Santa Catarina	X		
Brazil	Rio Grande do Sul	Estado do Rio Grande do Sul	X		
Brazil	Rio de Janeiro	Estado do Rio de Janeiro	X		
Brazil	Parana	Estado do Parana	X		
Brazil	Espirito Santo	Estado do Espirito Santo	X		
Brazil	Estado de Bahia	Estado da Bahia	X		

I. Strategic Context

A. Country Context

1. Over the last two decades, Brazil has made significant advances in terms of economic management, poverty reduction, and social indicators. Growth in employment and labor incomes, as well as the implementation of targeted social assistance programs have contributed to a reduction in the share of Brazilians living below the extreme poverty line of R$70 a month from 10.8 percent in 2001 to 4.3 percent in 2012[1], as well as a reduction in inequality as reflected in a fall in the Gini coefficient from 0.59 to 0.53 over the same period.

2. Brazil's extensive coastline measures over 9,000 km, including bays and promontories. The coastal and marine zone includes a land area of 514 thousand km² and a marine area of over 3.5 million km^2, an area equivalent to 41% of the Brazilian terrestrial territory (8.5 million km^2) and comparable in size to the Brazilian Amazon (4.1 million km^2).

3. The Brazilian coastal zone hosts 43 million inhabitants, or 18% of the national population, 395 municipalities and 16 of the country's 28 metropolitan regions [1]. The fishing industry accounts for some 800,000 jobs in Brazil, involving about 4 million people directly and indirectly. The Brazilian coast hosts an immense variety of environments and wildlife: one of the longest continuous stretches of mangrove ecosystems in the world – important as nursery sites, biological filters and carbon sinks – the only coral reefs in the South Atlantic; many endemic species; dune fields; lagoon complexes; *restingas* (sandy-coastal plain vegetation); and flood plains. Unfortunately, these environments have been subjected to intense human pressure.

4. As economic activities in the coastal zone account for roughly 70% of the Brazilian GDP, the coastal zone can be considered one of the most environmentally threatened regions in the country. The establishment of marine protected areas (called *unidades de conservação*, UCs in Brazil, as defined by the Law 9.985/2000) is considered essential to conserve the ocean's biodiversity, and natural assets important for tourism. Since the 1990s, it has been also increasingly recognized as an important factor in maintaining productivity, especially of fish stocks. Marine UCs have been shown to help recovery of collapsed and threatened stocks, serving as nursery areas and as a source of export of mature individuals to adjacent areas[2].

[1] MMA – Ministério do Meio Ambiente (2008) Programa REVIZEE: avaliação do potencial sustentável de recursos vivos na zona econômica exclusiva: relatório executivo/ MMA, Secretaria de Qualidade Ambiental. Brasília.

[2] Prates, A.P.L. (2007) O Plano Nacional de Áreas Protegidas - O Contexto das Áreas Costeiras e Marinhas. *In* Prates, A.P.L. & Blanc, D. (2007) Áreas Aquáticas Protegidas como Instrumento de Gestão Pesqueira, p. 17-24. Ministério do Meio Ambiente, Secretaria de Biodiversidade e Florestas, Brasília.

B. Sector and Institutional Context

5. Despite the vastness of Brazil´s coastal and marine area, only 1.57% is currently protected within the Marine and Coastal Protected Areas (MCPA) network (*rede de Unidades de Conservação Marinhas e Costeiras* – UCMC). However, Brazil's interest and effort to conserve coastal areas is indicated by the second National Environmental Program (PNMA II) initiated in 2000, which has coastal zone management as one of its focal areas.

6. In 2000, the Government of Brazil (the Government, GOB) passed the Law Nº. 9.985, regulated by Decree Nº. 4.340 of 2002, enacting the National System of Protected Areas (SNUC). The system defines five categories of "strict protection" areas and seven categories of "sustainable resource use" protected areas (UCs), establishes rules for their management, provides mechanisms for property ownership and provides a framework for coordination between federal, state, and municipal levels and the private sector.

7. In addition, the Government established the National Protected Areas Strategic Plan (PNAP), Decree 5,758 of 2006, as a blueprint for implementing the country's commitments under the Convention on Biological Diversity (CBD). The PNAP addresses all Brazilian biomes, taking into consideration recommendations made by the *Ad Hoc* Technical Expert Group on MCPAs. These call for a representative MCPAs system to include a primary representative network of no-take fishing zones, inserted within a secondary network associated with sustainable management practices.

8. The National Commission on Biodiversity (CONABIO), in line with the targets set under the CBD[3], subsequently approved the national target of achieving 10% of the marine and coastal zones in protected areas (UCs) under any category, of which at least one percent should be under strict biological protection status and/or no-fishing zones (CONABIO Resolution 3 of 2006).

9. The National Policy for Resources of the Sea (PNRM) was prepared in the 1980s, and updated in 2005, to promote the training of human resources, stimulate the development of marine research, science and technology, and encourage sustainable use of marine resources and of the adjacent coastal areas. The implementation of this policy is overseen by the Inter-ministerial Commission for Resources of the Sea[4] (CIRM), reporting to the President of the Republic.

10. The GOB´s National Biodiversity Program (PRONABIO), supported by the Conservation and Sustainable Use of Brazilian Biodiversity Project (PROBIO), through a highly participatory process, identified priority areas and actions for conservation and sustainable use of biodiversity (terrestrial, coastal

[3] These targets were originally to be achieved by 2010, however, the CDB agreements reached during COP 10 in Nagoya extended this deadline to 2020 and approved specific targets for protected areas (Target 11).

and marine), officially recognized by the Decree Nº 5.092 of 2004 and the Ministry of Environment's Ordinance No. 126 of 2004, and updated through its Ordinance No. 9 in 2007.

11. The Government agencies responsible for creation and maintenance of federal protected areas (UCs) are the Ministry of Environment (MMA) and its executive agency, the Chico Mendes Institute for Biodiversity Conservation (ICMBio). These agencies have state and municipal level counterparts responsible for state and municipal protected areas (UCs), respectively.

12. Due to its extraction activities in the coastal and marine zone of Brazil, Petróleo Brasileiro S.A. (Petrobras), a mixed economy company linked to the Ministry of Mines and Energy and a leader in the Brazilian oil and gas industry, is one of the most influential stakeholders in the sector. The company, founded in 1953 and the leader of the Brazilian oil sector, is a publicly traded state-owned corporation ranked as the world's fourth biggest energy company in market value by a ranking organized by PFC Energy, a global consulting firm specializing in the oil and gas industry. Petrobras' Environmental Program includes three strategic actions: (a) investments in environmental projects; (b) reinforcing environmental organizations and their networks; and (c) disseminating information on sustainable development. Petrobras has incorporated the findings of the priority setting exercise for biodiversity conservation carried out under PROBIO I, into its long-term strategic planning and, in partnership with the private sector, universities and governmental agencies, undertakes several habitat recovery and protection actions.

C. Higher Level Objectives to which the Project Contributes

13. The proposed Marine Protected Areas Project (the Project) (that responds to Brazil's MCPAs program) supports the GEF's Global Operational Strategy by contributing to the long-term protection of Brazil's globally important ecosystems. Specifically, the Project targets three Global Environmental Fund (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. It will contribute to GEF Focal Area Objectives as follows: (a) Improve sustainability of Protected Area System (BD-1), and (b) Mainstream Biodiversity Conservation and Sustainable Use into Production Landscapes, Seascapes and Sectors (BD-2). The Project is fully consistent with Brazil's first report to the Conference of Parties (COP) IV and with the principles of the CBD, by supporting all three levels of biodiversity (ecosystems, species, and genes).

14. Brazil signed the CBD in 1992 and Congress ratified it 1994. The country also ratified the Ramsar Convention on Wetlands in May 1996. The proposed Project contributes to Brazil's commitments under these two Conventions (including CBD´s 2020 Aichi Biodiversity Targets) and meets the Brazilian eligibility criteria for GEF funding according to the guidelines set by the CONABIO – Decree Number 4.703, of May, 22, 2003 and the National Biodiversity Policy Decree Number. 4.339, of August 22, 2002.

15. **The World Bank Group's Country Partnership Strategy (CPS) 2012-2015 (Report No. 63731)** discussed by Board of Executive Directors on November 1, 2011 has under its Strategic Objective 4 "Improve sustainable natural resource management and climate resilience". The proposed Project is fully consistent with the CPS recommendations, particularly the need to protect priority ecosystems. Also, the World Bank has sponsored a number of South-South dialogues led by Brazil, mostly on agriculture and water resources. The proposed Project is an obvious candidate for expanding this type of collaboration, particularly given the successful Brazilian experiences with protected areas (UCs).

II. Project Development Objectives

A. Project Development Objective

16. **The Project's Global Environmental Objective (GEO) is the same as the Project's Development Objective (PDO),** namely, (a) to support the expansion of a globally significant, representative and effective Marine and Coastal Protected Area (MCPA) system in Brazil and (b) to identify mechanisms for its financial sustainability.

17. By so doing so, the Project will contribute to conservation of trans boundary ocean life, including migrating species, through protection of important areas where these species feed, rest and/or breed along the Brazilian Coast. Additionally, protected ecosystems will maintain their capacity to produce food, maintain good water quality, and increase their capacity to recover from disturbances, bringing far-reaching social and economic benefits. The project will directly benefit affiliated traditional communities by providing secure resource access, contributing to poverty reduction and improved shared prosperity.

18. The Project is fully consistent with and contributes to Brazilian national policies regarding biodiversity conservation and sustainable development of the coastal and marine zone: National Policy on Biodiversity, 2010 National Goals for Biodiversity, National Coastal Management Plan, 2012-2015 Sectorial Plan for Resources of the Sea (PSRM VIII), National Policy for Resources of the Sea (PNRM) – including the Sectorial Plan for Resources of the Sea (PSRM), National Coastal Management Plan[5] (PNGC), Continental Shelf Survey (LEPLAC), Evaluation, Monitoring and Conservation of Marine Biodiversity (REVIMAR), Marine Mentality Program (PROMAR), Ocean and Climate Observation System (GOOS), among others.

B. Project Beneficiaries

[5] An Integrated Marine and Coastal Areas Management approach has been adopted within Brazil, where the National Coastal Management Plan dates back to 1988. Its main actions are the *Projeto Orla* (Shore Project), the Economic Ecological Zoning, Maps of Sensitivity to oil spills and the Macro Diagnosis of the Marine and Coastal Zone (MMA, 2008).

19. The Project's beneficiaries are local populations and resource users living inside and around sustainable use MCPAs, the fishing and tourism industries, protected area (PA) agencies, the scientific community and the national and international societies. Local populations, including local fishers, fishing communities and some indigenous communities, will benefit from improved resource management and conservation, community empowerment and increased access to public policies. The Project will support their participation in Management Councils, elaboration and updating of PA Management Plans.

20. The tourism industry will benefit from improved public use management, infrastructure, environmental education and conservation. The fishing industry will benefit from improved sustainability of their activities.

21. Local, state, and federal stakeholders will be strengthened through participation in project activities and targeted capacity-building initiatives. The national and international community will benefit from the establishment and implementation of a globally representative system of marine and coastal protected areas (UCs) in Brazil, better able to protect its ecosystems and trans boundary biodiversity. Critical information will be generated to scientists and policymakers on the achievement of CBD and Ramsar Convention targets.

C. PDO Level Results Indicators

22. The PDO level indicators and respective targets are to:

- bring under biodiversity protection at least 5%, (equivalent to 175,000 km^2) of the Brazilian marine territory;
- bring under enhanced biodiversity protection at least 9,300 km^2 of marine and coastal area; and
- identify, design, and prepare for implementation at least two financial mechanisms able to contribute to the long-term sustainability of MCPAs.

III. Project Description

A. Project components

23. The proposed Project design includes four components:

24. **Component 1 - Creation and Implementation of Marine and Coastal Protected Areas (UCs) (GEF: $12.29 million, co-financing: $50.64 million):** This component aims to increase the area and strengthen the management of Brazil's marine and coastal environment under formal protection. The two sub-components aim to: (a) increase the protected area from 1.57% to at least 5% of the country's marine and coastal territory through creation and implementation of up to nine new protected areas (UCs) and proposing no take fishing zones; and (b) support actions to enhance protection of biodiversity in at least 9,300km^2 of selected new and existing MCPAs, including cross-cutting capacity-building, training, and communication activities to strengthen management of the MCPA system as a whole.

Selection of the existing and new PAs (UCs) to be supported by the Project will build upon a series of participatory priority setting exercises such as the "Priority Areas for the Conservation and Sustainable Use of Brazilian Biodiversity" (adopted in 2000 and subsequently updated in 2007) and the proposal of seven marine ecologically or biologically significant areas (EBSAs) submitted to the CBD Subsidiary Body on Scientific, Technical and Technological Advice in 2012[6].

25. **Component 2 – Identification and Design of Financial Mechanisms to Support the MCPAs System (GEF: $2.50 million, co-financing: $1.09 million):** Protected areas demand resources in order to perform the function for which they were designed and play an important role in the economy by generating various environmental goods and services and by injecting resources directly into the local, regional or national economy through diversification of economic opportunities. This component aims to contribute to the identification and adaptation of consolidated tools for conservation finance and to the creation of new approaches specifically designed to promote the financial sustainability of MCPAs, specifically, to identify and design at least two potential financing mechanisms for MCPAs.

26. **Component 3 - Monitoring and Evaluation (GEF: $2.50 million, co-financing: $40.68 million):** Monitoring and evaluation activities to be supported fall into two main areas: (a) designing an integrated monitoring and evaluation system, establishing a baseline and monitoring key biodiversity and environmental health indicators in individual Protected Areas and the MCPA system over the long-term, and (b) assessment of the marine biodiversity conservation status and conservation requirements.

27. **Component 4 - Project Coordination and Management (GEF: $0.91 million, co-financing: $7.24 million):** This component will support coordination, PA management effectiveness monitoring and communication activities, including the establishment and functioning of the various project inter-institutional structures including the: (a) Operational Committee, an administrative unit, and functions to ensure compliance with proposed project objectives considering Project Council guidance; (b) multi-stakeholder Project Council, comprised of representatives of key governmental and non-governmental stakeholders with a view to providing policy level and strategic guidance, ensuring linkages to relevant sectorial policies and programs, assisting in the resolution of any inter-sectorial, debating and suggesting improvements for the SNUC regarding coastal and seascape management challenges, and other problems; (c) ad hoc technical working groups focused on specific issues as necessary; and (d) monitoring of management effectiveness in and financial sustainability of new and existing protected areas supported under the Project (this will be achieved through the adaptation and annual implementation of the GEF's Protected Area Management Effectiveness Tracking Tools (METT Scorecard).

[6] Of Brazil's 7 proposed EBSAs, 6 were recommended by the CBD Subsidiary Body on Scientific, Technical and Technological Advice for endorsement at the CBD COP 11 held in Hyderabad, India in October 2012.

B. Project Financing

28. The Project will be financed by a US$18.2 million GEF grant and US$99.66 million in co-financing from the Government of Brazil (MMA and ICMBio) and Petróleo Brasileiro S.A. (Petrobras). The partnership among the GEF, the GoB, the Ministry of Mines and Energy (MME)/Petrobras and other potential private sector players is an innovative approach to coastal zone management and mainstreaming of biodiversity in Brazil.

1. Project Financing Table

Component and/or Activity	**GEF** (US$ million)	**Co-Funding** (US$ million)	**Total** (US$ million)
Component 1 - Creation and Implementation of Marine and Coastal Protected Areas (UCs)	12.29	50.64	62.93
Component 2 - Design of Financial Mechanisms to Support the MCPAs System	2.50	1.09	3.59
Component 3 - Monitoring and Evaluation	2.50	40.68	43.18
Component 4 - Project Coordination and Management	0.91	7.24	8.15
Total Project Cost	**18.2**	**99.66**	**117.86**

IV. Implementation

A. Institutional and Implementation Arrangements

29. The Project will be implemented by the Ministry of Environment (MMA) in partnership with the Brazilian Biodiversity Fund (FUNBIO), ICMBio (responsible for federal protected areas and threatened species), MME/Petrobras, and state and municipality agencies (for specific protected areas in their jurisdictions). Implementation will additionally involve the academic sector, NGOs and civil society.

30. MMA will be responsible for the overall coordination of the four components, and through the Project Coordination Unit (PCU), will *inter alia*: (a) oversee the preparation of annual operating plans; (b) prepare supervisory and other reports as needed by donors or the World Bank; (c) monitor and evaluate project activities; (d) confirm that subsidiary agreements are effectively carried out; (e) secure project safeguard compliance in collaboration with ICMBio and state environment agencies; and (f) conduct communication and information-dissemination programs. FUNBIO will be responsible for procurement and financial management and monitoring, including approving and tracking the distribution of funds. Monitoring of the Project's progress will be carried out in close coordination by MMA's PCU and FUNBIO.

31. The Project's governance structure includes a Project Council (PC), an Operational Committee (OC) and Technical Working Groups. The PC will be comprised of representatives of key governmental and non-governmental stakeholders with a view to providing policy level and strategic guidance, ensuring linkages to relevant sectorial policies and programs, assisting in the resolution of any inter-sectorial conflicts, and debating and suggesting improvements for the SNUC regarding coastal and seascape management challenges, among other issues. The OC will be comprised of representatives of the key executing agencies and chaired by MMA, serving as an administrative unit to ensure compliance with the PDO, considering PC guidance. The Technical Working Groups will be established as needed to

provide in-depth guidance upon specific issues related to the Project implementation.

32. The Project Operational Manual will detail the roles and responsibilities of each of these institutional structures as well as the agencies involved in the Project's implementation.

B. Results Monitoring and Evaluation

33. A Project Monitoring and Evaluation (M&E) unit will be established within the PCU in MMA. This unit will lead the Project's monitoring and evaluation, with support on the fiduciary aspects from FUNBIO and from each of the components' executing partners. Progress will be tracked against the indicators outlined in the Project's Results Framework (Annex 1) and the actions agreed in the Project's Annual Operation Plans (*Planos Operativos Anuais* – POA) agreed annually with the Project's OC and donors. Quarterly financial and bi-annual progress and monitoring and evaluation reports will be submitted to the World Bank. In addition, (a) bi-annual progress reviews will be conducted by the OC; (b) bi-annual progress reviews during World Bank implementation support missions; (c) a mid-term review of the Project's implementation will be conducted jointly by the GOB, the OC, the PCU, FUNBIO, the World Bank and MME/Petrobras; and (d) an independent end of project evaluation will be also completed, and a project completion report prepared.

34. The Project will also monitor and evaluate the Project's impact on the ground by tracking the management effectiveness in the selected protected areas (UCs) and the MCPA system. In parallel, the Project will support the design and launch an M&E system for the long-term monitoring of key environmental and biological indicators.

C. Sustainability

35. The Project is expected to be the first phase of a longer-term process to establish an effective and sustainable MCPA system, through the following strategies: (a) biodiversity protection with compatibility and integration with other coastal activities; (b) evaluation of financial sustainability needs and proposition of revenue generating and benefit sharing options for the protected areas (UCs); and (c) implementation and strengthening of institutional coordination mechanisms and build long-term capacity for management of the MPCA system.

36. The involvement and financing provided by MME/Petrobras is an interesting development that, if successful, could pave the way for private sector MCPA financing over the long-term. In ecological terms, the design and adoption of an environmental and biological monitoring system will also be a critical instrument for MCPA system sustainability.

V. Key Risks and Mitigation Measures

A. Risk Rating Summary Table

Risk	Rating	Risk	Rating
Project Stakeholder Risks		**Project Risk**	
- Stakeholder Risk	Moderate	- Design	Low
Operating Environment Risk		- Social and Environmental	Moderate
- Country	Moderate	- Program and Donor	Moderatel
- Sector and Multi-Sector	Moderate	- Delivery Monitoring and Sustainability	Moderate
Implementing Agency (IA) Risks (including Fiduciary Risks)			
- Capacity	Moderate		
- Governance	Moderate		
- Fraud and Corruption	Low		

B Overall Risk Rating Explanation

37. **The Overall implementation Risk is rated as Moderate** given the economic and political stability of the country, as well as the extensive experience of the Bank as implementing agency of various projects involving protected areas (UCs) in Brazil. At this stage of project development, the main risks identified are: Brazilian economic and population growth in the coastal areas will increase pressure on natural resources. As a mitigation measure, the Project will be implemented in close coordination with other governmental policies and sectors and seek engagement of different actors at the local, state and national level to ensure political support for conservation actions and adequate financing for timely implementation. There is a moderate risk that project approval delays occur owing to the many steps in the negotiation process. To mitigate this risk, the task team will remain in close contact with the GoB, its partners and other interested stakeholders who could affect ability to obtain all approvals in a timely manner. The project involves activities that trigger safeguard measures that may be challenging, but participatory mechanisms adopted are likely to ensure that local and traditional communities' rights are respected.

38. Successful project implementation will require close collaboration among federal, state and municipal levels of government, the Ministry of Environment, FUNBIO, private sector partners, the scientific community and stakeholders in the project areas. The project includes cross-sectoral and multi-stakeholder committees (the Project Coordination Unit, Operational Committee, Project Council, and Working Groups) to help coordinate activities and ensure integration of the coastal and marine areas into the SNUC.

39. There is a risk that some stakeholders resist the creation of additional protected areas (UCs) due to perceived potential economic losses, and poor past experiences with land tenure regularization or resettlement. To mitigate these risks, consultations on traditional communities' issues, loss of access, and the complete environmental assessment are being carried out, and a Process Framework and an Indigenous Peoples Plan being prepared. The project will utilize a highly participatory approach that emphasizes consensus and community participation in MCPA management, improving MCPA design to create mosaics that avoid conflict with local people while maximizing conservation benefits

40. **The Overall Implementation Risk is also rated as Moderate**, as co-financing funds have already been secured from MME/Petrobras, and the implementing agency has long experience in the implementation of GEF-financed biodiversity conservation projects. Although the environmental risk is low (this is essentially an environmental protection project), there may be moderate risks of social conflicts regarding the creation of new protected areas (UCs).

VI. Appraisal Summary

A. Economic and Financial Analysis

41. GEF financing, along with the sizeable co-financing secured for the Project, will provide the conditions to develop the necessary institutional capabilities, set up the legal and policy frameworks for the sustainable management of the country's marine ecosystems, and develop mechanisms for the participatory management.
42. The Project is important to strengthen the long-term economic and financial sustainability of PAs (UCs). The public budget is limited but the Project will support alternative instruments to overcome this limitation. Without the Project, the budget forecast to be allocated for MCPAs conservation by the GOB (the baseline scenario) is about US$8.0m over the life of the Project. The $18.2m GEF investment would leverage an additional US$90m from other donors over the same period.

43. The GEF incremental support would assist the GOB in effectively expanding the representation of MCPAs, identifying sustainable financing options for these areas, and involving new actors at the national and sub-national levels.

B. Technical

44. The Project seeks to increase the formally protected marine and coastal area from 1.57% to at least 5%, an increase of 120,000 km^2, and to enhance the protection of 9,300 km^2 of existing protected areas (UCs). Its design draws upon the lessons learned with the establishment of MCPA systems in other parts of the world, seeking to avoid and mitigate identified risks stemming from *inter alia* poor system design, weak stakeholder participation and other factors.

45. Further, it recognizes the critical importance of securing financial sustainability if gains on the ground are to be maintained, but is realistic in its ambitions, recognizing clearly that this project can only be a first step towards securing the necessary resources for long term sustainability.

C. Financial Management

46. A Financial Management Assessment was carried out in accordance with World Bank guidelines and the Project Financial Management risk has been assessed as "Moderate" due to the following factors: (a) decentralization of funds to the protected areas (UCs); (b) lack of an audit department in FUNBIO to help in the control of the funds; and (c) the relatively new area of assistance of the Project. FUNBIO has assumed fiduciary management responsibilities for previous and ongoing World Bank-financed projects under similar arrangements. The assessment evaluated the FM arrangements of FUNBIO as satisfactory, given FUNBIO's adequate staffing, accounting and financial management systems and lack of important audit findings. Implementation agency weaknesses include lack of an internal control/audit unit and adequate internal controls to monitor decentralized funds. Mitigation measures include: (a) preparation of a user friendly and detailed Project Operational Manual by negotiations, (b) preparation of audit Terms of Reference; and (c) close monitoring and follow-up by the PCU, assuring proper supervision to provide training on the *Cérebro* system[7], FM and disbursement procedures throughout implementation. Lessons learned from previous projects show that issues related mostly to the lack of both preventive internal controls and an internal audit unit. This has been addressed through strengthening of FUNBIO's internal controls but, in order to enforce the preventive internal control procedures, there is still the need to establish an internal control/audit unit (currently underway). The accounting system (RM), and *Cérebro II*[8], the monitoring system, are fully operational and capable of running the agreed Interim Unaudited Financial Reports (IFRs) and satisfy World Bank requirements. FM Implementation Support Missions will be conducted on an annual basis.

D. Procurement

47. The overall project risk for Procurement is Low. A full assessment of FUNBIO's capacity to implement procurement in accordance with the World Bank's Guidelines has been carried out and no major risks were identified. FUNBIO has implemented other World Bank-financed projects and has acquired good familiarity with procurement rules, including using bidding documents, requesting prior and post reviews, and preparing Procurement Plans. Due to the nature of the Project, and because only few selection

[7] Under earlier World Bank-financed projects an internet-based financial management system (*Cérebr*o), a full service system created by FUNBIO that enables all annual budget planning, review and approval, execution, and monitoring to occur in a secure, efficient, and transparent online environment was developed and implemented.

[8] Under GEF MAR an updated version, *Cérebro I*I, is being adopted which will resolve minor problems encountered in the first phase.

processes are expected have a higher complexity, selecting them for prior review is an adequate measure to mitigate this residual risk. Some findings to be highlighted are: (a) FUNBIO's *Cérebro* system, has a full procurement module, and deals with procurement responsibilities and formalizes the decision making process; (b) FUNBIO has a bidding and contracting manual, which was reviewed by the World Bank and its procedures were considered acceptable; (c) FUNBIO has an excellent filling system; (d) the procurement unit is currently staffed with eight experienced staff, and can be expanded if needed. FUNBIO will develop a Procurement Plan which will be updated in agreement with the World Bank annually or as required to reflect the actual implementation needs and improvements in institutional capacity. Procurement supervision will include selected prior reviews to be carried out by the World Bank and yearly field supervision missions to carry out post reviews of procurement actions.

E. Social

48. The Project is classified as Category B for safeguard purposes. It is essentially a conservation initiative, expected to generate positive and long-lasting social, economic and environmental benefits. It is expected to bring about social and economic benefits as it moves towards putting the management of these economically valuable coastal and marine resources onto a more sustainable footing. No one will be physically displaced by the creation and consolidation of the selected protected areas (UCs). Nevertheless, it is recognized that the creation of new, and changes in management of existing PAs could give rise to localized negative social issues if restrictions of access to protected area resources leads to impacts on livelihoods. Furthermore, one of the existing PAs (UCs) to be potentially supported under the Project is affiliated with an indigenous population. For these reasons both the Involuntary Resettlement (OP/BP 4.12) and the Indigenous Peoples (OP/BP 4.10) safeguard policies have been triggered. To ensure that any such issues are appropriately addressed, the FUNBIO has prepared, consulted on and publically disclosed a social safeguard document detailing the following prior to Appraisal: (i) a Process Framework; (ii) a social assessment; and (iii) an Indigenous People's Plan.

F. Environment

49. The Project is expected to have a significantly positive environmental outcome. This will improve biodiversity protection and reduce coastal degradation, improving environmental capacity to adapt to climate changes and bringing local, national and international benefits. The Project may support small-scale investments in the selected protected areas (UCs), such as demarcation, possibly interpretative centers, trails, preparation of management plans, etc. Management plans in sustainable use protected areas (UCs) should discipline and ensure sustainable resource use. Possible negative impacts from these small-scale investments are expected to be small, localized and reversible. Some of the existing protected areas (UCs) include historical sites and, although project actions as planned should not interfere with those sites, eventual additional historical and/or archeological findings may occur during implementation.

50. In view of this, and as mentioned above, the Project is classified as Category B for safeguards purposes, with following environmental safeguard policies triggered: Environmental Assessment (OP/BP 4.01); Natural Habitats (OP/BP 4.04); Forests (OP/BP 4.36) and Physical Cultural Resources (OP/BP 4.11). To ensure any such issues are appropriately addressed, FUNBIO has prepared, consulted on and publically disclosed an Environmental and Social Assessment and Management Framework, which assesses potential impacts and proposes a framework for preventing or mitigating them. Proposed measures are similar to legally required actions routinely performed by implementing agencies MMA and ICMBio, which have demonstrated capacity to comply with World Bank safeguard instruments under previous World Bank-financed projects. Furthermore, the Framework will also be integrated into the operating rules of the financing mechanisms envisaged as part of Component 2 and principles of OP 4.01 on proper consultation will be applied as part of project-financed studies for the creation of new PAs (UCs) envisaged as part of Component 1.

Annex 1: Results Framework and Monitoring

Country: Brazil

Project Name: Marine Protected Areas Project (P128968)

Results Framework

Global Environmental Objectives

PDO Statement

The Global Environmental Objective (GEO) is the same as the Project Development Objective (PDO). The objectives of the project are (a) to support the expansion of a globally significant, representative and effective Marine and Coastal Protected Areas system in Brazil, and (b) to identify mechanisms for its financial sustainability.

These results are at	Project Level

Global Environmental Objective Indicators

Indicator Name	Core	Unit of Measure	Baseline	Cumulative Target Values					Frequency	Data Source/ Methodology	Responsibility for Data Collection
				YR1	YR2	YR3	YR4	End Target			
Marine areas brought under biodiversity protection (ha)	☒	Hectare(Ha)	5.50	5.50	5.50	10.50	16.00	17.50	Annually	Draft PA designation decrees and laws officially submitted.	MMA/ICMBio
Area brought under enhanced biodiversity	☐	Hectare(Ha)	0.00	850.00	450.00	730.00	830.00	930.00	Annually	METT Scorecards	MMA

protectionTarget : 930,000 ha (9,300 km2),											
Financial mechanisms to support the long-term sustainability of MCPAs designed and ready for implementation. Target: 2	☐	Number	0.00	0.00	0.00	1.00	1.00	2.00	Annually	Project reports, agreements established, financial mechanisms proposed and submitted, legislation proposed and submitted, etc.	FUNBIO

Intermediate Results Indicators

Indicator Name	Core	Unit of Measure	Baseline	Cumulative Target Values					Frequency	Data Source/ Methodology	Responsibility for Data Collection
				YR1	YR2	YR3	YR4	End Target			
Protected Area Management Plans (a) prepared or updated, and (b) under implementation.	☐	Number	0.00	0.00	3.00	9.00	15.00	16.00	Annually	Management Plans submitted to the PA Management Agency. Annual PA implementati	MMA, ICMBio

										on reports.	
Technical studies completed	☐	Number	0.00	1.00	2.00	3.00	4.00	4.00	Annually	Draft studies and technical reports	MMA, FUNBIO
Marine Biodiversity Monitoring System developed and under implementation in project sites	☐	Percentage	0.00	0.00	0.00	50.00	50.00	100.00	Annually	Project Reports	ICMBio/MMA
Management systems (incl. fiduciary systems) in place and operational, producing satisfactory annual and quarterly reports. Project monit. operational, producing satisfactory bi-annual and quarterly.rep.	☐	Yes/No	No	Yes	Yes	Yes	Yes	Yes	Quarterly, Annually	Quarterly financial reports. Bi-annual Implementation reports	MMA, ICMBio, FUNBIO, IBAMA, Petrobras
Participants in consultation	☐	Number	0.00	0.00	120.00	240.00	360.00	480.00	Annualy	PA Management	MMA, ICMBio

activities during project implementation , of which female										Council Minutes and attendance registers	
MCPA classification system defined and costed	☐	Percentage	0.00	0.00	50.00	50.00	50.00	100.00	Annually	Classification system report; project progress reports	MMA, FUNBIO
Managerial Effectiveness Monitoring systems adopted and implemented in all project sites	☐	Percentage	0.00	100.00	100.00	100.00	100.00	100.00	Annually	Tracking tools report	ICMBio/MMA
Project implementation structures established and operating in accordance with the POM and their procedural rules	☐	Percentage	0.00	90.00	100.00	100.00	100.00	100.00	Annually	Project reports. Minutes of meetings.	MMA

Annex 1: Results Framework and Monitoring

Country: Brazil

Project Name: Marine Protected Areas Project (P128968)

Results Framework

Global Environmental Objective Indicators	
Indicator Name	Description (indicator definition etc.)
Marine areas brought under biodiversity protection (ha)	This is a proxy indicator that measures marine biodiversity protection as a result of the World Bank operation through either formally gazetting an area as a marine protected area or limiting access to an area for fishing either through the introduction of a quota or licensing system or by introducing seasonal or species closures.
Area brought under enhanced biodiversity protectionTarget: 930,000 ha (9,300 km2),	Increase in level of management effectiveness based on METT scorecard percentage (after scorecard is adapted to each site). <35%=Non-functioning; 35-75% = Basic functioning; >75% = high-level functioning.
Financial mechanisms to support the long-term sustainability of MCPAs designed and ready for implementation.Target: 2	Proposals for financial mechanisms that could be created, including sources of funds, mechanisms, economic instruments, legal requirements, etc
Intermediate Results Indicators	
Indicator Name	Description (indicator definition etc.)
Protected Area Management Plans (a) prepared or updated, and (b) under implementation.	Number of selected MCPAs with Management Plans (a) elaborated and (b) under implementation. (Likely to include Costa dos Corais, APA Fernando de Noronha, PARNA Noronha in PY 2; Baleia Franca, Lagoa do Peixe, Corumbau in PY3; Canavieiras, Cassurubá, Ilha dos Lobosin PY4 and PARNA Abrolhos in PY5.)
Technical studies completed	Number of studies focusing on the definition of the cost structure and the identification and assessment of revenue generating opportunities for MCPAs
Marine Biodiversity Monitoring System developed and	50% means system developed. 100% means system adopted in all selected MCPAs

under implementation in project sites	
Management systems (incl. fiduciary systems) in place and operational, producing satisfactory annual and quarterly reports. Projectmonit. operational, producing satisfactory bi-annual and quart.rep.	No description provided.
Participants in consultation activities during project implementation , of which female	Number of participants in consultative and Management Council meetings for participating project sites, distinguished by gender. (Use meeting with highest number of participants for each site)
MCPA classification system defined and costed	Protected Area categories and implementation phases defined for the MCPA system and costed (Initial estimate completed: 50%, Refined estimate: 100%).
Managerial Effectiveness Monitoring systems adopted and implemented in all project sites	Tracking tools updated. In the 1st year the target percentage is calculated based on selected existing PAs. In the 2nd year onwards, the target percentage is calculated based on selected existing PAs plus new PAs created by the project.
Project implementation structures established and operating in accordance with the POM and their procedural rules	30% PCU 30% PIU 30% Operational Committee 10 PC

Annex 2: Detailed Project Description

I. Project Development Objective

1. **The Project's Development Objective (PDO)** is to support the expansion of a globally significant, representative and effective marine and coastal protected area (MCPA) system in Brazil and identify mechanisms for its financial sustainability.

2. The PDO level indicators and respective targets are to:
   - bring under biodiversity protection at least 5%, (equivalent to 17,500 km^2) of the Brazilian marine territory;
   - bring under enhanced biodiversity protection at least 9,300 km^2 of marine and coastal area; and
   - identify, design, and prepare for implementation at least two financial mechanisms able to contribute to the long-term sustainability of MCPAs.

II. Project Description

3. The proposed Project includes four components:

4. **Component 1 - Creation and Implementation of Marine and Coastal Protected Areas (UCs) (GEF: $12.29 million, co-financing: $50.64 million):** This component aims to both increase the area and strengthen the management of Brazil's marine and coastal environment under formal protection. It will support the creation and implementation of different categories of new and existing MCPAs in the Brazilian marine and coastal zones, establishing and strengthening an effective MCPA system. These areas may be either strict protection or sustainable use MCPAs. A short list of sites eligible for project support has been identified during preparation (see Annex 8). The component is divided into two sub-components aimed at: (a) the identification and creation of marine protected areas (UCs) and seasonal or permanent no-take fishing zones, and (b) implementation of MCPAs.

5. **Sub-component 1.1 - Creation of new marine protected areas (UCs):** This sub-component will principally support the creation of new marine protected areas (UCs) and the identification of potential seasonal or permanent no-take fishing zones (lying outside of marine protected areas, UCs)[9], as the marine zone has the greatest deficit of protection among all Brazilian biomes.

6. With respect to marine protected areas (UCs), nine potential federal sites have been identified during preparation for support under this sub-component (see Annex 8). This sub-component will launch with a scientific and consultative process to both prioritize the sites and identify the key actions needed. An enormous amount of analytical work at the regional and biome-level is available in Brazil, undertaken over the past 15 years by research and government agencies,

[9] Marine Protected Areas and no take fishing zones are governed by different legislative rules: the former fall within the ambit of SNUC, which is coordinated by MMA and executed by ICMBio, State and Municipal governments, while the latter fall within the ambit of the fisheries legislation and is oversee jointly by MMA and the Ministry of Fisheries and Aquaculture.

universities and NGOs. The Project will use this regional and macro-level information - not only biodiversity data but socio-economic information as well - and refine it at the local level to further identify the priority sites for action, and to define the specific protected area creation and implementation actions to be supported. Activities to be supported under this sub-component include among others the following: updating the National Protected Area Database, undertaking biological and social studies, implementing public consultation processes, and drafting decrees for protected area creation.

7. The procedures for establishing protected areas (UCs) are determined by the National System of Protected Areas (SNUC- federal law Nº. 9.985, of June 18, 2000, and Decree Nº. 4.340, of August 22, 2002). The SNUC Law provides a sound legal basis for the establishment and consolidation of protected areas (UCs). The Project will contribute to improving institutional capacity for implementing this legislation for coastal and marine areas. As determined by Brazilian Law, public consultations with all key stakeholder groups will be carried out for each new protected area to be created, with studies on the environment, land (in the case of coastal protected areas – UCs) and resource use rights, and socio-economic indicators informing the final decisions about the legal classification, location and boundaries of new protected areas (UCs). Additionally, the implementing agencies will undertake public consultations and circulation of the draft decrees for protected area creation.

8. With respect to the identification of seasonal or permanent no-take fishing zones, the Project will support a participatory and scientific process to: (a) identify key coastal species (e.g., lobsters, shrimp, and others.); (b) determine their geographic distribution throughout their lifecycles, including important reproductive areas; and (c) prepare proposals for their creation, including developing management, surveillance and other action plans. These will be submitted to the inter-ministerial MMA/MPA commission and relevant scientific sub-committees (e.g., lobster, shrimp etc. sub-committees) for approval.

9. **Sub-component 1.2 - Implementation of selected marine and coastal areas:** This subcomponent aims to provide sufficient human and financial resources, adequate infrastructure, supportive local constituencies, technical capacity for strategic planning, political support, and sufficient ecological information for the long-term conservation of the selected protected areas (UCs). It will finance implementation activities in the new marine protected areas (UCs) created under sub-component 1.1, as well as in selected existing MCPAs. A short list of existing protected areas (UCs) eligible for support under the Project has been prepared (see Annex 8), comprising eleven federal, three state and one municipal protected area. Similar to the process described under sub-component 1.1, the Project will support a scientific and consultative process, drawing upon the extensive existing information and complemented by new studies as required, to prioritize the sites and identify the actions required. Activities to be supported in the newly created and/or selected existing protected areas (UCs) are expected to include: (a) demarcation, establishment and functioning of a management council; (b) preparation/update and implementation of protection plans[10]; (c) alternative

[10] Protection Plans are defined as those which govern the period between passage of the protection decree and the adoption of a full Management Plan.

livelihood programs and/or other actions linked to compensation for any loss of access; (d) preparation and implementation of management, visitation or other plans; (e) design and implementation of environmental education, awareness raising and other programs; (f) implementation of threatened and endangered species protection programs; (g) surveillance and enforcement; and (h) the provision of basic infrastructure and equipment.

10. This sub-component would also support cross-cutting initiatives to strengthen conservation management of the MCPA system as a whole, including, rehabilitation and equipping of marine centers, and training, capacity building and outreach activities targeting field staff and local community stakeholders in marine conservation, monitoring, social participation, etc. The component will also support communication activities for the MCPA system and the Project, including development and implementation of a strategy to raise awareness and disseminate information and lessons learned among stakeholders. Specific activities might include *inter alia*: (a) design of brochures, pamphlets; (b) design and maintenance of a MCPA website; and (c) preparation and dissemination of informative material.

11. Under this component GEF financing would cover consultancy services, non-consultancy services (e.g., publications), limited, small-scale infrastructure and rehabilitation works, goods and equipment, public consultations, workshops and training, and operating costs (including travel and per diems).

12. **Component 2 – Identification and Design of Financial Mechanisms to Support the MCPA system (GEF: $2.50 million, co-financing: $1.09 million):** This component aims to identify and design at least two potential financing mechanisms for MCPAs, with a view to putting the MPCA system on a financially sustainable footing in the future, supporting the development of necessary public policies and helping to bridge the gap between protected area policies and central economic decision makers in the Federal Government (Planning and Treasury). Protected areas demand resources in order to perform the function for which they were designed and play an important role in the economy by generating various environmental goods and services and by injecting resources directly into the local, regional or national economy through diversification of economic opportunities. This component seeks to contribute to the identification and adaptation of consolidated tools for conservation finance and to the creation of new approaches specifically designed to promote the financial sustainability of MCPAs, inter alia: cost modelling for PA management, financial modelling and financial arrangement development (public-private partnerships, endowment structures, public funding initiatives, etc.).

13. Building on MMA, FUNBIO and others´ experiences, activities under the component will aim at developing new or adapting existing tools (e.g., Minimum Investments for Protected Areas, Score Card, ARPA Econometric model, etc.) to a marine context so as to determine the public costs of maintaining protected areas and estimate the minimum investment and maintenance recurrent costs necessary for their management. These will take into account costs and potential revenues for different types of protected areas. In addition, activities supported under this component will seek to complement government financing options by supporting a review of existing and identifying potential new funding sources and mechanisms,

including but not limited to the endowment experience of the GEF-supported ARPA project and the Atlantic Rainforest Conservation Fund of the State of Rio de Janeiro (*Fundo da Mata Atlântica do Rio de Janeiro*), as well as preparing the ground for joint development of public policies towards the financing of PA with Planning and Treasury Ministries. As part of this work, studies on potential returns of income generating activities, stakeholder assessments with an emphasis on gender and vulnerability issues associated with protected area management and resource use, including those related to benefit sharing, relevant legal, and other studies, will be conducted. The Project will specifically support studies, modeling, design and structuring of potential revenue generating mechanisms for protected areas focusing on inter alia fisheries and climate change related mechanisms (Blue Carbon) for payment for environmental services. The most promising options will be identified, and elements to support the development of these instruments by the GOB, FUNBIO and other partners will be prepared and discussed by the operational committee.

14. Under this component GEF financing would cover consultant services (e.g., technical assistance linked to the identification and design of financing mechanisms), as well as, non-consultancy services (e.g., publications), public consultations and workshops, and operating costs (including travel and per diems).

15. **Component 3 - Monitoring and Evaluation (GEF: $2.50 million, co-financing: $40.68 million):** Monitoring and evaluation activities to be supported fall into two main areas: (a) designing an integrated monitoring and evaluation system, establishing a baseline and monitoring key biodiversity and environmental health indicators in individual Protected Areas and the MCPA system over the long-term, and (b) Assessment of the marine biodiversity conservation status and conservation requirements. This is an essential complement to the METT Scorecard information, allowing for evaluation of the on-the-ground impact of conservation and management measures, and detection of biodiversity responses to environmental and human disturbance. The information and knowledge gained will be used to improve biodiversity and ecosystem protection within specific Protected Areas and the MCPA system. In addition, the biodiversity and environmental monitoring information, particularly for globally significant species and ecosystems, will contribute to global knowledge on the state of marine and coastal environments and their resources – currently poorly understood in comparison with their terrestrial counterpart.

16. **Sub-component 3.1 – Design and launch of a long-term marine biodiversity monitoring system:** Assessment of impact (or outcomes) of protected areas management efforts in terms of biodiversity conservation and ecosystem protection needs complemented by monitoring the status of biodiversity and key habitats, allowing the on-the-ground impact of conservation and management measures to be evaluated, and biodiversity responses to environmental and human disturbance detected. Currently monitoring of coastal and marine biodiversity comprises of independent, poorly coordinated initiatives focusing on specific ecosystems (specifically, coral reef systems) and species (marine turtles, marine mammals, avifauna, etc.). The data is collected and managed through diverse institutions using different data management systems with little or no communication between them. Hence, using the existing initiatives as a starting

point, this sub-component will focus on the design and launch of an integrated monitoring and evaluation system to track key marine and coastal environmental and biodiversity indicators in individual protected areas and the MCPA system over the long-term. This information in turn will enable the adoption of an adaptive management approach, enabling the effectiveness of conservation efforts in the individual protected areas and the MCPA mosaic system to be improved over time. Activities to be supported under this sub-component will include inter alia: development of a biodiversity and environmental monitoring strategy; refinement of indicators and monitoring protocols for key ecosystems and species, e.g., coral reefs, rocky coastline, migratory birds, sea turtles, selected species of commercial value and/or aquatic mammals; developing data management tools; design of the associated institutional arrangements; and establishment of a baseline followed by execution of on-going monitoring activities. In addition, the component would support awareness raising and knowledge/data sharing activities targeting local, national and international stakeholders.

17. **Sub-component 3.2 - Assessment of the marine biodiversity conservation status and conservation requirements:** This sub-component will promote the assessment of the efficiency of the protected areas to biodiversity conservation. The outcome of this analysis will support the improvement of the management plans and the proposal for new protected areas. All marine vertebrate species and relevant invertebrate species will be assessed using the IUCN criteria for extinction risk, the strategic measures to their conservation will be identified, and the level of protection provided by the MCPA will be evaluated.

18. Under this component GEF financing would cover consultancy services, non-consultancy services (e.g., publications, boat rental, etc.), goods and equipment, public consultations, workshops and training, and operating costs (including travel and per diems).

19. **Component 4 - Project Coordination, Management (GEF: $0.91 million, co-financing: $7.24 million):** This component supports crosscutting activities designed to strengthen coordination, communication, management and monitoring of implementation for all components. It aims to ensure project efficiency and efficacy through the establishment of a satisfactory management system and the maintenance of the Project's participatory structures. It comprises two sub-components: (a) project management, and (b) project coordination.

20. **Sub-component 4.1 – Project management:** This sub-component will finance the costs associated with the day-to-day management and supervision of overall project implementation. Specifically it will support the operation of the Project Coordination Unit in MMA, responsible for ensuring project implementation and monitoring; and the Project Management Unit in FUNBIO, responsible for the satisfactory management of project funds and procurement processes. It also includes preparation and implementation of an overarching project communication strategy.

21. **Sub-component 4.2 – Project coordination:** This sub-component will support coordination, protected area management effectiveness monitoring and communication activities, including the establishment and functioning of the

various project inter-institutional structures including the: (i) Operational Committee, the highest level project decision-making body comprised of each of the key executing agencies; (ii) multi-stakeholder Project Council, comprised of government, private sector, NGO and civil society, and academia representatives, responsible for technical, strategic and policy guidance and advice; and (iii) ad hoc technical working groups focused on specific issues as necessary; (iv) monitoring of management effectiveness in and financial sustainability of new and existing protected areas supported under the project (this will be achieved through the adaptation and annual implementation of the GEF's Protected Area Management Effectiveness Tracking Tools (METT Scorecard)[11]..

22. Under this component GEF financing would cover consultant and audit services; non-consultant services (e.g., publication of communication materials); goods and equipment; workshops, meetings and training; and operating costs (including travel and per diems).

[11] This standardized tool is designed to measure management effectiveness through a series of questions linked to core protected area issues (e.g., legal status, surveillance, communications, etc.). Analysis of the scoring associated with each issue will provide directional trends and patterns to inform the development of work plan activities to increase the effectiveness of protected area management activities in individual protected areas. The sub-component will also support the preparation of associated national reports. The METT scorecard will be translated into Brazilian Portuguese and adapted to the context of Brazilian protected areas. Scorecard questions that represent milestones in marine protected area implementation under the project were identified.

Annex 3: Implementation Arrangements

I. Overview and Management Arrangements

1. **Overview/Executing partners:** Overall political responsibility for the Project lies with the Biodiversity and Forest Secretariat (SBF) at MMA, however, its day-to-day execution will be undertaken in partnership with:
   (i) **MMA's Biodiversity and Forest Secretariat (SBF) at MMA** – the lead government implementing agency, housing the Project Coordination Unit (PCU) responsible for coordination, supervision and monitoring of project implementation;
   (ii) **Brazilian Biodiversity Fund (FUNBIO)** – is a non-profit private entity, qualified by the Ministry of Justice of Brazil as of public interest since 2004. FUNBIO operates under the rules of private law, in special the Brazilian Code;
   (iii) **Chico Mendes Institute for Biodiversity Conservation (ICMBio)** – a government agency responsible for management of federal protected areas (UCs) and threatened species in Brazil;
   (iv) **Petróleo Brasileiro S.A. (Petrobras)** – mixed economy company linked to the Ministry of Mines and Energy, a leader in the Brazilian oil and gas industry; Petrobras will support Mines and Energy Ministry (MME) in technical and scientific issues, and co-finance the Project; and
   (v) **State and municipal agencies**, where appropriate, according to the protected areas (UCs) supported by the Project – responsible for the implementation of project activities in specific UCs under their jurisdiction.

2. The working relationships and roles and responsibilities of each of the Project's key executing agencies and institutional structures is summarized in Section II below, and will be spelled out in detail in the Project Operational Manual, as well as in a series of legal agreements to be signed between the parties.

3. **Co-financing Partners:** The Project's main parallel co-financing partners are the Federal Government (GOB)(US$8.4 million) and MME/Petrobras (US$90 million):

   (i) **GOB** will provide US$9.7 million in federal fiscal resources to support MMA and ICMBio's participation in project implementation at large and for the implementation of activities under Components 1, 2, 3 and 4.

   (ii) **MME/Petrobras** will provide a grant in an amount of US$20 million ("MME/Petrobras Grant"), to be converted to its equivalent in *Reais* at the date of the signature of the legal agreement dealing with these resources, as parallel financing for Components 1, 3, and 4. In addition, MME/Petrobras will sign an agreement with the F**e**deral Government of Brazil, through MMA, for the provision of about127 millions of Brazilian *Reais* of in-kind support to the Project ("Separate Agreement"). This in-kind contribution consists of data that will be made available, work hours of Petrobras staff as consultancy and scientific support to the

Project under supervision of the MME, not including logistic support or any of any other nature (such as helicopters, boats, monitoring campaigns). The Separate Agreement will define inter alia the objectives, form, and rules for provision of such support.

4. **Financial arrangements:** The GOB has selected FUNBIO to manage GEF's and Petrobras grant resources. To this end, FUNBIO will sign two separate grant agreements, one with the World Bank ("GEF Grant Agreement") and the other jointly with MME/Petrobras and MMA ("MME/Petrobras Grant Agreement"), to carry out the implementation of the Project. Each Grant Agreement shall set forth the specific terms and agreements for grant management, and shall include the following responsibilities *inter alia*: (a) procuring goods and contracting services needed for project execution with grant resources; (b) carrying out disbursements and the financial execution and accounting of the project. In addition, FUNBIO will lead implementation of the GEF-financed Component 2 activities aimed at identifying and designing financial and legal instruments for long-term sustainability of protected areas (UCs).

5. Implementation agreements will be signed between FUNBIO, MMA and ICMBio. The agreements are expected to be developed along similar lines to those governing ARPA Phases 1 and 2 projects, and will define each institution's responsibilities and obligations under the Project. For the Protected Area sites requiring state or municipal participation, a model cooperation agreement between their environmental secretariats and agencies, the GOB, through MMA, and FUNBIO will be included in the Project Operational Manual.

6. **Legal governance:** The Project will be legally governed by the Project Operational Manual, the legal agreements to be signed between the participating institutions themselves and prevailing legislation:

    - Grant Agreement between FUNBIO and the World Bank (acting as trustee for the GEF);
    - "MME/Petrobras Grant Agreement" between FUNBIO, MMA and MME/Petrobras;
    - Technical Cooperation Agreements between FUNBIO and each of the Brazilian Governmental federal executing agencies;
    - Technical Cooperation Agreements between FUNBIO and State and municipal agencies when relevant;
    - Applicable national legislation, including: Law Nº 9,985 of 18 July 2000; Law Nº 9,478 of 6 August 1997; Decree Nº 2,745 of 24 August 1998; Decree Nº 4,340 of 22 August, 2002; Decree Nº 4,339 of 22 August, 2002; Decree Nº 5,746 of 5 April, 2006; and
    - Legal Charter and Operations Manual of FUNBIO.

7. **Effectiveness Conditions:** To this end, the following are the required conditions for effectiveness for the GEF Grant:

    a. The execution and delivery of the Grant Agreement with the World Bank by FUNBIO;

b. Implementation Agreements between FUNBIO and MMA, ICMBio to carry out the parts of the Project under their respective jurisdictions;

c. "MME/Petrobras Grant Agreement" with MMA and FUNBIO; and

d. Adoption of a Project Operational Manual satisfactory to the World Bank.

II. Organizational Structure and Roles and Responsibilities

8. **Overview:** The Biodiversity and Forest Secretariat (SBF) at MMA has the overarching policy level responsibility for carrying out the overall institutional coordination required to implement project activities, while the SBF's DAP will be charged with leading project execution. An Operational Committee, an executive and decision-making body chaired by MMA and comprised of representatives of the key executing agencies, will oversee project implementation. The Operational Committee will be supported by (a) a Project Coordination Unit (PCU) based in MMA, responsible for the day-to-day coordination and supervision of implementation activities being undertaken by the executing agencies, and (b) a Project Management Unit (PMU) based in FUNBIO, responsible for the day-to-day financial management and procurement activities.

9. In addition, a Project Council (PC) comprised of at least 11 representatives drawn from the federal government, private sector, academic sector and NGOs/civil society will be established, to provide overarching strategic and technical guidance, and to provide a forum for problem resolution as needed. Lastly, *ad hoc* Technical Working Groups will be established as needed to provide in-depth guidance upon specific issues related to project implementation.

10. The Project Operational Manual will detail the roles and responsibilities of each of these institutional structures as well as the agencies involved in project implementation. A summary is presented below.

11. **Project Council (PC):** An advisory Project Council comprised of representatives of key governmental and non-governmental stakeholders will be established with a view to providing policy level and strategic guidance, ensuring linkages to relevant sectorial policies and programs, assisting in the resolution of any inter-sectorial, debating and suggesting improvements for the SNUC regarding coastal and seascape management challenges, and other problems. The Council will meet at least twice a year, and more frequently on an ad hoc basis as needed. It will be chaired by MMA, and will comprise at least the following 12 members in addition to the executors of the project:

Table 1: ***Members of the Project Council***

Government	***Civil Society***
1 representative of MMA (Chair) *1 representative of Min Mining and Energy* *1 representative of Min Science, Technology and Innovation* *1 representative of Min Defense/SECIRM* *1 representante da SEP (Secretaria de Portos)* *1 representative of Min Fisheries*	*1 representative of State environmental agencies* *1 representative of Academia* *2 representatives of environmental NGO (CNEA) – 1 from North/Northeast and 1 from South/Southeast* *1 representative of private sector (CNI)* *1 representative of Artisanal Fishers*

12. Federal Government representatives will be appointed by their relevant Ministers through a specific administrative act. The State representative will be appointed by the Brazilian Association of State Environmental Agencies (*Associação Brasileira de Entidades Estaduais de Meio Ambiente* - ABEMA). The academic representative and alternate shall be appointed by the academic community, for example through the Brazilian Society for Scientific Progress (*Sociedade Brasileira para o Progresso da Ciência* - SBPC). Environmental and social NGOs shall have their representatives and alternates appointed by *Rede MangueMar* and *Fórum do Mar*. The private sector shall appoint its representatives and alternates from leading private sector associations, such as the National Industrial Confederation (*Confederação Nacional da Indústria* - CNI) and others. The representative from Artisanal fishers will be appointed by the Association of Marine Extractivist Reserves (*Associação das Reservas Extrativistas Marinhas*). ICMBio and FUNBIO will participate as observers in the Project Council.

13. **Operational Committee:** The Operational Committee is an administrative unit, and functions to ensure compliance with proposed PDO considering Project Council guidance. To this end the committee will: (a) approve action strategies; define procedures and guidelines; (b) establish criteria for the signing of agreements and contracts envisioned under the Project; (c) analyze and approve the Project's Annual Operating Plans and Procurement Plans; (d) review implementation progress and budgets for each component on a quarterly basis, and resolve any problems and bottlenecks that are identified; and (e) analyse and issue opinions on technical and financial reports, as well as on strategic recommendations made by the other project groups. The Operational Committee will meet at least once every three months. It will be chaired by a representative from SBF/MMA and will comprise the following four members:

Table 2: ***Members of the Operational Committee***

Operational committee members:	
1 representative of SBF	1 representative of FUNBIO
1 representative of ICMBio	1 representative of MME/Petrobras

14. **Technical Working Groups (WG):** In addition to seeking guidance from the Program Council, the Operations Committee may periodically establish specific Technical Working Groups to analyze and provide technical guidance on particular

issues that may arise with respect to implementation. These WGs will typically include a subset of the members of the Program Council, complemented by additional technical experts drawn from *inter alia* government, universities, research institutions, NGOs and/or stakeholders relevant to the question at hand.

15. **Project Coordination Unit (PCU):** The PCU is the executive implementing body under the SBF within MMA. The PCU serves as link between the Operational Committee and the different executors. The PCU is responsible for the day-to-day coordination and management of project implementation. This includes: (a) coordinating, supporting, executing, and supervising the implementation of activities under each component by the executing agencies; (b) monitoring the Project's physical and financial activities both within and outside protected areas (UCs) (including GEF Tracking Tools updated based on the information provided by the Protected Area coordinators) according to the agreed targets and budgets and, as needed, discussing and proposing adjustments to operations, project reference documents and methodologies to achieve objectives; (c) guiding project executors on the technical, administrative, and financial procedures accepted by the World Bank; (d) formulating and systematizing documents for analysis and approval by the Operational Committee; (e) receiving Annual Operating Plans (*Plano Operativo Anual* - POAs); (f) collating and consolidating the physical and financial execution reports from all executors; (g) preparing quarterly progress and financial reports as well as annual project monitoring and evaluation reports; and (h) preparing the consolidated POA for the Project and the general progress report to be reviewed and approved by the Operational Committee. The PCU will also act as the chair for the Operational Committee and executive secretariat for the Project Council. The unit will be headed by a National Project Coordinator and supported by at least two technical specialists and administrative staff.

16. **Project Management Unit (FUNBIO PMU).** A PMU will be established within FUNBIO to ensure sound fiduciary management of project resources. Its responsibilities will include *inter alia* financial management, procurement, implementation, monitoring and evaluation of the Project, as described in detail in the Operational Manual. FUNBIO will ensure that the PMU is staffed with qualified staff in adequate numbers to ensure sound fiduciary management of project resources until completion of the Project in agreement with the terms set forth in the Operational Manual. The National Project Coordinator in the PCU will work closely with the PMU in FUNBIO to ensure smooth coordination on questions related to finances and procurement.

III. Key Project Executing Agencies.

17. The roles and responsibilities attributed to each of the key executing agencies will be described in detail in the Project Operational Manual. Table 3 provides an overview of the key execution agencies and partners for each of the four components.

Table 3: ***Execution and administration responsibilities***

Components	Executors	Administrator	Potential Partners
1. Creation and implementation of MCPAs	ICMBio, MME/Petrobras and, where relevant, MMA, States and Municipalities	FUNBIO	Sectoral Ministries (Federal/State), NGOs, research institutes, academic institutions, grass roots organizations, private sector, Ibama
2. Design of financial mechanisms to support MCPA system	MMA, ICMBio, FUNBIO	FUNBIO	NGOs, research institutes, academic institutions, grass roots organizations, private sector, Ibama
3. Monitoring and evaluation	ICMBio, MME/Petrobras and, where relevant, States and Municipalities	FUNBIO	Sectoral Ministries, States, NGOs, research institutes, academic institutions, grass roots organizations, private sector, Ibama
4. Project coordination and management	MMA	FUNBIO	ICMBio, FUNBIO, MME/Petrobras

18. **MMA - Ministry of the Environment:** MMA would carry out overall project management and communication activities at the strategic level, evaluating and updating, as needed, project objectives and targets in the project results matrix; monitoring performance against project goals; and supervising FUNBIO. Partnerships with research institutions will be critical for carrying out the biodiversity and environmental monitoring. In addition, the Project will work, through close supervision and timely actions, to improve the implementation capacity that already exists in both institutions. The monitoring of project progress in the protected areas will be carried out by MMA in close coordination with the ICMBio and Funbio..

19. **ICMBio – Chico Mendes Institute for Biodiversity Conservation:** ICMBio is responsible for all aspects of federal protected areas ranging from preparing proposals for the creation of new federal Protected Areas, managing the consolidation process for existing and newly created Protected Areas, preparing the Annual Operating Plans for federal Protected Areas, ensuring implementation of management actions (including surveillance and control) in federal PAs, and providing the counterpart resources, and the implementation of biodiversity and environmental monitoring. The Department of Biodiversity Monitoring, Evaluation and Research (Diretoria de Pesquisa, Avaliação e Monitoramento da Biodiversidade – DIBIO) together with the Department of Creation and Management of Protected Areas (Diretoria de Criação e Manejo de Unidades de Conservação - DIMAN) within ICMBio will oversee the project actions by the Institute and will coordinate with the Project Coordination Unit (UCP), in MMA,

and the Project Management Unit (PMU) in FUNBIO. Also, pertaining to the financial sustainability of MPAS, ICMBio will provide elements (cost modeling, projections and etc) to support the development of public policies under Project objectives.

20. **FUNBIO - Brazilian Biodiversity Fund:** FUNBIO, the Grant Recipient, has extensive experience in implementing World Bank-financed projects. Financial monitoring and procurement functions will be carried out by FUNBIO, which is responsible for approving and tracking the distribution of funds.

21. **MME/Petrobras:** MME/Petrobras is both a donor and an implementing agency. Its US$ 20 million[12] grant will be managed by FUNBIO together with GEF funds. In addition, MME/Petrobras will contribute about 127 million Brazilian *Reais* in kind. This in kind contribution consists of data that will be made available, work hours of MME/Petrobras staff as consultancy and scientific support to the Project under supervision of the MME, not including logistic support or any of any other nature (such as helicopters, boats, monitoring campaigns).

22. **State and Municipal Environmental Secretariats and Agencies:** The state and municipal environmental secretariats and agencies are responsible for: (a) preparing proposals for the creation of state/municipal Protected Areas whithin its territorial jurisdiction; (b) managing the process of consolidating new and existing state/municipal Protected Areas; (c) preparing the Annual Operating Plans (POA) for participating state/municipal Protected Areas ; (d) ensuring implementation of management actions (including surveillance and control) in state/municipal Protected Areas; and (e) ensuring the prompt availability of counterpart resources for the carrying out of the State/Muncipality's pertinent part of the Project.

[12] Which will be converted to reais at the data of the signature of the legal agreement dealing with these funds.

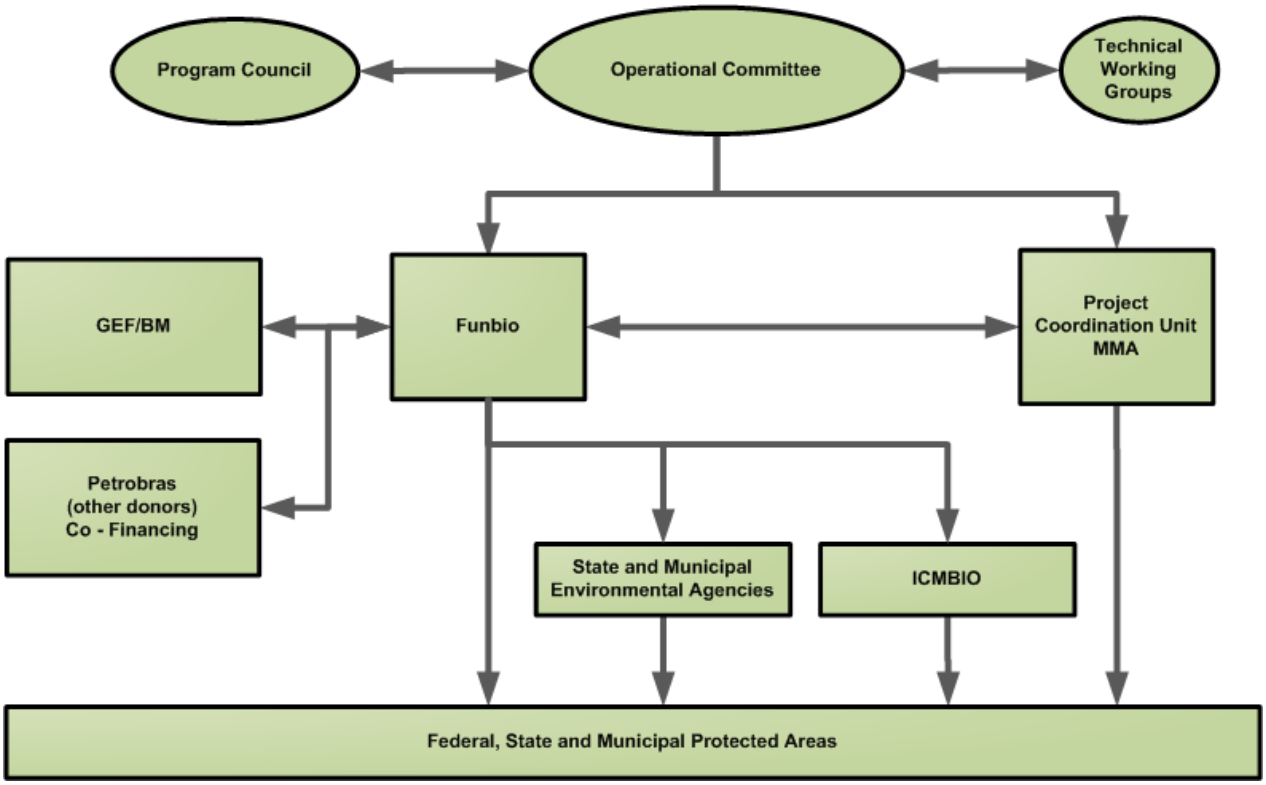


Figure 1: Project's Organizational Structure

IV. Financial Management, Disbursement and Procurement

23. The Project's administrative and financial procedures will be detailed in the Project's Operational Manual (MOP).

Annual Operating Plans (POAs)

24. ICMBio, FUNBIO, MME/Petrobras, and state environmental agencies, where appropriate, and under the scope of their respective responsibilities, will prepare POAs (*Planos Operativos Anuais*, Annual Operating Plans) and send them to the PCU. The POAs direct the application of financial resources allocated to the Project. The PCU reviews and consolidates the different POAs into a single Project's POA and sends it to the Operational Committee for approval. The Project's POA is then sent to the World Bank for "no objection". The PCU forwards the final POA to FUNBIO and other agencies and administrative authorities in charge of POA execution. These agencies, in turn, implement the POA through their internal procedures, strictly observing the terms approved by the World Bank, donors and Operational Committee and the contractual rules assumed with the World Bank through the grant agreements and the Project Operational Manual.

25. The MME/Petrobras grant resources are allocated to FUNBIO, and finance purchases and contracting of goods and services for project activities included in POAs approved by the Operational Committee, as cofinancing.

V. Monitoring and Evaluation of Project Results

26. A Project Monitoring and Evaluation (M&E) Unit will be established within MMA to implement M&E activities as part of the Project Coordination Unit. The monitoring and evaluation indicators have been agreed and are presented in Annex 1. Monitoring and evaluation of project implementation will be conducted through: (a) activities of the Project Coordination Unit and the FUNBIO PMU; (b) bi-annual progress reviews by the Operational Committee; (c) bi-annual progress reviews during World Bank implementation support missions; and (d) mid-term review of project implementation to be conducted jointly by the GOB, the Operational Committee, the Project Coordination Unit, FUNBIO, MME/Petrobras and the World Bank. Under Component 3, biological and/or socio-economic monitoring will be carried out as well as studies and activities to capture lessons learned, disseminate results, and promote replication elsewhere in Brazil and globally. Every six months, the Project Coordination Unit will transmit to the Bank progress reports on project implementation and outcomes (not later than one month after the end of the period covered by such report.) An Implementation Completion Report will be prepared within six months after closing of the GEF Grant.

VI. Financial Management Arrangements

27. A Financial Management assessment was carried out in accordance with World Bank guidelines. The financial management risk associated with the Project has been assessed as "Moderate" mainly due to the following factors: (a) decentralization of funds to the protected areas (UCs), and (b) lack of an audit department in FUNBIO to help in the control of the funds and the relatively new field of the Project: development and implementation of coastal and marine protected areas (UCs). FUNBIO has assumed fiduciary management responsibilities for previous and ongoing World Bank-financed projects under similar arrangements. The assessment considered FUNBIO's FM arrangements satisfactory, due to FUNBIO's adequate staffing, accounting and financial management systems and lack of any important audit findings in the previous years' audit reports, as detailed below. Issues include lack of an internal control/audit unit and adequate internal controls to monitor decentralized funds. Mitigation measures include: (i) preparation of a user friendly and detailed operational manual by negotiations, (ii) preparation of audit TOR; and (iii) close monitoring and follow up by the PCU staff, assuring proper field supervision missions to provide training on the *Cérebro* system, FM and disbursements procedures throughout implementation.

28. Lessons learned during the implementation of previous projects, in particular ARPA Phase 1, show that issues were related mostly to the lack of preventive internal controls but, in order to enforce the preventive internal control procedures, there is still a need to establish an internal control/audit unit (currently underway). The Financial Management Missions are expected to be undertaken on an annual basis.

29. RM - the accounting system - and *Cérebro II*[13] - the monitoring system – are fully operational and capable of running the agreed Interim Unaudited Financial Reports (IFRs) and satisfy World Bank requirements. FUNBIO maintains and manages the RM system that has been used to manage other donor-financed projects, and as such, the system is considered acceptable for the Project as well. Annual budget (POA) amounts approved by the Program Committee are updated in the *Cérebro* system that is accessible to the PCU for budget execution and project monitoring.

30. **Decentralized Execution of GEF Funds:** Funds may be administered and expended directly by Protected Areas, withdrawn from the designated account and transferred to a 'Conta Vinculada', a bank account held in the name of FUNBIO. These accounts are reserved for the receipt of GEF grant funds. FUNBIO reviews, monitors (through Cérebro and field visits) and approves the requests for new advances and keeps a copy of the support documentation, and the Internal Control is made a posteriori. No cash or petty cash payments will be allowed. The FUNBIO financial council staff are experienced and trained in Bank project requirements.

31. Interim Unaudited Financial Reports IFRs (1-A and 1-B) will be prepared on a cash-basis and will show expenditure figures by quarter, accumulated for the year and accumulated for the Project. A specific ledger will be created in the system to record all grant transactions, and will be aligned with the structures of the grant cost and disbursement tables to record transactions by category and component/activity. They will be sent not later than 45 days after each calendar year quarter. Any counterpart contribution (in-kind or cash contributions) supporting the grant's activities will be reflected in the IFRs.

32. An audit of the Project's financial statements will be conducted by an independent audit firm acceptable to the World Bank, carried out in accordance with terms of reference acceptable to the World Bank and the World Bank's audit policy. The Audit's TOR will be subject to an annual review that will require the respective "No Objection" by the World Bank. The audit will be due no later than six months after the end of the fiscal year. The audit report will contain a single opinion on the project financial statements and the designated account and a management letter (report on internal controls). The audit report will be subject to the World Bank policy on Access to Information. FUNBIO publishes its annual financial statements by posting them on the internet.

VII. Flow of Funds

33. **Designated Account**. FUNBIO will open a segregated designated account (DA), in Brazilian Reais, in the Banco do Brasil, with a Fixed Ceiling of (to be determined by negotiation) Disbursements will be made based on Withdrawal

[13] Under previous projects an internet-based system (*Cérebro)*, a full service financial management system created by FUNBIO that enables all annual budget planning, review and approval, execution, and monitoring to occur in a secure, efficient, and transparent online environment was developed and implemented. Under the Project an updated version, *Cérebro* II, is being adopted which will resolve minor problems encountered in the first phase.

Applications supported by statements of expenditure (SOEs), except for payments made under contracts for: (a) goods, works and non-consulting services above US$ 500,000 equivalent, (b) contracts with consulting firms above US$ 100,000 equivalent, and (c) contracts with individuals above US$ 50,000 equivalent. In these cases, records must be attached to a Summary Sheet (SS). The information required for the compilation of statements of expenditure is maintained by the financial management unit in the *Cérebro II*/RM database.

34. **Other accounts***:* MME/Petrobras funds will be channeled through a special project account also managed by FUNBIO. The disbursement procedures for MME/Petrobras funds will be specified in the MME/Petrobras Grant Agreement.

VIII. Disbursements

35. FUNBIO will open a segregated designated account (DA), in Brazilian Reais, at Banco do Brasil in Rio de Janeiro to receive grant funds and make payments in local currency.

36. FUNBIO will be responsible for processing all payments for works, goods and services. Payments will be made directly from the DA. Such arrangements are considered appropriate. This arrangement has the necessary segregation and level of approvals and can speed up implementation.

37. The following disbursement methods will be used: Advance, Reimbursement and Direct Payment. The Minimum Application Size with respect to Direct Payments and Reimbursements (not Advances) will be in US$ (to be determined by negotiations) equivalent. Applications documenting expenditure paid from the Designated Account should be submitted by FUNBIO ideally once a month but not later than once every three months, and must include reconciled bank statements as well as other appropriate supporting documents. The Project will also have a four month Grace Period.

38. All payments will be made through electronic deposits at each beneficiary/consultant bank account. Records, Summary Sheets and SOE's will be used to document eligible expenditures. Original support documentation will be available at FUNBIO's headquarters.

39. The following table specifies the categories of Eligible Expenditures that may be financed out of the proceeds of the Grant. No withdrawal shall be made for payments made prior to the date of the Grant Agreement, except that withdrawals up to an aggregate amount not to exceed US$1,820.000 may be made for payments made on or after December 3, 2013 for Eligible Expenditures under the Project.

Table 4: Eligible Expenditure Categories

Category	Amount of the GEF Trust Fund Grant Allocated (expressed in USD)	Percentage of Expenditures to be Financed (inclusive of Taxes)
(1) Goods, works, Non-Consulting Services and Surveillance Activities[14]	10,500,000	100%
(2) Consultant Services, including audits	5,600,000	100%
(3) Training and workshops[15]	1,190,000	100%
(4) Operating Costs[16]	910,000	100%
TOTAL AMOUNT	18,200,000	

IX. Procurement Arrangements

40. **General**. Procurement for the proposed Project would be carried out in accordance with the World Bank's "Guidelines: Procurement of Goods, Works and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers", dated January 2011 (Procurement Guidelines); and "Guidelines: Selection and Employment of Consultant under IBRD Loans and IDA Credits & Grants by World Bank Borrowers", dated January 2011 (consultant Guidelines); and the provisions stipulated in the Legal Agreement. The general description of various items under different expenditure categories is provided below. For each contract to be financed by the Grant, the different procurement methods or consultant selection methods, the need for prequalification, estimated costs, prior review requirements, and time frame are agreed between the Grant Recipient and the World Bank in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

[14] The term "Surveillance Activities" means the cost associated with the creation and consolidation of Protected Areas, including: (i) travel and *per diem* for technical staff; (ii) rental of aircraft, boats, cars; and (iii) fuel and maintenance of vehicles, all for the carrying out of supervisory and quality control activities in Protected Areas under Parts XXX of the Project;

[15] The term "Training" means the costs associated with the delivery of training and capacity building activities under the Project, including: (i) logistics; (ii) equipment rental; (iii) training materials, (iv) stationary for workshops and meetings; (v) lodging, (vi) catering services for coffee-breaks; (vii) rental of training facilities; and (viii) reasonable fees, travel, transportation, and *per diem* of trainers and trainees.

[16] The term "Operating Costs" means recurrent costs associated with the coordination and implementation of the Project, including: (i) operation and maintenance of vehicles, repairs, fuel and spare parts (except those covered under Surveillance Activities); (ii) equipment and computer maintenance; (iii) shipment costs (whenever these costs are not included in the cost of goods); (iv) office supplies; (v) rent for office facilities; (vi) utilities; (vii) travel and per diem costs for technical staff carrying out supervisory and quality control activities (except those covered under Surveillance Activities); (viii) communication costs including advertisement for procurement purposes; and (ix) salaries for the Recipient's operational staff.

41. **Procurement of Works**. Works procured under the Project would include the construction or extension of small head offices in Protected Areas. Procurement methods for works are International Competitive Bidding – ICB, National Competitive Bidding – NCB and shopping and their respective thresholds will be defined in the procurement plan. It is anticipated that works under the project are likely to fit below the threshold for shopping.

42. **Procurement of Goods**. Goods procured under the Project would include *inter alia* vehicles, boats, satellite images, IT and electronic equipment, household supplies. Procurement methods for goods are International Competitive Bidding – ICB, National Competitive Bidding – NCB and shopping and their respective thresholds will be defined in the procurement plan The method known as "pregão eletrônico", as provided in the Guarantor's Law No. 10520, of July 17, 2002, under "COMPRASNET", the Guarantor's procurement portal or any other e-procurement system approved by the Bank, may be used in replacement for National Competitive Bidding and Shopping, when procuring off-the-shelf goods, subject to the following additional procedure, namely, that the bidding documents shall be acceptable to the Bank.

43. **Procurement of Non-consulting Services**. **"**Non-consulting Services" means services which are of non-intellectual nature and that can be procured on the basis of performance of measurable physical outputs, including *inter alia* the cost of, installation of equipment, repairs and/or maintenance services, and demarcation surveys. Procurement methods for non-consulting services are International Competitive Bidding – ICB, National Competitive Bidding – NCB and shopping and their respective thresholds will be defined in the procurement plan The method known as "pregão eletrônico", as provided in the Guarantor's Law No. 10520, of July 17, 2002, under "COMPRASNET", the Guarantor's procurement portal or any other e-procurement system approved by the Bank, may be used in replacement for National Competitive Bidding and Shopping, when procuring readly available services, subject to the following additional procedure, namely, that the bidding documents shall be acceptable to the Bank

44. **Selection of Consultants**. Consulting services from firms and individuals selected under the Project would include *inter alia* preparation of 10 Protected Area management plans, land tenure studies, works supervision, engineering designs, communication and marketing plans, asset management, conservation finance studies, development of conservation financing mechanisms, legal advice, and preliminary studies to create protected areas (UCs). Individual consultants would be selected following the procedures set forth in Section V of the Guidelines, including sole-source selection procedures, whereas consulting firms would be selected following Quality and Cost Based Selection (QCBS), Least-Cost Selection (LCS), Selection under a Fixed Budget (FBS), Selection Based on Consultant's Qualifications (CQS), Selection of consultants under Indefinite Delivery Contract or Price Agreement, or Single-Source Selection (SSS). Short lists of consultants for services estimated to cost less than $500,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

45. **Surveillance Activities** and **Training**. Costs for surveillance activities are costs associated with the creation and consolidation of protected areas (UCs), including: (a) travel and *per diem* for technical staff; (b) rental of aircraft, boats, cars; and (c) fuel and maintenance of vehicles, all for the carrying out of supervisory and quality control activities in protected areas (UCs) under Components 1 and 3 of the Project, many of which would be financed through "*contas vinculadas*". Training costs refer to costs associated with the delivery of training and capacity building activities under the Project, including: a) logistics; (b) equipment rental; (c) training materials; (d) stationary for workshops and meetings; (e) lodging; (f) catering services for coffee-breaks; (g) rental of training facilities; and (h) reasonable fees, travel, transportation, and *per diem* of trainers and trainees.

46. **Operational Costs**. These costs would include recurrent costs associated with the coordination and implementation of the Project, including: (a) operation and maintenance of vehicles, repairs, fuel and spare parts (except those covered under Surveillance Activities); (b) equipment and computer maintenance; (c) shipment costs (whenever these costs are not included in the cost of goods); (d) office supplies; (e) rent for office facilities; (f) utilities; (g) travel and per diem costs for technical staff carrying out supervisory and quality control activities (except those covered under Surveillance Activities); (h) communication costs including advertisement for procurement purposes; (i) salaries for FUNBIO's operational staff; and (j) all costs associated with audits.

47. **"Contas Vinculadas"**. The "*contas vinculadas*" are mechanisms for distribution of funds that allow for more autonomy of PA administrators to spend small amounts of their budgets on daily operation and maintenance of PA offices. These items are considered operational costs and would be procured using FUNBIO's administrative procedures, which were reviewed and found acceptable to the World Bank. A detailed list of expenditures to be paid out of "*contas vinculadas*" would be included in the Project Operational Manual.

48. **Assessment of the agency's capacity to implement procurement**. As a private entity, its regulations allow enough flexibility to apply the World Bank's Guidelines, so no special provisions are required. A full assessment of FUNBIO's capacity to implement procurement under the World Bank's procurement guidelines has been carried out and no major risks were identified. FUNBIO has implemented other World Bank-financed projects and has acquired good familiarity with the procurement rules, including using bidding documents, requesting prior and post reviews, and preparing procurement plans. Due to the nature of the Project, and because only few selection processes might have a higher complexity, selecting them for prior review is an adequate measure to mitigate this residual risk. Some findings to be highlighted are: (i) FUNBIO uses a management system named *Cérebro*, which has a full procurement module. This system deals with procurement responsibilities and formalizes the decision making process; (ii) FUNBIO has a bidding and contracting manual, which was reviewed by the World Bank and their procedures were considered acceptable; (iii) FUNBIO has an excellent filling system; and (iv) the procurement unit is currently staffed with six experienced people, and it can be expanded if needed.

49. The overall project risk for procurement is Low.

50. **Procurement Plan**. FUNBIO will develop a Procurement Plan for project implementation, which provides the basis for the procurement methods. It will also be available in the Project's database and in the World Bank's external website. The Procurement Plan will be updated in agreement with the World Bank annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

51. **Frequency of Procurement Supervision**. In addition to the prior review supervision to be carried out from World Bank offices, the capacity assessment of the Implementing Agency has recommended yearly supervision missions to visit the field to carry out post review of procurement actions.

52. **Prior and Post Reviews**. Thresholds for procurement prior review will be established by the procurement plan.

X. Environmental and Social Safeguards

1. Safeguard Policy Issues

53. The Brazilian coastal and marine environment is globally recognized for the importance of its rich biodiversity, and increasingly for the contribution of its extensive mangroves to carbon storage. The Project, which is classified as safeguards category B, is essentially a conservation initiative, generating long-lasting benefits to the environment through the significant expansion of coastal and marine areas under effective protection. This will result in improved biodiversity protection and reduced coastal degradation, improving environmental capacity to adapt to climate changes. It is also expected to bring about social benefits as it moves towards putting the management of these economically valuable coastal and marine resources onto a more sustainable footing. Nevertheless, it is recognized that the construction of essential managerial infrastructure (such as field base, monitoring trails, basic visitor center with sanitary facilities) and the use of natural resources in sustainable use protected areas (UCs) might give rise to localized and reversible negative environmental impacts and that the process of creating new protected areas (UCs) might give rise to social issues. In addition, one of the existing protected areas (UCs) to be potentially supported under the Project is affiliated with an indigenous population. A preliminary identification of the safeguards potentially triggered by the Project is presented below. To ensure that any such issues are appropriately addressed, the Ministry of Environment prepared the following safeguard documents: (i) an Environmental and Social Assessment of the Project as a whole; (ii) an Environmental and Social Management Framework; (iii) a Process Framework; and (iv) an Indigenous People's Plan.

2. Safeguards Triggered

54. **Environmental Assessment (OP/BP 4.01).** Given the essentially environmental conservation characteristic of the Project, a category B is proposed. The Project is expected to have a significantly positive environmental outcome as it will improve the conservation and management of ecologically important areas through the creation and implementation of MCPAs, and the establishment of the Marine and

Coastal Protected Areas (MCPA) System, to be comprised of new and existing PAs. The Project may support small-scale investments in the protected areas (UCs) to be created or existing protected areas (UCs) that will integrate the MCPA system, such as demarcation, possibly interpretative centers, trails, preparation of management plans, etc. Possible negative impacts from these small-scale investments are expected to be small, localized and reversible. Some of the existing protected areas (UCs) include historical sites and, although project actions as planned should not interfere with those sites, eventual additional historical and/or archeological findings may occur during project implementation. As such, project preparation included the preparation of an Environmental and Social Management Framework by the Grant Recipient, which assessed potential impacts and proposed a framework for preventing or mitigating them. The framework will also be integrated into the operating rules of the financing mechanisms envisaged as part of Component 2. Furthermore, principles of OP4.01 regarding proper consultation will be applied as part of project-financed studies for the creation of new protected areas (UCs) envisaged as part of Component 1.

55. **Forests OP/BP 4.36.** This safeguard policy is triggered as project actions for strengthening protected areas (UCs) may include existing coastal protected areas (UCs) that can contain mangroves, *restinga* or portions of Atlantic Forest and the sustainable use of non-timber forest resources can be allowed in sustainable use protected areas (UCs). All impacts on forest systems are expected to be positive. The Environmental and Social Management Framework ensures the policy is addressed appropriately through the application of a precautionary approach to the management of non-timber resources in forested areas in sustainable use protected areas (UCs), and by complying with strict protection guidance when recommended by the existing studies on Priority Areas for Conservation. The Project will not involve the conversion or degradation of forested areas.

56. **Natural Habitats OP/BP 4.04.** This policy is triggered as the Project is expected to have positive impacts on the quality of critical natural habitats. The Environmental and Social Management Framework ensures the policy is addressed appropriately by identifying the criteria for prioritizing the most biologically valuable and/or threatened areas to be protected and through the application of a precautionary approach to natural resource management in sustainable use protected areas (UCs), among other measures and guidance. Even though the Project will not finance natural resource use subprojects, the ESMF also provides guidance on ensuring that provisions for sustainable NRM are included in the management plans that will be prepared or revised for sustainable use protected areas (UCs).

57. **Physical Cultural Resources OP/ BP 4.11.** The specific management actions to be supported under the Project will be defined during project implementation as part of the update or preparation of new management plans. The impact of these actions on physical cultural resources is therefore unknown *a priori*. To address this concern the impacts and procedures for "chance findings" from specific investments under Component 1 (if applicable) were assessed within the Environmental Assessment, and the resulting Environmental and Social Management Framework includes relevant provisions to mitigate any potentially adverse impacts. Such provisions include compliance with the guidelines defined

by the National Institute for Historical and Cultural Heritage (IPHAN) regarding historical sites and/or archaeological findings.

58. **Indigenous Peoples OP/BP 4.10.** During project preparation it was determined that Indigenous peoples with the four characteristics called for in OP 4.10 are present within one of the protected areas (UCs) to be supported by the Project. A Social Assessment and Indigenous Peoples Plan (IPP) was prepared, consulted and disclosed, per the requirements of OP 4.10 prior to appraisal.

59. **Involuntary Resettlement OP/BP 4.12**. The Project will not require the involuntary taking of land. However, the creation and consolidation of protected areas (UCs) could potentially lead to restrictions in access leading to impacts on peoples' livelihoods. A Process Framework was prepared, consulted on and disclosed prior to appraisal and will ensure that affected people and communities have an opportunity to participate in the definition and design of alternative livelihood activities or other compensation/mitigation measures.

Annex 4: Operational Risk Assessment Framework (ORAF)
Brazil: Marine Protected Areas Project (P128968)
Stage: Negotiation

Project Stakeholder Risks	**Rating**	**Moderate**		
Description : There is a risk that some stakeholders will resist the creation of additional protected areas due to perceived potential economic losses, poor past experiences with land tenure regularization or resettlement.	**Risk Management :** To mitigate these risks, the creation of PAs will follow all World Bank and Government procedures related to involuntary resettlement. In addition, consultations on traditional communities# issues, resettlement, and the complete environmental assessment will be carried out. The Project will utilize a highly participatory approach during the process of MCPA creation that emphasizes consensus and community participation in MCPA management, improving MCPA design to create mosaics of protection that avoid conflict with local people while maximizing conservation benefits.			
	Resp: **Client**	**Stage:** **Implementation**	**Due Date :**	**Status:** **Not Yet Due**
Implementing Agency Risks (including fiduciary)				
Capacity	**Rating:**	**Moderate**		
Description : The Government of Brazil has been making substantial progress on the expansion of the system of protected areas. However, this expansion is often constrained by the lack of financial resources and limited staffing and implementation capacity at the Ministry of Environment (MMA) and the federal protected areas agency (ICMBio).	**Risk Management :** MMA and ICMBio's constraints will be addressed through close supervision and timely actions to improve implementation capacity and through partnerships with research institutions to help strengthening institutional capacity on MCPAs. Furthermore, Funbio's experience with World Bank procedures helps mitigates this risk.			
	Resp: **World Bank**	**Stage:** **Implementation**	**Due Date :**	**Status:** **Not Yet Due**
	Risk Management : Close supervision will be undertaken, especially in the first year of project implementation.			
	Resp: **Bank**	**Stage:** **Implementation**	**Due Date :**	**Status:** **Not Yet Due**
Governance	**Rating:**	**Moderate**		
Description: Changing government priorities throughout	**Risk Management :**			

project implementation may divert attention from project activities. Weak coordination capacity and decision making authority by the Project's coordination unit undermines project implementation.	The Project focuses on key MMA objectives around which there is a consensus within government. Nonetheless, necessary changes could be addressed in a Mid-Term Review.			
	Resp: **World Bank**	**Stage:** **Implementation**	**Due Date :**	**Status:** **Not Yet Due**
	Risk Management : The Project's coordination arrangements will be based on the existing central government agencies that control budget allocations and key decision-making.			
	Resp: **World Bank**	**Stage:** **Implementation**	**Due Date :**	**Status:** **Not Yet Due**
Project Risks				
Design	**Rating: Low**			
Description : Successful project implementation will require close collaboration between the Ministry of Environment, FUNBIO, the private sector partners, the scientific community and the stakeholders in the Project's areas. The Project includes cross-sectoral and multi- stakeholder committees (Project Coordinating Committee) to help coordinate activities And ensure a smooth integration of the marine areas into the country's national protected areas system.	**Risk Management :** The project design is building on previous experience and the lessons learned from other biodiversity protection projects and particularly from Arpa and PROBIO II projects which have similar objectives and successful results. Therefore, studies and consultations will be carried out in order to assure different stakeholders integrated participation			
	Resp: **World Bank**	**Stage:** **Implementation**	**Due Date :**	**Status:** **In Progress**
Social & Environmental	**Rating: Moderate**			
Description : Brazilian economic and population growth, especially in the coastal area cities, will increase pressure on natural resources. As a mitigation measure, the Project will be implemented in close coordination with other governmental policies and sectors and will also seek the engagement of different actors to ensure political support for the conservation actions and adequate financing for timely implementation.	**Risk Manageme** Clear responsibilities for safeguard implementation and monitoring have been defined during project preparation. In addition, close supervision will be undertaken all along project implementation.			
	Resp: World Bank	**Stage: Implementation**	**Due Date :**	**Status:**
	Resp:	**Stage:**	**Due Date :**	**Status:**
Program & Donor	**Rating:**	**Moderate**		
Description : Donor withdraw of funds or support for the Project.	**Risk Management :** The Project will continue to be developed and implemented within the context of the World Bank strategic dialogue with project donors (GEF, Petrobras) and implementing agencies (MMA, ICMBio, FUNBIO). A letter confirming co-financing from Petrobras was received and MMA is engaging in discussions with MME (Ministry of Mines and Energy) for preparation of Legal Agreement (MOU) with Petrobras. The process has been slower than expected, in part due to an			

	internal reorganization at Petrobras.			
	Resp: **World Bank**	**Stage:** **Implementation**	**Due Date :**	**Status:** **In Progress**
Delivery Monitoring & Sustainability	**Rating:**	**Moderate**		
Description : Delays in the establishment of adequate coordination and monitoring arrangements may undermine project implementation and monitoring.	**Risk Management :** Support to the definition of monitoring arrangements is already underway and additional support may be provided during project implementation if necessary.			
	Resp: **World Bank**	**Stage:** **Implementation**	**Due Date :**	**Status:** **In Progress**

Overall Risk Following Review
Implementation Risk Rating: Moderate
Comments: Protected areas based staff remains an important issue for project implementation success.

Note : Include on average no more than 3 Risk Management Measures per Risk Category

Annex 5: Implementation Support Plan

1. The Project Implementation Support Plan (ISP) describes how the World Bank, public entities and other development partners will address the risk mitigation measures (identified in the ORAF) and provide the technical advice necessary to facilitate achieving the PDO (linked to results/outcomes identified in the result framework). The ISP below also identifies the minimum requirements to meet the Bank's fiduciary obligations.

2. The Ministry of Environment (MME) in Brazil has reasonable capacity, and performed well in previous GEF-financed projects. State Governments have varying capacities and will need to be engaged and supported. FUNBIO and the Chico Mendes Institute for Biological Diversity (ICMBio) are relatively new institutions and can benefit from technical assistance. The World Bank and MME/Petrobras will provide guidance in accordance with each institution's comparative advantage.

I. Implementation Strategy - Potential Risks

3. As described in the ORAF, there are moderate risks to some stakeholders, especially because the social safeguards of Indigenous Peoples (OP/BP 4.10) and Involuntary Resettlement (OP/BP 4.12) have been triggered. Although the public perception of the Project is likely to be positive, people's livelihoods could be disrupted by the creation of new protected areas (UCs) perceptions of the Project could change. The World Bank has a strong relationship with the GOB, and the risk to grant recipient relations from the Project is moderate. The relationship between the World Bank and MME/Petrobras, the other donor, is also expected to be strengthened during implementation, and the risk to donor relations is moderate. This is first project in which the World Bank is partnering with MME/Petrobras.

4. There are some risks related to the implementation agencies. There are many organizations at different levels involved in implementation, and the coordination of these will be a challenge. Additionally, some of the institutions involved are relatively new, and are still establishing their relationships with relevant partners. This is particularly the case for MME/Petrobras, which although having a long-standing participation in national conservation dialogue, has not partnered with MMA in a project of this nature previously. However, the organizations involved are transparent and there have not been cases of fraud and corruption in the agencies involved.

5. Selecting areas to be designated as protected areas (UCs) will be technically challenging and may be controversial. Selecting areas to both achieve the maximum possible conservation benefits and to establish flagship projects for MPCA system will be challenging; if done well, this process will take time. While there are not expected to be significant safeguard risks associated with the Project, these will nevertheless need to be managed carefully, particularly those associated with implementing the Indigenous Peoples Plan and Process Framework.

II. Administrative and Fiduciary Flexibility

6. If necessary disbursement categories will be aligned with components, allowing flexibility in the use of funds to reach specific targets. The annual operating plans and annual procurement plans will allow the GOB, Petrobras and World Bank to plan the use of funds based on actual opportunities and needs.

7. The initial disbursement size and reimbursement amounts are to be determined after the Project's disbursement official has reviewed the project scope and likely disbursement profile. For procurement, appropriate streamlining and thresholds for prior and post review have been established. An audit of annual project financial statements will be conducted by an independent auditing firm and in accordance with terms of reference acceptable to the World Bank.

8. Tables 1 and 2 provide the main activities to be carried out and respective skills/resources required for the project implementation.

Table 1: Implementation Support Plan.

Time	Focus	Skills Needed	Resource Estimate	Partner Role
First twelve months	Establishing fiduciary systems in FUNBIO;	Procurement and FM Expertise	Included in project annual operating plan	FUNBIO to provide staff, space and equipments.
	Communications strategy development and implementation	Communications specialists	($60,000). $30,000 (in annual operating plan)	MMA/ UCP to identify, host
	Environmental-Social Management framework in place	Social/ indigenous peoples specialist; environmental impact evaluation experts	$30,000	MMA/ICMBio staff to monitor Indigenous Peoples Framework, overall ESMF
	Establishment of Committees and Project Council (and *ad hoc* working groups as needed)	Organization of regular high level meetings	No cost to Project	MMA leadership
	Sign inter-institutional agreements	Legal expertise and political support to engage relevant agencies and partners	No cost to Project	MMA leadership

12-48 months	Project's investments and bidding process adequately operating	Procurement and FM expertise.		FUNBIO leadership
	Carry out prioritization and identification studies for PA creation.	Environment and social specialists.		MMA/ ICMBio leadership
	Environmental-Social Management Framework in place. Establish priority investments for existing PA consolidation.	Social, indigenous peoples' specialist; environmental impact mitigation experts.		MMA/ ICMBIO leadership
	Capacity building plans implementation	Technical expertise in selected sectors.		MMA/ICMBio leadership
	Frequent update of the project M&E system.	M&E specialists.		MMA/ICMBio leadership
Project Completion	Impact evaluation and sustainability planning.	Impact evaluation experts		

Table 2: Skills Mix Required

Skills Needed	**Number of Staff Weeks**	**Number of Trips**	**Comments**
Safeguards (social, indigenous peoples, and environment; other safeguards per project documents)	Bank supervision will require 6 SWs per FY (mainly senior technical staff)	Two trips per fiscal year	
Institutional Capacity strengthening (FM, procurement, disbursement,)	14 SWs per FY (Mix of junior and senior technical staff)	One trip per fiscal year	
Technical Expertise Enhancement (MPA, M&E, Knowledge sharing, technical support)	5 SWs per FY (Mix of junior and senior technical staff)	Two trips per fiscal year	

Annex 6: Team Composition

World Bank staff and consultants who worked on the project:

Name	Title	Project Roles	Unit
Adriana Moreira	Senior Environment Specialist	TTL	LCSEN
Cristina Roriz	Consultant	Environmental Management Issues	LCSRF
Tanya Yudelman	Consultant	MPAs Specialist	LCSEN/AFTN3
Alberto Costa	Senior Social Development Specialist	Social Safeguards	LCSSO
Agnes Velloso	Consultant	Environmental Safeguards Specialist	LCSEN
Guadalupe Romero Silva	Consultant	Operations Specialist	LCSEN
Barbara Brakarz	ET Consultant	Technical Specialist	LCSEN
Frederico Rabello Costa	Senior Procurement Specialist	Procurement Specialist	LCSPT
Maria Joao Kaizeler	ET consultant	Financial Management Specialist	LCSFM
Patricia Miranda	Senior Counsel	Legal Specialist	LEGOP
Fernando Gomes Brandao	ET Temporary	Team Assistant	LCSTR
Michele Martins	Program Assistant	Team Assistant	LCC5C

Annex 7: Economic and Financial Analysis

I. Introduction

1. The Project's development objective is to support the expansion of a globally significant, representative and effective Marine and Coastal Protected Area (MCPAs) System in Brazil and identify mechanisms for its financial sustainability.

2. By so doing, the Project will contribute to the conservation of trans-boundary ocean life, including migrating species, through the protection of important areas where these species feed, rest and/or breed along the Brazilian Coast. Additionally, protected ecosystems will maintain their capacity to produce food, maintain good water quality, and increase their capacity to recover from disturbances, bringing far-reaching social and economic benefits.

3. Among other criteria for site selection, the potential to offset climate change and generate revenues through the carbon market (Blue Carbon), establishment of community or individual access privileges (such as fish quotas) within MCPA and surrounding areas, or payment for ecosystem services mechanisms could also be considered.

4. The Project will directly benefit local populations living inside and around MCPAs, which depend upon the associated resources, including local fishers, fishing communities - including some indigenous communities - and the tourism industry. Other stakeholders involved with and likely to benefit more indirectly from the Project are: communities living within and around the protected areas (UCs), people involved with the fishing industry (artisanal and commercial), and the tourism sector. It is estimated that fishery activities account for 800,000 jobs in Brazil, involving about 4 million people directly and indirectly.

5. This Project will be funded by a US$18.2 million GEF Grant and US$99.65 million in co-financing (cash and in kind). The partnership among the GEF, the Government of Brazil, MME/Petrobras and potentially other private sector players is an innovative and exciting approach to coastal zone management and mainstreaming of biodiversity in Brazil.

II. The impact of MCPAs on Fishery and Tourism Sectors

6. In Brazil, 43 million inhabitants live in the coastal zone, concentrating 18% of the national population, and 16 of the country's 28 metropolitan regions (MMA, 2008). Coastal economic activities account for roughly 70% of the Brazilian GDP (MMA, 2007). Coastal zones can be considered one of the most environmentally threatened regions in the country. Coastal zones are the main geographic area for economic growth for many industries, including the tourism industry and the oil and gas industry, which engages in significant off-shore drilling. As well, the waters off the Brazilian coast have traditionally been rich with fisheries. The creation of protected areas (UCs) is considered an important measure to protect maintain productivity, especially of fish stocks.

III. Incremental Benefits of MCPAs

7. The creation and consolidation of MCPAs provide tangible goals and outputs that will help to conserve globally significant biodiversity and mitigate climate change within marine coastal zones. Also, the improvement of mechanisms to ensure the long-term sustainability of MCPAs will provide the Brazilian government with the opportunity and means to actively involve multiple partners in common conservation goals. Other key gains enabled by the GEF support would include:

   - Partnerships to leverage GEF financing to further ensure the generation of global benefits, including the private sector;
   - Enhancement of the decentralization process through participation in MCPA management by the state and municipal governments, with a view for long-term MCPA accountability at the local level;
   - Coordination mechanisms to mainstream lessons and actions (Project Coordination Unit); and financial resources from the government of Brazil and from multilateral, bilateral, and private donors, to support PAs in Marine Coastal Zone. These mechanisms enable the progressive decrease of GEF support;
   - An integrated approach for PA management that responds to social, economic, and political realities and a regional long-term vision of the system of MCPA;
   - Definition of long-term management needs, management plans, and agreements to share MCPA management responsibility with private sector organizations; and
   - Pilot projects based on the sustainable use of biodiversity to provide economic incentives for conservation.

8. While difficult to value, these incremental benefits are the key to ensuring the sustainability of conservation efforts and tangible benefits over the long term.

IV. Incremental Benefits of the GEF Alternative

9. GEF financing is necessary to support the Brazilian Government in protecting globally significant biodiversity through the protection of key sites in the coastal and marine ecosystem. Given the complexity involved in the management of marine ecosystems, without GEF's support Brazil would likely continue to prioritize and focus on the management of terrestrial protected areas (UCs), not making a concerted effort to invest resources in conservation actions for protected areas (UCs) in the Brazilian Coastal and Marine Region. Conservation of globally important and highly endangered marine species would continue to be a second-order priority. GEF financing, along with the sizeable co-financing secured for the Project, will provide the conditions to develop the necessary institutional capabilities, set up the legal and policy frameworks for the sustainable management of the country's marine ecosystems, and develop mechanisms for the participatory management.

10. Regarding long-term social and financial sustainability, the already existing financial instruments, such as tourism entrance fees and environmental compensation, might develop in a few MCPAs, but additional income generating activities (based on international experiences) would likely not take place without the Project. Without the Project, the budget forecast to be allocated for MCPAs conservation by the GOB (the baseline scenario) is about US$8.0 million over the life of Project. The $18.2m GEF investment would leverage an additional US$90 million from other donors over the same period.

11. The GEF incremental support would assist the GOB in effectively expanding the representation of MPAs, identifying sustainable financing options for these areas, and involving new actors at the national and sub-national levels. While this might happen over the next 10 years in Brazil without the Project, GEF financing would accelerate the implementation of urgently needed actions to save at-risk coastal and marine resources.

    The support from the GEF will also catalyze an important contribution from MME/Petrobras, both in cash and in kind. The in kind contribution will be very significant, as such an investment in biodiversity information gathering for PA management is seldom made.

12. The following matrix summarizes the incremental costs and benefits, detailing the incremental costs for achieving global environmental benefits. The Baseline Scenario would generate limited short-term gains in marine and coastal biodiversity conservation, while the GEF Alternative would constitute a concerted effort to mainstream conservation actions and resources for MCPAs, focusing on long-term social and financial sustainability.

Cost Category	US$ Million	Domestic Benefit	Global Benefit
Component 1: Creation and Implementation of Marine and Coastal protected areas (UCs)			
Baseline	US$5.6 million	Consultation and planning are likely to be limited by scarce resources restraining the creation/implementation of MCPAs.	Global benefit in the long term, yet the creation of the protected areas (UCs) is not guaranteed.
With GEF Alternative	US$62.93 million	At least 175,000 km^2 of Marine Area brought under biodiversity protection (equivalent to 5% of Brazil's marine territory). At least 9,300 km^2 of marine and coastal area brought under enhanced biodiversity protection. Protected Area Management Plans prepared or updated	Protection of globally significant biodiversity.
Incremental	**US$ 57.29 million**		
Component 2: Design of financial mechanisms to support the MCPAs system			
Baseline	US$1.09 million	Limited resources for PA creation and consolidation.	The consolidation of MCPAs would be achieved

		Limited and uncertain resources for PA maintenance and investments.	at a slow rate and over a considerably long period of time. Reduced impact of PAs on the Marine and Coastal Zone conservation.
With GEF Alternative	US$3.59 million	Improve the financial sustainability of the MCPAs created and consolidated through: (i) identification, design, and preparation of at least two financial mechanisms able to contribute to the long-term sustainability of MCPAs; (ii) at least 4 technical studies completed; (iii) 100% of the MCPA classification system defined and costed.	Establishment of a solid foundation for the effective financial sustainability and management of PAs.
Incremental	**US$2.50 million**		
Component 3: Monitoring and Evaluation (GEF: US$2.50 million, co-financing: US$39.00 million)			
Baseline	US$1.68 million	Limited resources for PA monitoring.	MCPA consolidation and sustainability indicators are not tracked in a satisfactory manner.
With GEF Alternative	US$43.18 million	Improved Marine Biodiversity Monitoring System developed and under implementation in project sites. Managerial Effectiveness Monitoring systems adopted and implemented in all project sites	Streamlined protection of globally important biodiversity
Incremental	**US$41.50 million**		
Component 4: Project Coordination and Management (GEF: US$0.91 million, co-financing: US$7.24 million):			
Baseline	US$7.24 million	Lack of coordination of government, private sector and civil society initiatives.	Reduced impact of investments and initiatives carried out.
With GEF Alternative	US$8.15 million	Management systems (including fiduciary systems) in place and operational, producing satisfactory annual and quarterly reports. Communication strategy prepared and implemented	Efficient execution of the project Enhanced knowledge sharing among local, national and international partners.
Incremental	US$0.91 million		
Total Baseline: US$9.66 million			
Total GEF Alternative: US$117.86 million			
Total Incremental Costs: US$108.20 million, of which US$18.20 million is being requested from the GEF			

Annex 8: Protected Areas (UCs) Supported by the Project

I. Background

1. In accordance with its commitments to the Convention on Biological Diversity (CBD) and the National Program of Biological Diversity (PRONABIO), in the late 1990s Brazil´s Ministry of Environment conducted an extensive consultation process, with the goal of identifying areas of critical importance for the conservation and sustainable use of Brazil´s biological diversity. Workshops independently conducted on each Brazilian biome aimed to evaluate the biological richness of the ecosystem and the socioeconomic conditions of the region, and to contribute towards the elaboration of a comprehensive biodiversity conservation strategy for each biome, identifying priority areas and recommendations for action. Two broad criteria were used to guide the establishment of these priorities: the biological importance of the areas and the urgency of the actions required for their conservation. The results were presented in 2000.

2. In that same year Law 9,985, establishing the National Protected Areas System (*Sistema Nacional de Unidades de Conservação* - SNUC), was enacted. The SNUC systematizes environmental conservation in Brazil, clearly defining the rules and responsibilities for the creation, implementation and management of protected areas (UCs), and provides mechanisms for property ownership. It establishes 12 Protected Area categories, divided into two groups: (a) five "strict protection" categories, and (b) seven "sustainable resource use" categories. The former have biological conservation as the core objective, and include Ecological Stations, Biological Reserves, National Parks, Natural Monuments, and Wildlife Reserves. The latter, while also having biodiversity protection as a goal, also allow for variable levels of sustainable use and include Environmental Protection Areas, Areas of Relevant Ecological Interest, National Forests, Extractive Reserves, Fauna Reserves, Sustainable Development Reserves, and the Private Natural Heritage Reserves. The corresponding IUCN category for each of these is presented in Table 4 below. No specific distinction is made between terrestrial and marine protected areas (UCs), as the definition of a protected area under Article 2 of the SNUC, includes both terrestrial and aquatic areas within Brazil's jurisdiction, hence the categories can be equally applied to both environments.

Table 1: Equivalence between SNUC and IUCN Protected Areas Categories

SNUC PA Category System		IUCN PA Category System	
Category	**Definition**	**Category**	**Definition**
Strict Protection Areas			
Ecological Station	Set aside for the conservation of nature and scientific research. Can be visited only for educational purposes.	**Ia. Strict Nature Reserve**	Strictly protected areas (UCs) set aside to protect biodiversity and also possibly geological/geomorphical features, where human visitation, use and impacts are strictly controlled and limited to ensure protection of the conservation values.
Biological Reserve	Destined for conservation of biological diversity, where ecosystem recovery measures are taken to regain the ecosystem's natural balance. Visitation for educational purposes only.		

National Park	Set aside for the preservation of natural ecosystems and sites of scenic beauty. This category allows for recreational, educational and environmental activities, as well as scientific research.	**II. National Park**	Large natural or near natural areas set aside to protect large-scale ecological processes, with the complement of species and ecosystems characteristic of the area. Allow for scientific, educational, recreational, and visitor opportunities.
Natural Monument	Destined for the conservation of rare, natural sites of great scenic beauty, allowing visitation activities. May consist of private areas, provided activities are compatible with the PA objectives.	**III. Natural Monument or Feature**	Set aside to protect a specific natural monument, which can be a landform, sea mount, submarine cavern, or geological feature.
Wildlife Refuge	Set aside for protection of natural environments, with the objective to ensure conditions for the existence and reproduction of species and local flora and fauna. Allows visitation activities.		
Sustainable Use Areas			
Environmental Protection Area	Land with natural, aesthetic and cultural attributes important to the quality of life and well-being of human populations. The objective is to protect biodiversity, ensure orderly human occupation and sustainable use of natural resources.	**V. Protected Landscape/ Seascape**	Area where interaction of people and nature over time has produced distinct charcter with significant ecological, biological, cultural and scenic value.
Area of Relevant Ecological Interest	Land that aim to preserve natural ecosystems of regional or local importance. Generally, it is an area of small extent, with little or none human occupation and unique natural features.	**IV. Habitat/ Species Management Area**	Aim to protect particular species or habitats and management reflects this priority. Many will need regular, active interventions to address the requirements of particular species or to maintain habitats.
Private Natural Patrimony Reserve	Privately owned area with aim to conserve biological diversity. Allows for scientific research and recreational and educational visitation. Created by owner initiative.		
National Forest	Area with forest cover with native species predomination, aiming at the diversified and sustainable use of forest resources and scientific research. The permanence of traditional populations is permitted.	**VI. Protected Area with Sustainable Use of Natural Resources**	Conserves ecosystems and habitats together with associated cultural values and traditional natural resource management systems. They are generally large, with most of the area in a natural condition.
Extractive Reserve	Used by traditional populations with activities based on extraction, subsistence agriculture and creation of small animals, ensuring the sustainable use of natural resources.		
Fauna Reserve	Area with populations of native animals, aquatic or terretrial. Suitable for technical-scientific studies on the sustainable economic management of wildlife resources.		
Sustainable Development Reserve	Inhabited by traditional populations that rely on sustainable systems of natural resource exploration. Allows public visitation and scientific research.		

Note: Ib. Wilderness Area (large unmodified or slightly modified areas, retaining their natural character and influence without permanent or significant human habitation, which are protected and managed so as to preserve their natural condition) is not considered to have an equivalent, in which areas are considered Category Ia within the SNUC system.

3. In 2005, discussions on a revised methodology for the review of the priority areas were led by the Ministry of Environment, with technical workshops for each biome being held in 2006. The revised priority areas, based on the Systematic Conservation Planning methodology, were published by the Ministry of Environment as Ordinance Nº 09 on January 23,2007.

4. In addition to the above mentioned public policies governing the identification, establishment and management of protected areas (UCs) in Brazil, Decree 5,758 dated April 13, 2006 instituted the National Strategic Plan for Protected Areas (*Plano Estratégico Nacional de Áreas Protegidas* – PNAP). The PNAP sets out principles, guidelines and goals to contribute towards the reduction of the rate of biodiversity loss in Brazil, through the consolidation of a comprehensive system of protected areas (UCs), ecologically representative and effectively managed, integrated into wider landscapes and seascapes

5. The priority areas, the SNUC and the PNAP constitute fundamental, landscape-based public policies for biodiversity conservation in Brazil. Area-based management approaches and tools are widely promoted by the CBD to address a multitude of threats to biodiversity conservation and sustainable use. These tools include marine protected areas (UCs) and networks, prior environmental impact assessments, improved regulation of sectoral activities, and broader ecosystem-based marine spatial planning. In addition, tools such as the establishment of no take zones are also used in Brazil as complementary area-based management strategiesAt the 9th Conference of the Parties (COP) of the CBD in 2008 in Bonn, Germany, the Parties to the Convention adopted a set of seven scientific criteria (Table 2) to identify ecologically or biologically significant areas (EBSAs) in the global marine realm (see CBD COP 9 Decision IX/20). Compiled at a CBD Expert Workshop, which took place in the Azores in 2007, the criteria identify specific ocean areas that require enhanced protection, thus helping to achieve a variety of conservation and management objectives.

Table 2: Scientific criteria to identify ecologically or biologically significant and/or vulnerable marine areas in need of protection.

Criteria	Definition	Rationale
Uniqueness or rarity	Area contains either (i) unique ("the only one of its kind"), rare (occurs only in few locations) or endemic species, populations or communities, and/or (ii) unique, rare or distinct, habitats or ecosystems; and/or (iii) unique or unusual geomorphological or oceanographic features	• Irreplaceable • Loss would mean the probable permanent disappearance of diversity or a feature, or reduction of the diversity at any level
Special importance for life-history stages of species	Areas that are required for a population to survive and thrive	• Various biotic and abiotic conditions coupled with species-specific physiological constraints and preferences tend to make some parts of marine regions more suitable to particular life-stages and functions than other parts.
Importance for threatened,	Area containing habitat for the survival and recovery of endangered, threatened,	• To ensure the restoration and recovery of such species and

Criteria	Definition	Rationale
endangered or declining species and/or habitats	declining species or area with significant assemblages of such species	habitats
Vulnerability, fragility, sensitivity, or slow recovery	Areas that contain a relatively high proportion of sensitive habitats, biotopes or species that are functionally fragile (highly susceptible to degradation or depletion by human activity or by natural events) or with slow recovery	• The criteria indicate the degree of risk that will be incurred if human activities or natural events in the area or component cannot be managed effectively, or are pursued at an unsustainable rate.
Biological productivity	Area containing species, populations or communities with comparatively higher natural biological productivity	• Important role in fuelling ecosystems and increasing the growth rates of organisms and their capacity for reproduction.
Biological diversity	Area contains comparatively higher diversity of ecosystems, habitats, communities, or species, or has higher genetic diversity	• Important for evolution and maintaining the resilience of marine species and ecosystems.
Naturalness	Area with a comparatively higher degree of naturalness as a result of the lack of or low level of human-induced disturbance or degradation	• To protect areas with near natural structure, processes and functions • To maintain these areas as reference sites • To safeguard and enhance ecosystem resilience

6. A series of regional workshops were then convened either by the Executive Secretary of the CBD or by competent intergovernmental regional organizations to facilitate the identification and description of EBSAs through application of the scientific criteria from Table 2 and other relevant compatible and complementary nationally and inter-governmentally agreed scientific criteria, and to prepare reports setting out details of areas for consideration and endorsement in a transparent manner by the Conference of the Parties to the Convention.

7. In preparation for the regional CBD workshop, which encompassed Brazil, the Ministry of the Environment convened a preparatory meeting in Brasília on February 7-8, 2012, with the presence of 25 specialists who identified an initial proposal for eight EBSAs along the Brazilian coast. In addition a questionnaire was completed by more than 50 specialists, with the results presented at the CBD Wider Caribbean and Western Mid-Atlantic Regional Workshop to Facilitate the Description of EBSAs held in Recife, Brazil, from February 28 to March 2, 2012. Of the eight EBSAs originally proposed for Brazil, a final total of seven was agreed at the Recife workshop and submitted for consideration at the 16th meeting of the CBD Subsidiary Body on Scientific, Technical and Technological Advice, held in Montreal, April 30 through May 5, 2012. These seven ESBAS are presented below in Table 2. At the Montreal workshop, the Southern Brazilian Sea EBSA was dropped resulting in a final recommendation for six EBSAs for Brazil. These will be presented for endorsement at the CBD COP 11, to be held in Hyderabad, India, in October 2012.

Table 3: Description of areas meeting marine EBSA Criteria in Wider Caribbean and Western Mid-Atlantic region (Brazil only).

Location of Areas and Brief Description	C1	C2	C3	C4	C5	C6	C7
1. Amazonian-Orinoco Influence Zone • Location: N 14.517, E: -45.144, S: -0.565, W: -60.981 (The proposed area encompasses the productivity flow from Northern Brazil, French Guiana, Suriname, Guyana and Eastern Trinidad.) • The Orinoco River drains an area of 1.1 x 10 6 km^2 within Venezuela (70%) and Colombia (30%). Together with the Amazon, these two major rivers play an extremely important role in transporting dissolved and particulate material from terrestrial areas to the coasts and open ocean. Their impact is evidenced by the overall extremely high productivity associated with the marine area extending from northern Brazil, to French Guiana, Suriname, Guyana, all the way to Trinidad and Tobago. Associated with this high productivity are high levels of biodiversity inclusive of endangered, threatened and endemic species of turtles, mammals, invertebrates, fishes and birds.	H	H	H	H	H	H	H
2. Parcel do Manuel Luiz e Banco do Álvaro • Location: Covers two main areas including Parcel do Manuel Luiz (69 km^2 centered on 00°50'S, 044°15'W) and Banco do Álvaro (30 km^2 centered on 00°17.5'S, 044°49.5'W) • Parcel do Manuel Luiz is the most northern coral communities known in Brazil. In some areas milleporids predominate on the reef walls, followed by the octocoral *Phyllogorgia dilatata* (endemic to Brazil). There are records of 50% of the Brazilian hard corals species in the area, six of which were not previously reported in the Northeastern adjacent coast. The fire coral *Millepora laboreli* is endemic to the area and has been recently included as EN in the Brazilian List of Endangered Species. The presence and great abundance of Caribbean reef organisms, which do not occur along the eastern coast of South America, provide additional evidence that these reefs may be one of the main faunal stepping stones between the Caribbean and the Brazilian coast. The region represents an important area of feeding and reproduction of elasmobranchs.	M	M	H	H	-	H	H
3. Banks chain of northern Brazil and Fernando de Noronha • Location: Covers the North Brazilian Chain (1°S to 4°S / 37°W to 39°W) and Fernando de Noronha Chain (3°S to 5°S / 32°W to 38°W). • The North Brazil Current interacts with the submarine topography generating upwellings that promote productivity. Chains are inserted in oligotrophic environment and Fernando de Noronha and Rocas Atoll are seen as a "hotspot" due to the presence of coral reef formations, high biodiversity and endemism. The area is a spawning site and / or feeding site for turtles, elasmobranchs, reef fish and pelagic fish. The area is a feeding site for breeding seabirds at Fernando de Noronha and covers part of the most important seabird migration corridor in the Atlantic, both sites which qualify as Bird Life Important Bird Area (IBA) for both threatened species and congregations. Some birds, elasmobranchs and turtles species listed in the IUCN red list as threatened occur in the area. Sharks, reef fishes and lobsters are target for fisheries carried out in the region. Fishing exploitation is a traditional activity in the area. Sea turtles are also subject to incidental catch by pelagic longline and ghost nets. The Rocas Atoll has the highest rate of endemism in the region and Fernando de Noronha has the highest species richness	H	H	H	M	M	H	H

Location of Areas and Brief Description	C1	C2	C3	C4	C5	C6	C7
when compared to other Brazilian oceanic islands. Fernando de Noronha and Rocas Atoll fauna display great similarity which is attributed to the presence of shallow oceanic banks that function as steps tones in the area. Larvae of coastal species suggest connectivity with the continental slope area.							
4. Northeastern Brazil Shelf-Edge Zone • Location: The northeastern shelf-edge zone extends along the Brazilian outer shelf and upper slope, from depths of 40m to 2000m and between parallels 3°S to 16°S, from south Bahia up to the Ceará states, where the Brazilian continental shelf is narrow and breaks abruptly at depths between 50 to 80m. • The continental shelf-edge zone is a marine ecotone where different components of the demersal, benthic and benthopelagic communities of the continental shelf, upper slope and adjacent pelagic biota coexist in a narrow strip along the continental margin. Biogenic reef formations associated to outer shelf channels, ravines and deeper canyons represent important traditional fishing grounds. The northeastern Brazilian shelf-edge zone contains distinct habitats and unusual geomorphological features such as shelf-edge reefs that represent a last refuge for some rare or endemic reef fishes distributed across the continental margin, including threatened (IUCN) commercial species of the snapper-grouper complex, currently depleted at the Brazilian EEZ jurisdiction. The shelf-edge harbor critical habitats for the life cycle of many sea turtles, whales, sharks and reef fish species, including migratory corridors and fish spawning aggregation sites. The area covers part of the most important seabird migration corridor in the Atlantic, a site which qualifies as a Birdlife Important Bird Area (IBA) for both threatened species and congregations. This region corresponds to a portion of the breeding ground of humpback whales (*Megaptera novaeangliae*) off the northeastern coast of Brazil.	M	H	H	H	L	H	M
5. Atlantic Equatorial Fracture Zone and high productivity system • Location: The proposed area extends approximately 1.9 m km^2 across the Equatorial Atlantic Ocean from the western border of the Guinea Basin (10°W) in the east to the northeast limit of Brazilian continental margin (32°W) in the west. • The proposed area combines both benthic and pelagic habitats of the Equatorial Atlantic, as defined by the seafloor topography, surface and deep water circulation patterns and the equatorial primary productivity regimes. It can also be characterized by particular pelagic and benthic biodiversity patterns.	H	H	M	M	H	H	M
6. Abrolhos Bank and Vitória-Trindade Chain • Location: The Abrolhos Region is an enlargement of the Brazilian continental shelf located in the eastern shore of Brazil, in the southern of Bahia and northern of Espírito Santo States. • Abrolhos Bank harbors the highest marine biodiversity in the South Atlantic, the largest coral reefs in Brazil, and relatively large populations of several endemic and endangered marine species. It presents a mosaic of different habitats, like mangroves, seagrasses meadows, rhodolith beds, submerged and emergent reefs, and a group of small volcanic islands. Abrolhos also has unique biological formations, such as the large mushroom shaped reef formations – "chapeirões", and unique geological formations, such as the "buracas" – distinctive depressions in the shelf plain (up to 20 meters deep and 70 meters large). The region is an important breeding and/or fishing site for several flagship species such as humpback whales, sea turtles and sea	H	H	H	H	M	H	M

Location of Areas and Brief Description	C1	C2	C3	C4	C5	C6	C7
birds. • The Vitória Trindade Chain, located on the central coast of Brazil, is composed of seven seamounts and an island complex (Archipelago of Trinidad and Martin Vaz). The substrate of the mountains and ocean islands is composed of living reefs of coralline algae, on which is also observed the presence of different species of corals, sponges and algae. The mountains and islands have a fauna of reef fish that is still preserved, with a significant biomass and abundance of species, harboring many sharks and spawning aggregation phenomena of important fishery resources. Moreover, the reef fish fauna includes at least 11 endemic species. Also, this area is the only breeding site for three endemic populations of seabirds, the Trindade petrel (*Pterodroma arminjoniana*), the Atlantic lesser frigatebird (*Fregata minor nicolli*), and the Atlantic greater frigatebird (*Fregata ariel trinitiatis*).							
7. Southern Brazilian Sea • Location: Extending from Chuí (Brazil-Uruguay boundary) (ca. 34°S) to the proximity of the Santa Marta Grande Cape (Santa Catarina State) (ca. 29°S). The western and eastern limits are the shoreline (ca. 53°W) and the 4000 m isobath (ca. 39°W), respectively. • Interactions between the Subtropical Convergence, continental runoff from the La Plata River (Argentina/Uruguay) and Patos Lagoon, and topographic features favor high biological productivity, and make this region an important reproduction, nursery and feeding grounds for pelagic and demersal fish stocks and a crucial feeding ground for threatened cetacean, seabirds and marine turtles species.	M	H	H	M	H	M	L

Key: EBSA criteria: C1 – Uniqueness or rarity; C2 – Special importance for life-history stages of species; C3 – Importance for threatened, endangered or declining species and/or habitats; C4 – Vulnerability, fragility, sensitivity, or slow recovery; C5 – Biological productivity; C6 – Biological diversity; C7 – Naturalness.
Ranking of EBSA criteria relevance: H – High; M – Medium; L – Low; - – No information.

II. Protected areas (UCs) to be supported under the Project.

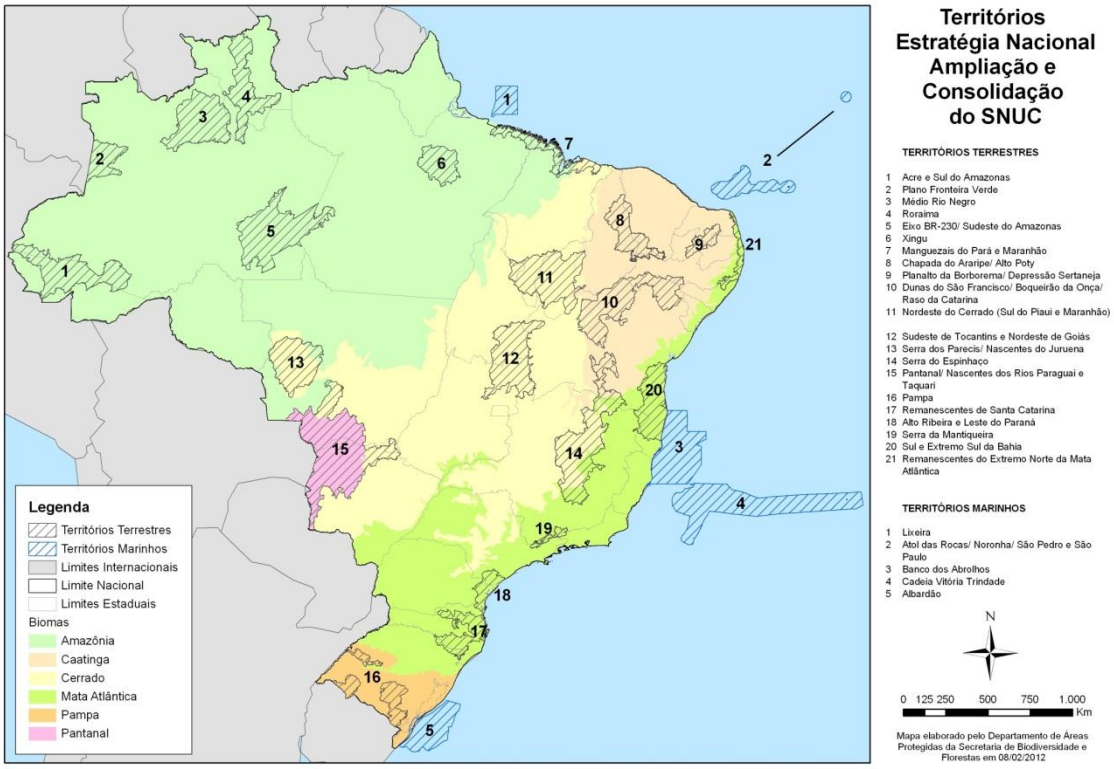
8. The Project seeks to generate long-lasting benefits to the global, national and local environment through the expansion of marine and coastal areas under effective protection. This will be achieved through the creation of new protected areas (UCs), and strengthening the implementation of selected existing protected areas (UCs). The Project is expected to be the first phase of a long term initiative to strengthen the conservation and sustainable use of the country's marine and coastal biodiversity and natural resources. Given the financial resources available and the magnitude of the marine and coastal challenge, a transparent scientific and consultative process was adopted to select the areas to be supported under the project during this initial phase. The identification and selection process (described below) resulted in the establishment of a shortlist of potential new protected areas (UCs) as well as existing protected areas (UCs) eligible for support under the project. During project implementation these areas will undergo further assessment and analysis to establish the specific project sites and actions to be financed by the project.

III. Selection of territories for the creation of new protected areas (UCs)

9. To ensure the representation of Brazilian ecosystems within the SNUC, maintain biodiversity and its ecosystem services, promote direct and indirect use of natural resources within protected areas (UCs) and insert the SNUC on the political socioeconomic development agenda sought by Brazil, the Chico Mendes Institute for Biodiversity Conservation (*Instituto Chico Mendes de Conservação da Biodiversidade* - ICMBio) has prepared a National Strategy for Conservation and Sustainable Use of Brazilian Biodiversity: Expansion and Consolidation of the National System of Conservation Units 2012-2020 (*Estratégia Nacional para Conservação e Uso Sustentável da Biodiversidade Brasileira: Ampliação e Consolidação do Sistema Nacional de Unidades de Conservação da Natureza* 2012-2020). The Strategy is structured in six thematic areas, one of which seeks to expand the SNUC and integrate it with wider landscapes and seascapes. This involves working towards the achievement of Target 11 of the CBD´s Strategic Plan for Biodiversity 2011-2020, aimed at enhancing protection of terrestrial and marine ecosystems through the establishment of protected areas (UCs) and their effective management.

10. To implement the expansion the SNUC and integrate it with wider landscapes and seascapes, territories of importance for each of the biomes (Amazon, *Caatinga*, *Cerrado*, Atlantic Forest, *Pantana*l, Pampa and the marine area) were selected. The selection process was based on the map of Priority Areas for the Conservation, Sustainable Use and Benefit Sharing of Brazilian Biological Diversity (MMA, 2007), the occurrence of endemism and conservation gaps of endangered species, the presence of remnants of native vegetation, social demands for the creation of protected areas (UCs), and the sustainable use of resources (ICMBio 2012). A total of five marine territories were identified (Figure 1).

Figure 1: Territories identified by the National Strategy for Conservation and Sustainable Use of Brazilian Biodiversity (ICMBio, 2012).



11. For the purposes of the Project, a further selection process was conducted to identify the specific sites within these five marine territories to be supported under the project. A workshop held in April 2012 in Brasília brought together the Working Group of technical specialists that attended the Marine Protected Areas Workshop convened by FUNBIO in March 2009 in Paraty, and who were responsible for the initial elaboration of the project, as well as representatives from the MME, ICMBio, IBAMA, MME/Petrobras, and FUNBIO. During the workshop, the participants confirmed the pertinence of the five marine territories and identified the following five additional criteria for the selection of marine protected areas (UCs) to be created under the Project:

- Consideration of biogeographic limits (Large Marine Ecosystems and MEOWs) [17]

[17] MEOW is a biogeographic classification of the world's coasts and shelves. It is the first ever comprehensive marine classification system with clearly defined boundaries and definitions and was developed to closely link to existing regional systems. MEOW represents broad-scale patterns of species and communities in the ocean, and was designed as a tool for planning conservation across a range of scales and assessing conservation efforts and gaps worldwide. For methodological details see Spalding, M.D; Fox, H.E.; Allen, G.R.; Davidson, N.; Ferdaña, Z.A.; Finlayson, M.; Halpern, B.S.; Jorge, M.A.; Lombana, A.; Lourie, S.A.; Martin, K.D.; Mcmanus, E.; Molnar, J.; Recchia, C.A. & Robertson, J. (2007) Marine Ecoregions of the World: A Bioregionalization of Coastal and Shelf Areas. *BioScience* 57(7): 573-583.

- Areas listed as a Priority Area for the Conservation, Sustainable Use and Benefit Sharing of Brazilian Biological Diversity according to MMA´s Ordinance no. 09 from 23 January 2007
- Areas located within one of the 7 proposed EBSAs[18];
- Political opportunity; and
- Threats.

IV. Selection of existing protected areas (UCs) to be supported by the Project

12. The inclusion of a set of existing protected areas (UCs) to receive support from the Project aims to strengthen the system of MCPAs, by ensuring that protected areas (UCs) representing distinct habitats and ecosystems of global importance (Marine Ecoregions of the World - MEOW) are consolidated.

13. At the specialist workshop held in Brasília on April 2012 participants defined criteria for selection of existing areas as follows:

- Areas listed as a Priority Area for the Conservation, Sustainable Use and Benefit Sharing of Brazilian Biological Diversity according to MMA´s Ordinance no. 09 from 23 January 2007;
- Areas located within one of the 7 proposed EBSAs[18];
- Sites of recognized international importance (Ramsar Sites, World Heritage Sites); and
- Areas of importance for the maintenance of ecosystem services.

14. In addition, to ensure that project resources are most effectively and efficiently applied, areas for which one or more of the following criteria apply were excluded:

- Protected areas (UCs) receiving GEF support through other projects (e.g. UNDP´s Effective Conservation and Sustainable Use of Mangrove Ecosystems in Brazil; IBRD´s Amazon Region Protected Areas Program - ARPA); and
- Coastal protected areas (UCs) that are exclusively terrestrial.

15. Based on the inclusion and exclusion criteria outlined above, Table 3 presents the shortlist of existing protected areas (UCs) eligible for support under the Project.

Table 4: Existing conservation units selected for inclusion in the Project.

Conservation Unit	Jurisdiction	Location	Area (ha)
Parque Estadual Marinho do Parcel de Manuel Luís	State	Maranhão	45,131
Reserva Biológica do Atol das Rocas	Federal	Rio Grande do Norte	35,186

[18] The selection of project sites was based upon the seven proposed EBSAs submitted to the 16th CBD Subsidiary Body on Scientific, Technical and Technological Advice held in Montreal, 30 May-5 April, 2012.

Parque Nacional Marinho de Fernando de Noronha	Federal	Pernambuco	10,928
Área de Proteção Ambiental de Fernando de Noronha	Federal	Pernambuco	884
Área de Proteção Ambiental da Costa dos Corais	Federal	Pernambuco	404,280
Área de Proteção Ambiental da Plataforma Continental do Litoral Norte	State	Bahia	352,764
Reserva Extrativista de Canavieiras	Federal	Bahia	100,726
Parque Nacional Marinho dos Abrolhos	Federal	Bahia	87,942
Reserva Extrativista de Cassurubá	Federal	Bahia	100,768
Reserva Extrativista Marinha do Corumbau	Federal	Bahia	89,597
Área de Proteção Ambiental Estadual da Ponta da Baleia / Abrolhos	State	Bahia	345,543
Parque Municipal do Recife de Fora	Municipal	Bahia	1,750
Área de Proteção Ambiental da Baleia Franca	Federal	Santa Catarina	154,866
Refúgio de Vida Silvestre da Ilha dos Lobos	Federal	Rio Grande do Sul	142
Parque Nacional da Lagoa do Peixe	Federal	Rio Grande do Sul	36,722
Total			**1,767,229**

16. During project implementation a further exercise will be completed to prioritize the specific sites on this short list and identify the actions to be supported by the Project. Criteria for this prioritization exercise will include *inter alia*:

- Flagship – areas exhibiting greater probability of success, taking into account their respective needs;
- Areas of global importance in terms of threatened species;
- Areas exhibiting opportunities for long term sustainability;
- Areas exhibiting potential synergies/ impact within a "system" (including mosaics and no take areas); and
- Areas in which management bodies commit qualified staff (requirement).

Annex 9: Petrobras's Corporate Responsibility and Environmental Commitment

Petrobras is a state-run, publicly traded company controlled by the Brazilian government by means of the Ministry of Mines and Energy. It is the third largest energy company in the world, with a presence in 30 countries on all continents, and the oil and gas industry leader in Brazil. Its operations range from exploration and production, refining, oil and natural gas trade and transportation, petrochemicals, oil product distribution, electricity, biofuels, to other sources of renewable energy.

I. Corporate Responsibility

Environmental responsibility is deeply embedded in Petrobras' mission, with a focus on ecoefficiency. The company aims not only to produce, refine and distribute oil within the strictest safety standards, but to reduce impact on the environment through rational water and energy use, and minimizing the waste and emissions at all units. Nearly all of the company's units in Brazil and abroad are ISO 14001 (relative to the environment) and BS 8800 (relative to safety and health) certified. Petrobras has been listed for seven years in a row on the Dow Jones Sustainability Index, and its management practices are aligned to the ten principles of the United Nations Global Compact.

The Social Responsibility Policy has been a core corporate function of Petrobras' Strategic Plan since the policy's creation in 2007. The policy is based on permanent dialogue, reduction of risks, avoidance of negative social impacts, and generation of positive social results through the company's relationship with the communities that neighbor its operations. The Petrobras Development and Citizenship Program had invested R$1.2 billion (US$610 million) by 2012 on projects that contribute to reducing poverty and social inequality and encourage income generation and work opportunities through professional qualification.

Petrobras seeks to actively contribute to society and the surrounding communities where it operates. It considers an ethical, transparent relationship with society to be essential to the company's strategy of promoting development in regions where it operates. Before beginning an activity, the company assesses the possible operation's impacts on the surrounding communities and identify both mitigation and compensation actions for the negative impacts, as well as multiplication efforts for the positive ones to provide social, environmental, and economic benefits to these areas. The company seeks to generate income and jobs for people living near the operations, and endeavors to strengthen relationships with local suppliers, promoting professional qualification initiatives and efforts to insert small and medium enterprises into the industry's production network. Furthermore, it supports programs and projects conceived to promote citizenship and foster the creation of Local Agenda 21s.

II. The Petrobras Environmental Program

Since its creation, in 2003, the Petrobras Environmental Program has worked in partnership with NGOs, state and federal governments and foundations, sponsoring hundreds of projects and reaching dozens of basins and ecosystems in six different Brazilian biomes: The Amazon, Atlantic Forest, Caatinga, the Cerrado, Pampa and the Pantanal. Its actions have involved 4 million people directly, and it has more than 820 established partnerships, delivered over 4,300 courses to the local population, and studied more than 5,000 native species. Between 2008 and late 2012, the Petrobras Environmental Program was expected to invest a total of R$500 million (US$ 255

million) in environmental conservation initiatives across all Brazilian biomes.

Integrated Strategic Planning for Marine Biodiversity Projects

Petrobras has also long been a supporter of marine biodiversity conservation projects, such as the Humpback Whale, Coastal Lagoons, and Spinner Dolphin Projects. Since 2007, they have been implementing the Integrated Strategic Planning approach for marine biodiversity projects, which foresees multi-year reviews and aims to share knowledge, optimize efforts and enhance results to promote marine conservation in Brazil. In March 2010, the company began a review process for this planning. The results expected for the new stage include the expansion of the scientific knowledge about the species, habitat protection and project sustainability.

Other examples of environmental projects being implemented by Petrobras include the Arraial Sustainable Network, which has developed a model of co-management of the Cape Arraial Marine Extractive Reserve, in response to the need for novel methods of selection and resilience for sustainable management of such a protected area under the National System of Conservation Units (SNUC). The results from this initiative include, *inter alia*, increased biodiversity with an abundance of flora, fauna and their habitats, thus promoting fishing as a sustainable management activity practiced by 2,000 local professional fishermen.

The Tamar Project is yet another example. Petrobras is the official sponsor of the project since 1983, for which the objective is the conservation of sea turtles along the Brazilian coast. In collaboration with IBAMA, the Brazilian Institute of Environment and Renewable Natural Resources , the Tamar Project has 22 stations under protection over a thousand miles of seacoast. Since its conception, the project has protected and released to the sea more than 9 million juveniles, carrying out research and actions in order to stave off the threat of extinction. The project has become a global reference for the conservation of sea turtles. Over 1,300 people participate directly in the project, including fishermen and residents of surrounding villages. Besides generating jobs for coastal communities, the Tamar Project develops an intense program of environmental education and social action, promoting the improvement in the quality of life of the population.

Petrobras participated in the 10th Conference of the Parties on Biological Diversity (COP-10), held in Nagoya (Japan). During the event, the company presented its initiatives and launched the document titled "Biodiversity - Petrobras Initiatives," which lists 21 projects Petrobras has implemented. The publication called Biodiversity: Brazilian Business Cases, sponsored by Petrobras and detailing 27 cases of 17 Brazilian companies that include defending biodiversity in their businesses, was also launched during the COP-10.

III. Integrated Environmental Management System

Petrobras seeks to minimize the impacts of its operations and products on the environment. This concern is featured both in the company's Business Plan and in its Corporate Strategy. Managing potential environmental risks inherent to the oil and gas industry −such as the consumption of natural resources, air emissions, impacts on biodiversity, and pollution caused by waste − requires integrated actions in the environmental area and involves all Petrobras System areas, units, and subsidiaries,

from the strategic to the operational level. The company uses an Integrated Environmental Management System, known as SEEH (Safety, Environment, Energy Efficiency and Health), to ascertain, prevent and mitigate impacts derived from its operations and products. An Environment Committee, linked to the Board of Directors, a Business Committee, and four Integration Committees, ensures sound environmental governance. To manage risks and potential impacts, Petrobras also invests in new environmentally sound technologies, energy sources, in increasing process efficiency, and in ecosystem preservation and restoration. Environmental management is also integrated in the operational safety, energy efficiency, and health management approaches given the synergy between all of these issues

IV. Health, Safety, and Environment Guidelines

The company's Health, Safety, and Environment Guidelines include, among others, requirements for:

(i) *Regional and Corporate Contingency Plans* as well as a *Contingency Plan for each unit*, to predict emergency scenarios and respond promptly and efficiently to reduce impacts. The Contingency Plans require that each unit's contingency plans are assessed, revised, and updated, adjustment of contingency plans to new identifiable risks, and consideration of social, economic, and environmental impacts resulting from possible accidents. The plans also comprise of *Environmental Defense Centers (EDCs)* that complement the existing local Contingency Plans at the terminals, refineries and other units to ensure maximum protection and flexibility in an emergency.

(ii) *Accidents and Incidents Analyses*, which foresees that accidents and incidents caused by corporate activities shall be reviewed, investigated, and documented to prevent recurrence and minimize their effects, including mandatory and immediate notification of accidents and prompt response and registration of accidents on respective performance indicators; and

(iii) *Risk Assessment and Management* procedures, which require that risks inherent to company activities be identified, assessed and managed to prevent accidents and/or minimize their effects, including adoption of measures to systematically identify and assess the frequency and results of undesirable events, implementation of mechanisms for prioritizing identified risks, and incorporation of risk assessment processes in all stages of projects and products.

From 2000 to 2011, Petrobras invested R$43.5 billion (US$ 23 billion) in Safety, Environment and Health. In 2010, Petrobras' total environmental protection costs and expenditures, including environmental expenditures related to production/operations, degraded area restoration, and pollution control equipment and systems surpassed R$2.4 billion, about R$457 million more than in 2009.

V. Accident Prevention

Recognized as the world's largest deep water operator, Petrobras is a reference in excellence in this area, which is based on modern technical and technological

knowledge, always having safety as its main goal. The company follows strict operating procedures, complying with both domestic and international safety rules. It undertakes risk analyses for offshore drilling projects, and the equipment that is used − both in the Pre-Salt area and in other sites off the Brazilian coast − meet the requirements of the industry's most advanced safety standards, incorporating the Brazilian and international experience accumulated over the years in well drilling operations. All offshore drilling rigs are equipped with detection systems that ensure immediate and automatic well closure in case of an emergency, keeping the situation from spinning out of control. The company's spill prevention network counts with:

- 30 large vessels to collect oil;
- 130 support vessels;
- 150,000 meters of containment barriers;
- 120,000 meters of absorption barriers;
- 200 oil collectors;
- 200,000 liters of chemical dispersants;
- Ten Environmental Defense Centers and 13 outposts;
- Emergency Response Centers, distributed in over 20 cities in Brazil.

Annex 10: Lessons Learned and Reflected in the Project Design

1. Lessons have been drawn from a number of projects (Table 1), financed by the World Bank and other institutions, with the goal of establishing protected areas (UCs) and effective, sustainable management systems.

2. **Avoiding the establishment of paper parks.** While the importance of MPAs to achieving biodiversity conservation goals is widely recognised, recent studies have highlighted the failure in practice of many on-going and past efforts, including in Brazil[19]. These failures result from a combination of factors, including flawed initial design; weak management and/or enforcement; failure to consider potential knock-on impacts arising from resource user displacement; and neglecting to address external threats from degradation of surrounding ecosystems. These reviews also note that ineffective MPAs further undermine biodiversity conservation by creating an illusion of protection. Lack of planning in the design of MPAs has also compromised the connectivity and conservation of the diverse ecosystems[20]. The Project seeks to address these challenges with respect to both the new and existing supported MPCAs through *inter alia:* (a) promoting an Integrated Marine and Coastal Area Management (IMCAM)[21] approach; (b) adopting a mosaic design, which integrates different protection categories and management strategies; (c) including enforcement feasibility and likelihood of conflicts in prioritization criteria; (d) emphasizing the importance of long-term sustainable financing; (e) establishing a biological monitoring system based on an adaptive management approach; (f) involving local, state and national stakeholders early in the process; and (g) establishing a multi-stakeholder Project Council to address cross-sectorial issues.

3. **Securing sustainable financing for marine protected areas (UCs) requires drawing upon multiple sources.** Lessons learned through ARPA, which reflect Protected Area finance experience globally, clearly demonstrate that financial sustainability cannot be achieved solely through reliance on endowment funds. Instead, it will necessarily depend on identifying multiple funding sources and mechanisms such as PES, REDD+, blue carbon, and environmental compensation mechanisms. This is all the more true in light of the global economic crisis, which has constrained philanthropic and government resources, resulting in a redirection of limited resources towards the poorest countries and social issues. Hence, the

[19] Agardy, T.; Notarbartolo di Sciara, G.; Christie, P. (2011). Mind the gap: Addressing the shortcomings of marine protected areas through large scale marine spatial planning. *Marine Policy 35 (2011) 226-232.* (http://www.sciencedirect.com/science/article/pii/S0308597X10001740*)*
Cressey, D. (2011). Ocean Conservation: Uncertain sanctuary. *Nature: 480 (2011) 166–167.* (http://www.nature.com/news/ocean-conservation-uncertain-sanctuary-1.9568)
World Bank. (2006). Scaling up marine Management. The role of marine protected areas. *Report 36635-GLB.* (http://siteresources.worldbank.org/ENVIRONMENT/Resources/Scaling_Up_MPA_ESW-May2011.pdf)

[20] MMA (2010) Panorama da conservação dos ecossistemas costeiros e marinhos no Brasil. Ministério do Meio Ambiente, Secretaria de Biodiversidade e Florestas, Gerência de Biodiversidade Aquática e Recursos Pesqueiros, Brasília. 148 p.

[21] The CBD defines IMCAM as "a participative decision-making process to prevent, control or mitigate the impact of human activities on coastal and marine environments and to contribute to the restoration of degraded coastal areas". This approach was initially adopted in Brazil in 1988 for the first National Coastal Management Plan. Despite this plan, little progress has been made in the integrated management of the country's coastal areas.

Project explicitly includes a component dedicated to the identification, exploration, and design of innovative financing mechanisms for marine protected areas (UCs).

4. **Ensuring efficient and effective fiduciary arrangements.** Experience with innovative implementation arrangements under previous environmental projects has demonstrated the effectiveness of outsourcing project financial management and procurement to FUNBIO, an agency with dedicated capacity in this area, as opposed to trying to create this capacity on a project-by-project basis within the relevant existing government department. To this end, the Project is designed such that FUNBIO will receive and manage GEF grant funds on behalf of the government. This arrangement will be governed by both a World Bank-FUNBIO Grant Agreement, and specific implementation agreements between FUNBIO, MMA and the other key executing agencies (such as ICMBio and MME/Petrobras). The agreements will be developed along similar lines to those successfully piloted under the ARPA projects, and will define each institution's responsibilities and obligations under the Project.

5. **Ensuring effective coordination between multiple executing agencies.** Prior protected area project experience in Brazil underscores the delicate balance between ensuring a high level of stakeholder participation and designing implementation arrangements able to respond efficiently and in a timely manner to project needs. To this end, the Project's implementation arrangements foresee a small and agile decision-making and executive body, complemented by a broader, inclusive advisory body responsible for providing technical guidance, coordination and conflict resolution support to aid project implementation. The former would comprise representatives from the five executing agencies, while the later will bring together representatives from key stakeholder groups.