

Document of
The World Bank

Report No: ICR00003411

IMPLEMENTATION COMPLETION AND RESULTS REPORT
(TF-91515)
ON A
GRANT FROM THE GLOBAL ENVIRONMENT FACILITY TRUST FUND
IN THE AMOUNT OF US\$22 MILLION
TO THE
FEDERATIVE REPUBLIC OF BRAZIL
AND
THE FUNDO BRASILEIRO PARA A BIODIVERSIDADE (FUNBIO)
FOR A
NATIONAL BIODIVERSITY MAINSTREAMING AND INSTITUTIONAL
CONSOLIDATION PROJECT

June 15, 2015

Environment and Natural Resources Global Practice
Brazil Country Management Unit
LCR

CURRENCY EQUIVALENTS

(Exchange Rate Effective June 16, 2015)

Currency Unit = Brazilian Real (BRL)

US\$ 1.00 = BRL 3.12

FISCAL YEAR

January 1 - December 31

ABBREVIATIONS AND ACRONYMS

ABC	<i>Agência Brasileira de Cooperação</i> (Brazilian Cooperation Agency)
ABS	Access and Benefit Sharing
ANA	<i>Agência Nacional de Águas</i> (National Water Agency)
ANP	<i>Agência Nacional de Petróleo</i> (National Petroleum Agency)
APA	Environmental Protection Area
APL	Local Productive Arrangement
AquaBio	Integrated Management of Aquatic Resources in the Amazon Project
ARPA	Amazon Region Protected Areas Program
BGBD	Below-ground Biodiversity
BHL	Biodiversity Heritage Library
BNDES	<i>Banco Nacional de Desenvolvimento Econômico e Social</i> (National Economic and Social Development Bank)
BRA/97/G31	<i>Projeto Estratégia Nacional de Biodiversidade</i> (National Strategy on Biological Diversity Project)
CAF	<i>Corporação Andina de Fomento</i> (Andean Development Corporation)
CAIXA	<i>Caixa Econômica Federal</i> (Federal Government Bank)
CAPES	<i>Coordenação de Aperfeiçoamento de Pessoal de Nível Superior</i> (Coordination for Academic Improvement)
CPS	Country Partnership Strategy
CBD	Convention on Biological Diversity
CEBDS	<i>Conselho Empresarial Brasileiro para o Desenvolvimento Sustentável</i> (Brazilian Business Council for Sustainable Development)
CEO	Chief Executive Officer
CGEE	Center for the Management of Strategic Studies
CGEN	<i>Conselho de Gestão do Patrimônio Genético</i> (National Genetic Resources Council)
CGIAR	Consultative Group on International Agricultural Research
CGU	<i>Controladoria Geral da União</i> (General Accountant Office)
CHM	Clearing House Mechanism
CIEVS	<i>Centro de Informações Estratégicas e Resposta em Vigilância em</i>

	<i>Saúde</i> (Health Surveillance Strategic Information and Response Center)
CIRM	<i>Comissão Interministerial para os Recursos do Mar</i> (Interministerial Commission for Marine Resources)
CISS	<i>Centro de Informação em Saúde Silvestre</i> (Wildlife Health Information Center)
CNBS	<i>Conselho Nacional de Biosegurança</i> (National Council on Biosafety)
CNCFlora	<i>Centro Nacional de Conservação da Flora</i> (Flora Conservation National Center)
CNDRS	<i>Conselho Nacional de Desenvolvimento Rural Sustentável</i> (National Rural Sustainable Development Council)
CNPq	<i>Conselho Nacional de Desenvolvimento Científico e Tecnológico</i> (National Scientific and Technical Research Council)
COBRAMAB	Man and the Biosphere Program
CONABIO	<i>Comissão Nacional de Biodiversidade</i> (National Commission on Biodiversity)
CONAFLO	<i>Comissão Nacional de Florestas</i> (Coordinating Commission of the National Forests Program)
CONAMA	<i>Conselho Nacional do Meio Ambiente</i> (National Council on the Environment)
COP	Conference of the Parties of the Convention on Biological Diversity
CTNBIO	<i>Comissão Técnica Nacional de Biossegurança</i> (National Technical Commission for Biosafety)
CU	Conservation Units
EA	Environmental Assessment
EMBRAPA	<i>Empresa Brasileira de Pesquisa Agropecuária</i> (Brazilian Agricultural Research Corporation)
EMP	Environmental Management Plan
EPBRS	European Biodiversity Research Strategy Platform
EAs	Executing Agencies
FAO	United Nations Food and Agricultural Organization
FAP	<i>Fundo de Áreas Protegidas</i> (Protected Areas Fund)
FapUNIFESP	<i>Fundação de Apoio à Universidade Federal de São Paulo</i> (Support Foundation of the Federal University of São Paulo)
FEMA	<i>Fundação Estadual do Meio Ambiente</i> (State Environmental Fund)
FGV	<i>Fundação Getúlio Vargas</i> (Getulio Vargas Foundation)
FINEP	<i>Financiadora de Estudos e Projetos</i> (Research and Project Financing Agency)
FIOCRUZ	<i>Fundação Oswaldo Cruz</i> (Oswaldo Cruz Foundation)
FMR	Financial Monitoring Report
FNMA	<i>Fundo Nacional do Meio Ambiente</i> (National Fund for the Environment)

FUNBIO	<i>Fundo Brasileiro para a Biodiversidade</i> (Brazilian Biodiversity Fund)
FUNATURA	<i>Fundação Pró Natureza</i> (Pro-Nature Foundation)
GBIF	Global Biodiversity Information Facility
GBO	Global Biodiversity Outlook
GCP	Global Canopy Programme
GDP	Gross Domestic Product
GEF	Global Environment Facility
GEO	Global Environment Objectives
GIS	<i>Grupo de Interés Científico</i> (Group of Scientific Interest)
GMOs	Genetically Modified Organisms
GOB	Government of Brazil
HCV	High Conservation Value areas
IAs	Implementing Agencies
IABIN	Inter-American Biodiversity Information Network
IBAMA	<i>Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis</i> (Brazilian Institute for the Environment and Renewable Natural Resources)
IBGE	<i>Instituto Brasileiro de Geografia e Estatística</i> (Brazilian Institute for Geography and Statistics)
IBRD	International Bank for Reconstruction and Development
ICMBio	Instituto Chico Mendes de Conservação da Biodiversidade
ICR	Implementation Completion and Results Report
IFB	<i>Instituto Francês de Biodiversidade</i> (French Biodiversity Institute)
IFC	International Finance Corporation
IFR	Interim Financial Report
IMO	International Maritime Organization
IPEA	<i>Instituto de Pesquisa Econômica Aplicada</i> (Institute for Applied Economic Research)
ISDS	Integrated Safeguards Data Sheet
ISPN	<i>Instituto Sociedade População e Natureza</i> (Society Population and Nature Institute)
IUCN	International Union for the Conservation of Nature
JBRJ	<i>Jardim Botânico do Rio de Janeiro</i> (Rio de Janeiro Botanical Garden)
MA	Millennium Ecosystem Assessment
MAPA	<i>Ministério da Agricultura, Pecuária e Abastecimento</i> (Ministry of Agriculture, Livestock and Supply)
MCTI	<i>Ministério da Ciência e Tecnologia</i> (Ministry of Science and Technology)
MDA	<i>Ministério do Desenvolvimento Agrário</i> (Ministry of Agrarian Development)
MDG	Millennium Development Goal
M&E	Monitoring and Evaluation
MMA	<i>Ministério do Meio Ambiente</i> (Ministry of the Environment)

MONITORE	National Program for Integrated Environmental Monitoring
MS	<i>Ministério da Saúde</i> (Ministry of Health)
MTR	Mid-Term Review
NBSAP	National Biodiversity Strategy and Action Plan
NBMIC	National Biodiversity Mainstreaming and Institutional Consolidation Project
NGOs	Non-Governmental Organizations
OAS	Organization of American States
OM	Operational Manual
OP	Operational Program
OS	Social Organization
OSCIP	Civil Society Organization of Public Interest
PAD	Project Appraisal Document
PainelBio	Brazilian Virtual Institute for Biodiversity
PAN-Bio	<i>Diretrizes e Prioridades do Plano de Ação para Implementação da Política Nacional da Biodiversidade</i> (Guidelines and Priorities for the Action Plan for the Implementation of the National Biodiversity Policy)
PCU	Project Coordination Unit
PDO	Project Development Objective
PIBS	<i>Programa Institucional Biodiversidade e Saúde</i> (Institutional Program on Biodiversity and Health)
PICUS	<i>Projetos Integrados de Conservação e Uso Sustentável</i> (Integrated Conservation and Sustainable Use Projects)
PMP	Pest Management Plan
PLEC	People, Land Management and Environmental Change
PMR	Project Management Report
PNB	<i>Política Nacional de Biodiversidade</i> (National Biodiversity Policy)
PNF	<i>Política Nacional de Florestas</i> (National Forests Program)
PNGC	<i>Plano Nacional de Gerenciamento Costeiro</i> (National Plan for Coastal Management)
PNSA	National Environmental Sanitation Policy
POA	Annual Operating Plan
PortalBio	Brazilian Biodiversity Portal of the Clearing House Mechanism
PPA	<i>Plano Pluri-Anual</i> (Multi-year Government Plan)
PPBio	<i>Programa de Pesquisa em Biodiversidade</i> (National Program of Biodiversity Research)
PPP	<i>Programa de Pequenos Projetos</i> (GEF Small Grants Program for the Cerrado)
PPG7	<i>Programa Piloto para a Proteção das Florestas Tropicais do Brasil</i> (Pilot Programme for the Protection of Tropical Forests in Brazil)
PROBEM	<i>Programa Brasileiro de Ecologia Molecular para Uso Sustentado da Biodiversidade</i> (Brazilian Program of Molecular Ecology)

	[Bioprospecting] for the Sustainable Use of Biodiversity in the Amazon)
PROBIO	<i>Projeto de Conservação e Utilização Sustentável da Diversidade Biológica Brasileira</i> (National Biodiversity Project)
PRONABIO	<i>Programa Nacional da Diversidade Biológica</i> (National Biodiversity Program)
PRONAF	<i>Programa Nacional de Fortalecimento da Agricultura Familiar</i> (National Program for Strengthening Family Agriculture)
PROSEGE	Social Action Program in Sanitation
RBJB	<i>Rede Brasileira de Jardins Botânicos</i> (Brazilian Botanical Gardens Network)
ReLSS	<i>Rede de Laboratórios em Saúde Silvestre</i> (Laboratory Network of Wildlife Health)
REMA	Reference stations and transects for environmental monitoring
RePSS	<i>Rede Participativa em Saúde Silvestre</i> (Participative Network of Wildlife Health, RePSS)
REVIZEE	<i>Programa de Avaliação do Potencial de Recursos Vivos na Zona Econômica Exclusiva</i>
RF	Results Framework
RPPN	Private Reserves of Natural Patrimony
SBF	<i>Secretaria de Biodiversidade e Florestas do Ministério do Meio Ambiente</i> (Secretariat of Biodiversity and Forests of the Ministry of Environment)
SBSTTA	Subsidiary Body on Scientific, TEchnical and Technological Advice of the Convention on Biological Diversity
SciELO	Scientific Electronic Library Online
SEAIN	<i>Secretaria de Assuntos Internacionais do Ministério do Planejamento</i> (Secretariat of International Affairs of the Ministry of Planning)
SEBRAE	<i>Serviço Brasileiro de Apoio às Micro e Pequenas Empresas</i> (Brazilian Support Service for Micro and Small Enterprises)
SIAFI	<i>Sistema Integrado de Administração Financeira</i> (Integrated System for Financial Management)
SIBBr	<i>Sistema de Informação Sobre a Biodiversidade Brasileira</i> (Brazilian Biodiversity Information System)
SigOrgWeb	<i>Sistema de Informações Gerenciais da Produção Orgânica</i> (Organic Production Management Information System)
SISBIO	<i>Sistema de Autorização e Informação em Biodiversidade</i> (Biodiversity Authorization and Information System)
SISNAMA	<i>Sistema Nacional do Meio Ambiente</i> (National Environmental System)
SISS-Geo	<i>Sistema de Informação em Saúde Silvestre</i> (Silvestre Health Information System)
SNPC	National Service for the Protection of Crops
SNUC	<i>Sistema Nacional de Unidades de Conservação</i> (Conservation Units National System)

SOE	Statement of Expenditure
SQA	<i>Secretaría de Qualidade Ambiental do Ministério do Meio Ambiente</i> (Secretariat for Environmental Quality in Human Settlements of the Ministry of Environment)
STAP	Scientific and Technical Advisory Panel
TCU	<i>Tribunal de Contas da União</i> (Federal Court of Account)
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Education, Science and Culture Organization
UNOPS	United Nations Office for Project Services

Senior Global Practice Director: Paula Caballero

Practice Manager: Emilia Battaglini (acting)

Project Team Leader: Adriana Moreira

ICR Team Leader: Adriana Moreira

Brazil
National Biodiversity Mainstreaming and Institutional Consolidation Project

CONTENTS

Data Sheet

A. Basic Information.....	ix
B. Key Dates.....	ix
C. Ratings Summary.....	ix
D. Sector and Theme Codes.....	x
E. Bank Staff.....	x
F. Results Framework Analysis.....	xi
G. Ratings of Project Performance in ISRs.....	xvi
H. Restructuring.....	xvi
I. Disbursement Graph.....	xvii
1. Project Context, Development Objectives and Design.....	1
2. Key Factors Affecting Implementation and Outcomes	7
3. Assessment of Outcomes	13
4. Assessment of Risk to Development Outcome.....	22
5. Assessment of Bank and Borrower Performance	22
6. Lessons Learned	25
7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners	256
Annex 1. Project Costs and Financing.....	288
Annex 2. Outputs by Component and Project Results Framework	299
Annex 3. Economic and Financial Analysis	411
Annex 4. Bank Lending and Implementation Support/Supervision Processes	433
Annex 5. Beneficiary Survey Results	455
Annex 6. Stakeholder Workshop Report and Results.....	466
Annex 7. Summary of Borrower's ICR and/or Comments on Draft ICR.....	488
Annex 8. Comments of Cofinanciers and Other Partners/Stakeholders	499
Annex 9. List of Supporting Documents	50
Annex 10. Project Institutional Arrangements	51
Annex 11. 2010 Convention on Biological Diversity Targets, and National Biodiversity Targets 2011-2020, Indicators	53
Annex 12. Map	63

DATASHEET

A. Basic Information			
Country:	Brazil	Project Name:	National Biodiversity Mainstreaming and Institutional Consolidation Project
Project ID:	P094715	L/C/TF Number(s):	TF-91515
ICR Date:	06/18/2015	ICR Type:	Core ICR
Lending Instrument:	SIL	Borrower:	GOV. OF BRAZIL
Original Total Commitment:	USD 22.00M	Disbursed Amount:	USD 22.00M
Revised Amount:	USD 22.00M		
Environmental Category: B		Global Focal Area: B	
Implementing Agencies:			
Cofinanciers and Other External Partners:			

B. Key Dates				
Process	Date	Process	Original Date	Revised / Actual Date(s)
Concept Review:	03/21/2005	Effectiveness:	09/12/2008	09/11/2008
Appraisal:	03/19/2007	Restructuring(s):		07/30/2012 11/25/2013 11/13/2014
Approval:	01/31/2008	Mid-term Review:	07/15/2010	04/06/2011
		Closing:	12/31/2013	12/31/2014

C. Ratings Summary	
C.1 Performance Rating by ICR	
Outcomes:	Moderately Satisfactory
Risk to Global Environment Outcome	Low or Negligible
Bank Performance:	Satisfactory
Borrower Performance:	Moderately Satisfactory

C.2 Detailed Ratings of Bank and Borrower Performance			
Bank	Ratings	Borrower	Ratings
Quality at Entry:	Moderately	Government:	Satisfactory

	Satisfactory		
Quality of Supervision:	Satisfactory	Implementing Agency/Agencies:	Moderately Satisfactory
Overall Bank Performance:	Moderately Satisfactory	Overall Borrower Performance:	Moderately Satisfactory

C.3 Quality at Entry and Implementation Performance Indicators

Implementation Performance	Indicators	QAG Assessments (if any)	Rating
Potential Problem Project at any time (Yes/No):	No	Quality at Entry (QEA):	None
Problem Project at any time (Yes/No):	No	Quality of Supervision (QSA):	None
GEO rating before Closing/Inactive status	Satisfactory		

D. Sector and Theme Codes

	Original	Actual
Sector Code (as % of total Bank financing)		
Central government administration	30	30
Forestry	25	25
General agriculture, fishing and forestry sector	45	45

Theme Code (as % of total Bank financing)		
Biodiversity	50	50
Environmental policies and institutions	50	50

E. Bank Staff

Positions	At ICR	At Approval
Vice President:	Jorge Familiar Calderon	Pamela Cox
Country Director:	Deborah L. Wetzel	John Briscoe
Practice Manager/Manager:	Emilia Battaglini	Laura E. Tlaiye
Project Team Leader:	Adriana Goncalves Moreira	Adriana Goncalves Moreira
ICR Team Leader:	Adriana Goncalves Moreira	
ICR Primary Author:	Adriana Goncalves Moreira	
	Suzana Nagele de Campos Abbott	
	Guadalupe Romero Silva	

F. Results Framework Analysis

Global Environment Objectives (GEO) and Key Indicators(as approved)

Promote mainstreaming of biodiversity at national level in key public and private sector planning strategies and practices; as well as consolidate and strengthen institutional capacity to produce and disseminate biodiversity information and concepts.

Revised Global Environment Objectives (as approved by original approving authority) and Key Indicators and reasons/justifications

N/A

(a) GEO Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	At least three government sectors apply biodiversity criteria and guidelines in their plans and policies by end of project.			
Value (quantitative or Qualitative)	1	3		3
Date achieved	12/28/2007	09/11/2008		12/31/2014
Comments (incl. % achievement)	Target achieved. The sectors include Agriculture (National Agroecology Policy), Health (criteria for screening wildlife associated diseases), and energy (National Energy Plan, criteria for hydro-generation). Partially achieved for fisheries.			
Indicator 2 :	Tangible progress is made toward achieving at least 16 of the 50 quantitative national targets already established for Brazil as part of the CBD targets for 2010.			
Value (quantitative or Qualitative)	0	100%		131%
Date achieved	12/28/2007	09/11/2008		12/31/2014
Comments (incl. % achievement)	Target surpassed. Progress was made in 21 of the 50 CBD national quantitative targets, including control of exotic species, strengthening biodiversity monitoring, and evaluation of threatened species.			
Indicator 3 :	At least 1 M ha of selected landscapes under integrated conservation and sustainable use of biodiversity established in Biodiversity Priority Areas with significant involvement by the private sector			
Value (quantitative or	0	1,000,000 ha		5,376,898 ha

Qualitative)				
Date achieved	12/28/2007	09/11/2008		12/31/2014
Comments (incl. % achievement)	Target surpassed. Sustainable and no-tillage agriculture (3, 790,000 ha), organic production (1,158,906 ha), sustainable extractivism (423,202 ha).			
Indicator 4 :	New areas outside protected areas managed as biodiversity-friendly (ha)			
Value (quantitative or Qualitative)	0	1,000,000 ha		4,800,000 ha
Date achieved	12/28/2007	09/11/2008		12/31/2014
Comments (incl. % achievement)	Target surpassed. Organic agriculture areas and private sector sub-projects in five productive landscapes at Atlantic Forest, Amazon, and Pampa regions.			

(b) Intermediate Outcome Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	At least 6 policy initiatives for mainstreaming biodiversity designed and adopted in selected areas through consultative process with government and private sector institutions.			
Value (quantitative or Qualitative)	1	6		6
Date achieved	12/28/2007	09/11/2008		12/31/2014
Comments (incl. % achievement)	Target Achieved. Six policy initiatives in Energy (Tapajos Basin Plan), Forestry (sustainable extractivism), Agroecology & Organic Agriculture National Policy, Health (Wildlife) and Fisheries (sustainable harvesting) discussed and adopted.			
Indicator 2 :	At least 12 policy subprojects designed and implemented in selected landscape units in partnership with private sector, promoting biodiversity conservation and sustainable use.			
Value (quantitative or Qualitative)	0	12		48
Date achieved	12/28/2007	09/11/2008		12/31/2014
Comments (incl. % achievement)	Target surpassed, 48 sub-projects implemented in partnership with public and private sectors in four landscapes (Amazon and Atlantic Forests,			

achievement)	Pampa and Pantanal).			
Indicator 3 :	Opportunities Fund capitalized with at least \$17 million by Y06.			
Value (quantitative or Qualitative)	0	US\$17 million		US\$18 million
Date achieved	12/28/2007	09/11/2008		12/31/2014
Comments (incl. % achievement)	Target surpassed. Capitalization of the Opportunities Fund was achieved with through establishment of partnerships with private sector.			
Indicator 4 :	At least 5 productive landscape units totaling at least 1 million ha adopting criteria associated with biodiversity conservation in their areas of operation.			
Value (quantitative or Qualitative)	0	1,000,000 ha		4,800,000 ha
Date achieved	12/28/2007	09/11/2008		12/31/2014
Comments (incl. % achievement)	Target surpassed. Private-sector subprojects covering an estimated 4.8 million ha of productive landscapes in the Amazon (Alcoa), Atlantic Forest (Votorantin, AdecoAgro), and Pampa regions (Association of Beef Producers).			
Indicator 5 :	At least 5 private sector organizations at a national or sub-national level adopting criteria linked with biodiversity conservation and sustainable use.			
Value (quantitative or Qualitative)	0	5		10
Date achieved	12/28/2007	09/11/2008		12/31/2014
Comments (incl. % achievement)	Target surpassed. Organizations include: Alcoa, Votorantin, AdecoAgro, SESC, LIFE, CNI, Natura, BP Biocombustíveis, and OGX.			
Indicator 6 :	At least 10 biodiversity friendly business plans prepared and disseminated through the Knowledge Base Facility			
Value (quantitative or Qualitative)	0	10		3
Date achieved	12/28/2007	09/11/2008		12/31/2014
Comments (incl. % achievement)	Target partially achieved. Ten sustainable business plans prepared, 5 under implementation and 3 disseminated through the Knowledge Base.			
Indicator 7 :	Component 2 monitoring strategy fully implemented by end of Y01, and			

	where necessary, implementation strategy improved.			
Value (quantitative or Qualitative)	none	100%		100%
Date achieved	12/28/2007	09/11/2008		11/30/2011
Comments (incl. % achievement)	Target achieved. Monitoring strategy for component 2 implemented by Y02 and adjustments made in subsequent years.			
Indicator 8 :	Component 2 results and lessons learned disseminated through national and local-level workshops, publications (by Y06), and internet portal (by Y01).			
Value (quantitative or Qualitative)	none	100%		100%
Date achieved	12/28/2007	09/11/2008		12/31/2014
Comments (incl. % achievement)	Target achieved with delays. Internet site is operational. SIG Web implemented."Guide to good practices for review of High Conservation Value Areas" and other publications.			
Indicator 9 :	Brazilian Virtual Institute for Biodiversity established and operational, coordinating activities of at least 10 partner institutions and producing information relevant to policymaking			
Value (quantitative or Qualitative)	none	100%		100%
Date achieved	12/28/2007	09/11/2008		12/31/2014
Comments (incl. % achievement)	Target achieved. Virtual institute established as "PortalBio", with partnership with 15 institutions producing relevant information on biodiversity.			
Indicator 10 :	Center for Biodiversity Monitoring and Forecasting created, fully staffed, and functioning, generating data for at least 10 key biodiversity indicators based on CBD 2010 Targets.			
Value (quantitative or Qualitative)	none	100%		Partially achieved
Date achieved	12/28/2007	09/11/2008		12/31/2014
Comments (incl. % achievement)	Virtual center established and generating data for 14 indicators. Management information system for organic production also launched (SigOrgWeb).			
Indicator 11 :	10 Thematic Specialized Centers for Conservation of Fauna and Flora created and consolidated at national level, with capacity for generating products for biodiversity conservation and sustainable use.			

Value (quantitative or Qualitative)	3	10		10
Date achieved	12/28/2007	09/11/2008		12/31/2014
Comments (incl. % achievement)	Target achieved. Six new fauna centers created and consolidated (Aquatic Mammals, Primates, Carnivores, Caves, Reptiles and Amphibians, Fishing Resources); One National Center for plant species (CNCF Flora) created and being consolidated.			
Indicator 12 :	Action plans for at least 50% of the national endangered species lists (Fauna 2003/2004, Flora 1992) designed and 25% under implementation.			
Value (quantitative or Qualitative)	4 action plans	80%. Action Plans for at least 50% Fauna and flora and 25% under implementation.		55 actions plans (52 for animal and 3 for plant species)
Date achieved	12/28/2007	09/11/2008		12/31/2014
Comments (incl. % achievement)	Target partially achieved. 52 action plans for fauna completed (66%) and 3 action plans for flora (16%).			
Indicator 13 :	At least 3,000 technical specialists from partner institutions trained in biodiversity themes in order to incorporate biodiversity in sectoral work.			
Value (quantitative or Qualitative)	0	3,000		7,973
Date achieved	12/28/2007	09/11/2008		12/31/2014
Comments (incl. % achievement)	Target surpassed. Almost 8,000 technical specialists trained in Biodiversity themes by different partner institutions.			
Indicator 14 :	Project monitoring strategy under satisfactory implementation at the end of Y01, and where necessary, implementation strategy improved.			
Value (quantitative or Qualitative)	none	100%		100%
Date achieved	12/28/2007	09/11/2008		
Comments (incl. % achievement)	Target achieved. Monitoring strategy implemented. Indicator data and Progress Reports revised and presented every six months. Completed by field monitoring of beneficiaries and sub-project activities.			
Indicator 15 :	Project results and lessons learned disseminated through national and local-level workshops, publications (by Y06), media campaigns (by Y03), and an internet portal (by Y01).			
Value	none	100%		80%

(quantitative or Qualitative)				
Date achieved	12/28/2007	09/11/2008		12/31/2014
Comments (incl. % achievement)	Target partially achieved. National media campaigns for agroecology and organic agriculture. Technical and stakeholder workshops conducted. Lessons learned and results Publication scheduled for November 2015.			

G. Ratings of Project Performance in ISRs

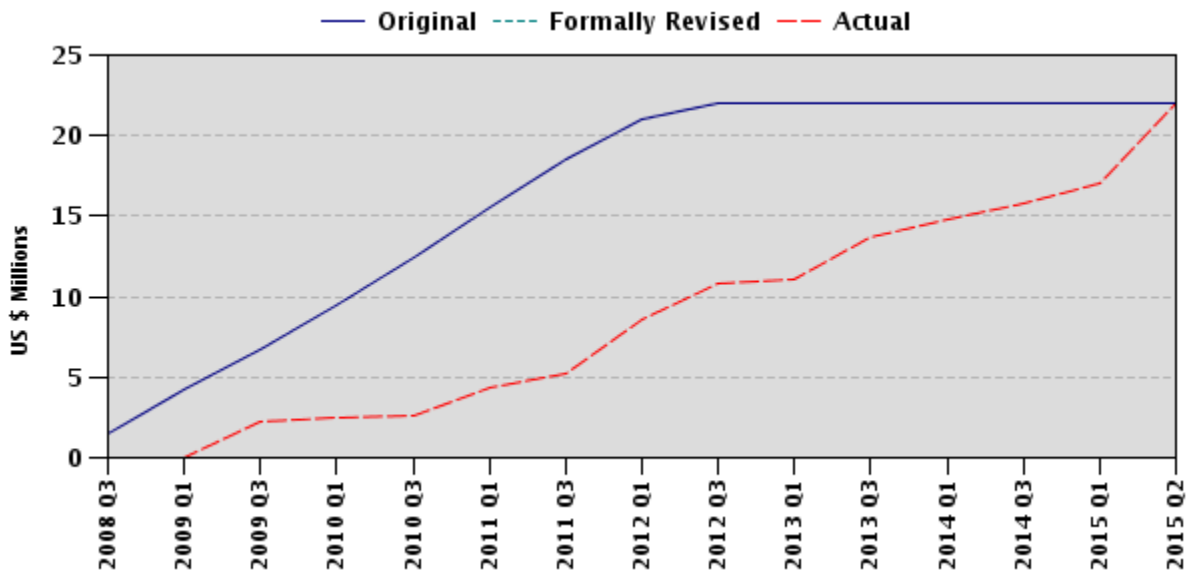
No.	Date ISR Archived	GEO	IP	Actual Disbursements (USD millions)
1	03/10/2008	Satisfactory	Satisfactory	0.00
2	10/06/2008	Satisfactory	Satisfactory	0.00
3	05/15/2009	Satisfactory	Satisfactory	2.22
4	12/01/2009	Satisfactory	Satisfactory	2.55
5	06/14/2010	Moderately Satisfactory	Moderately Satisfactory	3.35
6	02/23/2011	Moderately Satisfactory	Moderately Satisfactory	5.28
7	08/13/2011	Satisfactory	Satisfactory	6.43
8	12/27/2011	Satisfactory	Moderately Satisfactory	9.69
9	06/22/2012	Satisfactory	Moderately Satisfactory	10.93
10	01/01/2013	Satisfactory	Moderately Satisfactory	13.56
11	06/22/2013	Satisfactory	Moderately Satisfactory	13.67
12	01/04/2014	Satisfactory	Moderately Satisfactory	15.02
13	04/20/2014	Satisfactory	Moderately Satisfactory	15.81
14	12/06/2014	Satisfactory	Satisfactory	21.62
15	12/22/2014	Satisfactory	Satisfactory	22.00

H. Restructuring (if any)

Restructuring Date(s)	Board Approved GEO Change	ISR Ratings at Restructuring		Amount Disbursed at Restructuring in USD millions	Reason for Restructuring & Key Changes Made
		GEO	IP		
07/30/2012		S	MS	11.03	Reallocation of grant proceeds.
11/25/2013		S	MS	14.79	Extension of closing date, reallocation of grant proceeds and capitalization of

Restructuring Date(s)	Board Approved GEO Change	ISR Ratings at Restructuring		Amount Disbursed at Restructuring in USD millions	Reason for Restructuring & Key Changes Made
		GEO	IP		
					Opportunities Fund.
11/13/2014		S	MS	18.76	Reallocation of grant proceeds.

I. Disbursement Profile



1. Project Context, Development Objectives and Design

1.1 Context at Appraisal

1. Brazil is acknowledged as the most biodiversity rich country in the world, with an estimated one-fifth of the known species of plants and animals within its national borders. The country has a wide range of climate zones ranging from humid tropics to semiarid and temperate areas, comprising several ecologically differentiated biogeographical zones (biomes). Brazil contains the world's largest inland wetland (*Pantanal*), expanses of semiarid thorn forests (*Caatinga*), vast tree and scrub woodlands (*Cerrado*), and more than 7,000 linear kilometers of coastal and marine ecosystems. With more than 90 percent of the Atlantic Forest biome, half of the *Cerrado* and *Caatinga* biomes, and more than 15 percent of the Amazon Forest Biome already deforested, large numbers of biodiversity components in Brazil were considered in danger of becoming extinct. The Government of Brazil (GOB) officially recognized more than 600 animal species as being threatened with extinction.

2. At the time of Project Appraisal, habitat conversion or loss, invasive species and diseases were the main drivers of biodiversity loss that usually fell within the following categories: demographic change, inequality and poverty, macroeconomic policies and infrastructure construction, social changes, and developmental biases. In terms of economic activities, agricultural expansion, including plantation forestry and grazing, was the most important factor that threatened biodiversity, followed by invasion of exotic species, burning, road construction and mining. The main impact was clear-cut deforestation, followed by others such as erosion, flooding, soil and water pollution, landscape fragmentation, toxic runoff and water contamination, among others.

3. Brazil had committed under the Convention on Biological Diversity (CBD) to the global target of achieving by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level. However, there existed an intrinsic difficulty in generating a robust estimate of biodiversity loss, and the GOB, to address this gap, had carried out a set of diagnostic studies to estimate the rate of ecosystem, species and genetic biodiversity loss in Brazil and in each of the country's seven biomes (*Amazonia*, *Cerrado*, *Pantanal*, *Caatinga*, Atlantic Forest, Pampa, Coastal Zone and Marine). Although those studies provided insight, it was clear that additional work would be needed to obtain a valid estimate for each of Brazil's biomes and for the entire country, in order to monitor, mitigate and reduce biodiversity loss.

4. At the time of Appraisal of the National Biodiversity Mainstreaming and Institutional Consolidation Project (NBMIC, the Project) in February 2006, many institutions shared responsibility for managing biodiversity in Brazil, but there had been little effort to mainstream biodiversity concerns. Numerous ministries, institutes, secretariats, and departments within the GOB, and hundreds of national and international non-governmental organizations (NGOs), and foundations were implementing thousands of projects. Universities, consulting firms and other private sector institutions were also involved in biodiversity conservation. Many projects supported by bi-national and

multinational donors had been successful, but most efforts at mainstreaming biodiversity conservation had remained sporadic, uncoordinated and isolated, with the consequence that successes and lessons were either not shared or lost altogether. Further, efforts to address conservation policies and practices had not been well integrated across economic sectors, among public agencies, and between the public and private sectors, despite the enormous impact that other sectors can have on biodiversity. Conservation initiatives were almost exclusive the domain of biodiversity and environmental actors. However, their impact had been limited, and government funding, from ministries other than the Ministry of the Environment (MMA) was limited or nonexistent. Finally, the scale of biodiversity-related activities was considered suboptimal, having concentrated primarily on small, local, community-based economic activities that lacked sufficient scale to make a significant contribution to halting biodiversity loss in a country as large, and with as extensive a biodiversity, as Brazil.

5. Several issues had been identified for Brazil's lack of success in mainstreaming biodiversity concerns into policy and development, and the Project was designed to test and implement solutions designed to remedy these, which included: (i) lack of information relevant to policymakers; (ii) insufficient analysis of threats and problems; (iii) failure of decision makers to ask the right questions; (iv) geographic and spatial differences of scale; (v) exclusion of lower-level decision makers from policymaking; (vi) differences between different forms of economic development; (vii) lack of recognition of the role and impact of the private sector in the process of land use change and occupation; (viii) lack of coordination of financial mechanisms and economic instruments to finance conservation; (ix) lack of public awareness and support for biodiversity conservation, and (x) no public sector responsibility to value biodiversity.

1.2 Original Project Development Objectives (PDO) and Key Indicators (*as approved*)

6. The Project Development Objective (PDO) of the National Biodiversity Mainstreaming and Institutional Consolidation Project was to promote mainstreaming of biodiversity at the national level in key public and private sector planning strategies and practices as well as to consolidate and strengthen institutional capacity to produce and disseminate relevant biodiversity information and concepts¹.

7. Three key indicators were defined to measure progress towards the PDO:

- At least three key economic sectors² incorporate biodiversity criteria and guidelines in their plans and policies by end of year six of the Project;

¹ The wording of the PDO in the Project Appraisal Document was slightly different, as follows: The development objectives of the National Biodiversity Mainstreaming and Institutional Consolidation (Biodiversity Mainstreaming) Project is to promote mainstreaming of biodiversity at the national level in key government and private sector planning strategies and practices, and to consolidate and strengthen institutional capacity to produce biodiversity information relevant to mainstreaming.

² "Sector" was defined in the context of the Project as an area of economic activity such as agriculture, forestry, fisheries, mining and energy production and transmission. This was not necessarily aligned with ministerial

- Tangible progress is made toward achieving at least 16 of the 50 quantitative national targets established for Brazil as part of the CBD targets for 2010; tracked by a strategic set of monitoring indicators;
- At least 1 million hectares of affected landscapes under integrated conservation and sustainable use of biodiversity are established in Biodiversity Priority Areas with significant involvement by the private sector by the end of year six of the Project.

8. In addition, three intermediate results that would contribute to the attainment of the PDO were defined, one corresponding to each of the three technical project components, as follows:

- Conservation and sustainable use of biodiversity incorporated into select government sectors;
- Conservation and sustainable use of biodiversity incorporated into key private sector planning strategies and practices; and
- A consolidated and coordinated network of key Brazilian institutions working on biodiversity issues and producing relevant information for the development and implementation of biodiversity mainstreaming policies.

9. The Project's Global Environmental Objective was to contribute to the reduction of the current rate of biodiversity loss, Brazil's contribution to the 2010 goals and targets of the CBD.

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

10. The PDO was not revised.

1.4 Main Beneficiaries

11. The Project was not targeted at a specific group of beneficiaries, *per se*. Rather, if successful, it was expected to contribute to a significant reduction of the current rate of biodiversity loss at the global, regional and national levels, as a contribution to poverty alleviation and to the benefit of all life on earth, according to the global target for 2010 of the CBD's Strategic Plan. The Project was directly related to, and expected to contribute to GEF Strategic Priority BD2 (Mainstreaming Biodiversity in Production Landscapes and Sectors) and BD2 (Generation and Dissemination of Best Practices for Addressing Current and Emerging Biodiversity Issues). To achieve its objectives, under its Component 1, the Project would provide financial and technical assistance to government ministries, NGOs, and other institutions covering initially the agriculture, health, science and technology, environment, forestry, fisheries, and water resources sectors, chosen for

responsibilities since, for example, both the Ministry of Agriculture and the Ministry of Agrarian Development are responsible for overlapping aspects of agriculture and rural development policy. It was considered essential that both inter- and intrasectoral strategies be integrated in mainstreaming approaches.

their impact on biodiversity and for the willingness of the relevant institutions to participate fully. Institutions representing other sectors such as transport, energy and mining were expected also to participate under the Project. In addition, through financing to be made available under Component 2 for the creation and management of an Opportunities Fund, housed in and managed by FUNBIO, the Project would benefit producer groups, associations, cooperatives, chambers of commerce and large firms to promote private sector strategies and policies that support biodiversity conservation. Finally, under Component 3, the Project would benefit institutions responsible for development and implementation of biodiversity policy by providing capacity building and establishing mechanisms for coordination amongst them, as well as by promoting the generation and exchange of biodiversity information relevant to policymakers that would inform the global scientific community and contribute to Brazil's CBD commitments.

1.5 Original Components *(as approved)*

12. The Biodiversity Mainstreaming and Institutional Consolidation Project comprised three technical components and one component for project administration, as summarized below.

13. Component 1: Mainstreaming Biodiversity into Selected Public and Economic Sectors *(Total: US\$33.4 million, GEF US\$8.4 million)*

14. This component was designed to support the implementation of the National Biodiversity Policy and promote the mainstreaming of biodiversity conservation and sustainable use at scale. This was to be achieved through government actions aimed at different economic sectors with the purpose of seeking the support of relevant stakeholders. Each mainstreaming initiative was to follow four main steps: (i) consolidation of existing information; (ii) consensus building with stakeholders; and (iii) development of chosen solutions. Government agencies would dedicate attention and resources to the identification and implementation of large-scale mainstreaming opportunities at a national level that enjoyed the support of relevant stakeholders. These opportunities would be tested on the ground through applied sector activities under this component, as well as through landscape-scale subprojects under Component 2.

15. Component 2: Mainstreaming Biodiversity into the Private Sector *(Total US\$30.0 million, GEF US\$7.5 million)*

16. The objective of this component was to incorporate the conservation and sustainable use of biodiversity into key private sector planning strategies and practices. The main mechanism for implementing this was the creation and management of an Opportunities Fund, housed in and managed by FUNBIO, which provided support based on the assessment of proposals received and on inducement of subprojects developed to address the possibility of mainstreaming biodiversity in integrated large-scale productive landscapes. Activities would be carried out in coordination with relevant public sector agencies.

17. Component 3: Institutional Strengthening and Generation of Biodiversity Information for Policymaking (Total US\$31.1 million, GEF US\$6.1 million)

18. The objective of this component was to strengthen, consolidate, and coordinate a network of key Brazilian institutions working on biodiversity issues to produce information relevant to the development and implementation of biodiversity mainstreaming policies. This network would support progress toward Brazil's CBD targets for 2010 by promoting appropriate policies and practices and the dissemination of biodiversity information relevant to policymaking. This Component would also monitor the progress made on key biodiversity indicators, including those linked to the CBD targets for 2010. The two goals were considered linked: the generation of relevant information requires stronger, better coordinated institutions, and the information produced would further strengthen the capacity of the biodiversity sectors, especially as it relates to public policy development.

19. Component 4: Project Coordination and Management (Total US\$2.5 million, GEF US\$0.0 million)

20. This component would support the other project activities by ensuring efficient implementation, supervision, coordination, and administration. The Project was to be coordinated by the MMA, through its Secretariat for Biodiversity and Forests (SBF), and executed through a contract between MMA and FUNBIO. The National Biodiversity Commission (CONABIO) was to provide consultative oversight for the Project on biodiversity priorities, policies, and guidelines. It would also support workshops, conferences, and special events as well as publication and dissemination of information generated by the Project.

1.6 Revised Components

21. The Project's Components were not revised. However, the GEF Grant Agreement was amended through a project restructuring on November 25, 2013 in order to capitalize the Opportunities Fund under Part 2(c) of the Project. As originally designed in the Project, the Opportunities Fund would comprise both GEF resources and co-financing designated for the financing of territorial mainstreaming subprojects, and would be managed as a sinking fund as described in the Project Appraisal Document (PAD). It was envisaged, however, that any future capital contributions that were to be mobilized could be managed as endowment funds to finance activities over a longer period. Nevertheless, with initial start-up delays (Section 2.2), and private sector subprojects submitted with a medium- to long-term implementation period, it became clear that FUNBIO would not be able to account for use of funds before the Grant's December 31, 2013 Closing Date. With this, and to allow for the implementation of the private sector biodiversity mainstreaming strategy that contemplated actions with both a geographical focus and a sectorial approach (leading to a stronger impact of project activities), it was necessary to adjust the Opportunities Fund to the requirements for Conservation Funds, as provided in Operational Policy 10.20, Global Environment Facility Operations. The restructuring also extended the Grant's Closing Date by one

year to December 31, 2014 and reallocated US\$1.0 million in of the Grant's towards capitalization of the Opportunities Fund.

1.7 Other significant changes

22. In addition to the reallocation described in Section 1.6 above, two other reallocation of Grant proceeds were approved on July 27, 2012 and October 31, 2014. A summary of the three reallocations is presented in Table 1 below.

Table 1: Allocation of Grant Proceeds

Category of Expenditure	Original Allocation	Allocation Following 07/27/2012 Reallocation	Allocation Following 07/27/2012 Reallocation	Allocation Following 07/27/2012 Reallocation
	US\$ million			
(1) Goods, works, non-consultants' services and consultants' services under Components 1(a), 1(b)(i), 3(a) and 3(b)(i) of the Project	5.5	8.730	8.730	8.730
(2) Goods, non-consultants' services and consultants' services under Component 2(b) of the Project	0.5	2.095	1.095	0.845
(3) Goods, works, non-consultants' services and consultants' services financed by Public Sector Transfers under Components 1(b)(ii) and 3(b)(ii) of the Project	8.0	5.500	5.500	5.500
(4) Capitalization of the Opportunities Fund under Component 2(C) of the Project which will finance Private Sector Sub-projects under Component 2(a) of the Project	6.0	4.500	5.500	5.500
(5) Operating Costs under Component 2(d) of the Project	1.0	1.175	1.175	1.425
(6) Unallocated	1.0	0.0	0.0	0.0
TOTAL	22.0	22.0	22.0	22.0

2. Key Factors Affecting Implementation and Outcomes

2.1 Project Preparation, Design and Quality at Entry

23. ***Government Commitment.*** The GOB had adopted several initiatives to reduce the loss of biodiversity, and was fully committed to achieving the CBD targets to which it had committed, and putting in place the policies, strategies and mechanisms necessary to do so (Section 1.1). Since the ratification of the CBD in 1994, the GOB with the support of the GEF and other international assistance, had taken decisive measures to implement the CBD's three objectives, including: enhancement of the legal framework, institutional capacity building of the MMA, establishment of national policies, programs, and major projects. The GOB had taken several initiatives to reduce the loss of biodiversity, including the creation in 1995 of a set of interconnected instruments aimed at creating an effective national biodiversity conservation strategy and sustainable use policy and implementation programs. These included the establishment of the National Biodiversity Program (PRONABIO), conceived as an intergovernmental and multi-institutional program with establishing guidelines for the functioning of two other new mechanisms: PROBIO and FUNBIO. PROBIO, the Global Environmental Facility (GEF) Conservation and Sustainable Use of the Brazilian National Biodiversity Project had as its main objective that of assisting the GOB in initiating a program for the conservation and sustainable use of biodiversity by identifying priority actions, stimulating the development of demonstration subprojects and disseminating biodiversity information. FUNBIO, the GEF Brazilian Biodiversity Fund aimed to create a long-term sustainable financing mechanism to promote conservation and sustainable use of biodiversity, particularly vis-à-vis the private sector. Finally, the GOB had hosted the 8th Conference of the Parties of the Convention on Biological Diversity (COP-8) that provided a unique opportunity to bring together the best experts and policymakers on the subject. International conferences on themes related to the CBD organized by the MMA during the COP-8 served to highlight the challenges and experiences of different countries in mainstreaming biodiversity into sectoral policies and programs, especially of the private sector.

24. ***Integrated Program of World Bank and GEF Assistance.*** Since that time, numerous other World Bank- and GEF-financed projects and programs have supported biodiversity conservation in Brazil, resulting in nearly a decade of complementary experience across sectors in support of Brazilian biodiversity. The Project drew upon and incorporated the lessons learned under those projects and programs, both closed and ongoing, including: (i) the Amazon Region Protected Areas Program (ARPA); (ii) the Rio de Janeiro Integrated Ecosystem Management in Production Landscapes of the North-Northwestern Fluminense; (iii) the Integrated Management of Aquatic Resources in the Amazon; (iv) the Biodiversity Enterprise Fund for Latin America---Terra Capital Fund; (v) the First Programmatic Loan for Environmental Sustainability; (vi) the Environmental Sustainability Agenda Technical Assistance Loan; and (vii) several municipal-level project that were breaking new ground in environmental work and mainstreaming. Consistent with the World Bank's Environment Strategy, the Project's design and preparation also drew upon the World Bank's experience in other countries of

mainstreaming of environment into sector lending by stressing the need for cross-sectoral approaches to environmental issues. Consequently, the Rationale for World Bank involvement was strong. Finally, the design of the Project's monitoring strategy drew heavily on lessons learned from previous monitoring efforts, most of which had been considered moderately satisfactory.

25. ***Institutional Complexity.*** The Project was very ambitious and its institutional arrangements were complex, but necessarily so for a project that aimed to promote and institutionalize a cross-sectoral approach to biodiversity mainstreaming. The MMA, through its Secretariat for Biodiversity and Forests, was responsible for overall coordination, and a Project Coordination Committee composed of project partners and chaired by the MMA was put in place to oversee project activities and ensure consistency and synergy among its many executing agencies. FUNBIO was responsible for implementation of Component 2; MMA for implementation of Components 1, 3 and 4. Caixa Econômica Federal (CAIXA, a Federal Government Bank) was responsible for financial management for the MMA-implemented components. In addition, project funds were allocated to eight project beneficiaries (MMA, JBRJ, MAPA, EMBRAPA, MCTI, MS and FIOCRUZ and ICMBio) to implement specific activities assigned to them, as agreed in Annual Operational Plans approved by the Project Coordination Committee.

26. ***Participatory Process.*** The Project's preparation followed a highly participatory process, in which representatives from at least ten governmental and nongovernmental organizations with a stake in biodiversity conservation participated. In fact, as an integral part of this mainstreaming project, co-financing had been secured, and partnerships established with major stakeholders including the Ministry of Agriculture, Livestock and Supply (MAPA), Ministry of Health (MS), Ministry of Science and Technology (MCTI), the Oswaldo Cruz Foundation (FIOCRUZ), the Chico Mendes Institute of Biodiversity Conservation (ICMBio), the Rio de Janeiro Botanical Garden (JBRJ), the Brazilian Agricultural Research Corporation (EMBRAPA), the Brazilian Network of Botanical Gardens (RBJB), and NGOs. Informal contributions were received from many others, and following its participation in the international workshop during the COP-8 of the CBD, the private sector had expressed motivation to participate in mainstreaming biodiversity within Brazil's business sectors and contributed to the Project's design. The participation of these experts, and their willingness to work together at the design phase bode well for the implementation that would ultimately require cross- and multi-sector coordination of a diverse set of organizations, governmental, non-governmental, and private sector alike in order to succeed. Co-financing was secured from seven different governmental institutions, the private sector and NGOs among others, as described in Annex 5 of the PAD. This participatory process served to mitigate the main critical risk identified during preparation: that of lack of support from within government and society for a project that depended on a high degree of acceptance by a number of different government ministries, and by the private sector and civil society to succeed in mainstreaming biodiversity within different economic sectors.

2.2 Implementation

27. The World Bank's Board approved the US\$22.0 million Grant for the Project on January 31, 2008. The Grant Agreement was signed on March 14, 2008, and became effective on September 11, 2008. A project launch seminar including representatives of all implementing agencies took place in October 2008.

28. **Initial Delays.** Project implementation was slow at first, in part due to the Project's institutional complexity as roles and procedures for project implementation required further definition and structure. Important project activities related to the mainstreaming and adoption of biodiversity policies in public and private sectors took longer than planned due to the need to sensitize both sectors while looking for opportunities for negotiating the incorporation of principles of conservation and sustainable use of biodiversity which appeared strategically complex. The Project's GEO (PDO), Implementation Progress, FM, Project Management, and Procurement ratings in the Implementation Status and Results Reports were downgraded to Moderately Satisfactory briefly from mid-2010 until the Mid-Term Review in early-2011 when they were upgraded to reflect the increased pace of implementation.

29. **2008 Financial Crisis.** The Project became effective just as the international financial and economic crisis was unfolding. As a result, subprojects submissions to the Opportunities Fund under Category 2 aimed at changing production processes to incorporate biodiversity concepts and practices in the business strategies, prospecting and negotiating subprojects with the private sector took longer than anticipated. In addition, most of the subprojects that were put forward negotiated a medium/long-term implementation period. To address this, the Project was restructured to adjust the Opportunities Fund to the requirements for Conservation Funds as per OP 10.20 Global Environment Facility Operations (Section 1.6).

30. **Mid-Term Review (MTR).** At the time of the MTR (March 28-31, and April 6, 2011), implementation was still slower than expected. Given initial delays, grant disbursements totaled slightly less than 30 percent, but had been accelerating. An Independent Evaluation prepared in advance of the MTR showed that the Project was audacious and strategically well positioned in relation to the new guidelines of the CBD (Aichi) targets. Nevertheless, the Project had not achieved the majority of its mid-term objectives and targets, but it was clear that its implementing agencies were learning to operate in its complex institutional context and demonstrating improvements in their implementation capacity. The evaluation recommended some adjustments to the Project structure, however, the critical factors for its success were the alignment of its initiatives (projects, subprojects and activities) to the Project's overall objective of promoting mainstreaming of biodiversity at the national level in key public and private sector planning strategies and practices and the construction of customized approaches for the establishment of dialogues with the different sectors of the national economy. Minor adjustments were agreed to the mechanisms for identification of subprojects under Subcomponent 1.2. Originally, these were to be identified and put forward based on sector workshops carried out through a defined, four-step process to be carried out under

Subcomponent 1.1. Instead, the subprojects put forward included initiatives that were already under development or being contemplated by the project beneficiaries, which had already been through the assessment, consensus-building and development process contemplated under Subcomponent 1.1, albeit not with Grant financing.

31. **Staffing.** As is to be expected for a project with relatively long implementation period, and numerous executing agencies, changes in staffing occurred throughout. This involved both agency staff and consultants, and affected especially staff of the PCU in MMA that in addition suffered staffing reductions during implementation. Many of the project beneficiaries that counted on advice and support from PCU staff for routine administrative issues highlighted this lack of continuity and these shortages of staffing as an issue affecting their implementation of subprojects (while, at the same time, commending the quality and disposition of existing staff, despite their work overload).

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

32. **M&E Design.** Strengthening capacity for monitoring biodiversity was very much at the center of and implicit in the Project's PDO. As such, the design of M&E involved project progress monitoring (managerial monitoring) to manage the implementation schedule of planned activities and to evaluate the adequacy of schedule and execution, based on the Project's Results Framework. The Project Coordination Unit in MMA would be responsible for project monitoring. More importantly, however, it also involved strengthening capacity to monitor progress towards 2010 CBD targets (Annex 11), including establishment of the Brazilian Virtual Institute for Biodiversity that would be responsible for collecting data on progress toward these targets and compiling the results for reporting purposes. The Project also included under Component 4 funding for independent assessments of project progress.

33. The design of the Project's RF was somewhat complex, as could be expected for a complex project involving numerous institutions promoting a multi-sectoral approach. In some cases, there appeared to be a slight overlap in the Intermediate Results Indicators, with activities carried out under subprojects under Category 1 contributing to the achievement of more than one indicator. For example, activities that led to the achievement of the indicator "at least 6 policy initiatives.....designed and adopted in selected areas through consultative process", could also be considered toward the achievement of the indicator "at least 12 policy subprojects designed and implemented in partnership with key government sectors". Also, the Outcome Indicator "Progress toward the achievement of 2010 CBD targets for Brazil tracked by a strategy for selected monitoring indicators", did not actually require progress towards achievement of the indicators, although this was measured during implementation, as described below.

34. **M&E Implementation and Utilization.** M&E was implemented well, with data submitted by implementing agencies and project beneficiaries, and progress reports compiled by the PCU routinely tracked progress. Several indicators and targets were redefined during implementation, although not in a formal restructuring (Annex 2, in Comments). Project monitoring also provided input (as well as strengthening project

beneficiaries' systems to monitor) for tracking progress towards Brazil's progress towards the CBD 2010 targets. The Outcome Indicator mentioned above was tracked as "Tangible progress is made toward achieving at least 16 of the 50 quantitative national targets already established for Brazil as part of the CBD targets for 2010". And while tracking of this indicator allows for identifying the Project's contribution towards the number of targets impacted (Annex 2), it does not allow for attributing by how much each of the Project's subprojects contributed towards progress. Finally, in preparation for the MTR, and later upon project completion, external assessments were prepared, including consultation with project beneficiaries, and the findings of those assessments are incorporated throughout this ICR. As an integral aspect of the Project, progress towards putting in place strengthened M&E is also discussed under Section 3.2.

2.4 Safeguard and Fiduciary Compliance

35. **Safeguards.** The Project was classified as Category B, requiring an Environmental Analysis but not a full-scale Environmental Assessment (EA) Study. Nevertheless, during preparation the MMA and FUNBIO carried out an EA covering all the safeguard policies triggered by the Project. These included: (i) Environmental Assessment (OP 4.01); (ii) Natural Habitats (OP 4.04); (iii) Pest Management (OP 4.09); (iv) Physical Cultural Resources (OP 4.11), and (v) Forests. As expected, the EA found that the effects of the Project on the environment were likely to be overwhelmingly positive. Still, an Environmental Management Plan (EMP), including a short Pest Management Plan were prepared and incorporated in the Project's Operational Manual (OM) to provide a framework for assessing potential impacts, and presenting specific activities, responsibilities and budgets to ensure the implementation of any needed mitigating measures.

36. Reviews of safeguard compliance were carried out periodically throughout implementation, and confirmed the multiple benefits for the conservation and sustainable use of biodiversity derived from project activities and actions. During the MTR, project activities planned through completion were reviewed and it was confirmed that no social safeguards should be triggered. Nevertheless, the principles and procedures to be followed in the event that any project activities would involve donation of land or indigenous peoples were discussed, and the OM was updated to reflect agreed procedures. Throughout implementation support and field visits, the multiple benefits for the conservation and sustainable use of biodiversity derived from project activities and actions were confirmed.

37. **Fiduciary.** Procurement was carried out by each of the Project's beneficiary partners and executing agencies, coordinated by FUNBIO and the Project's PCU in MMA. Although there were no major issues with the Project's procurement arrangements, all beneficiaries and executing agencies alike highlighted the difficulties in following the World Bank's Guidelines, especially insofar as there were differences with Brazil's National Procurement Legislation, Law No. 8666. Unfamiliar with specific World Bank Guidelines and Procedures, beneficiaries' staff responsible for goods and services procurement were often reluctant to follow procedures other than those provided

in National Legislation, and the back and forth of documentation to the PCU often resulted in procurement delays.

38. Responsibility for the Project's financial management (FM) was shared by both FUNBIO and CAIXA, each with specific responsibilities, structure and FM arrangements. FM risk was considered moderate, especially in view of the large number of partners and activities. FM was reviewed regularly, and found generally satisfactory or moderately satisfactory throughout implementation, as arrangements including staffing/personnel, budgeting, accounting, internal control, funds flow, financial reporting and auditing adhered to standards required by the World Bank. With respect to FUNBIO, the main issues noted in FM implementation support and supervision reporting related to: (i) a change in the Designated Account from US Dollars to Brazilian Reais; (ii) Interim Financial Reports being created in Excel, increasing the risk of errors in recording of transactions (the Project eventually provided funding to cover expenses associated with the development and maintenance of FUNBIO's *Cérebro* System); (iii) insufficient controls to ensure that the values of financial and in kind counterpart funds were included in IFRs, and (iv) the need for further clarity in the management arrangements for the Opportunities Fund, particularly with respect to the execution of subprojects to be executed after the Grant's Closing Date. With respect to CAIXA, the main issues noted in FM implementation support and supervision reporting related to: (i) weaknesses in the controls relating to the advances made to the partners and the large variations between the budgeted values versus the actual values disbursed; (ii) a need to strengthen control procedures to ensure that the values of the financial and in kind counterpart funds were promptly included in the IFRs, and (iii) the control of the execution of the budgeted values was done in Excel, leading to the possibility of human errors. Although CAIXA's IFRs continued to be generated in Excel, these minor issues were addressed, and overall FM arrangements provided accurate and timely financial information and reasonable assurances that project funds were used for the purposes intended. Independent auditors routinely audited project financial statements in accordance with international standards, and the World Bank received the unqualified audit opinions in a timely fashion.

2.5 Post-completion Operation/Next Phase

39. All of the institutions and organizations that participated in and benefited from the Project are established institutions that will continue to exercise their mandated functions upon completion, albeit in a more coordinated and strengthened policy framework under the auspices of the MMA. Brazil has committed to a set of 20 streamlined National CBD Targets 2011-2020, and now benefiting from the coordination of PainelBio, these institutions and organizations will continue to work together towards these targets, which include continued dissemination of information related to progress under the systems established/supported under the Project, in support of Brazil's biodiversity. The main issue, as is to be expected, is one of continued funding (over and above their normal budgets) needed to make decisive progress on mainstreaming and reversing biodiversity loss. Several of the agencies (e.g., MCTI) have incorporated activities implemented under the Project in their institutional *Plano Pluri-Annual* and have allocated funding to continued implementation. The GOB, in its Fifth National Report to the CBD,

recognizes the importance of securing resources and meeting capacity, and highlights that MMA will be preparing a national strategy for mobilizing resources and meeting capacity needs. The MMA will contract the *Instituto de Pesquisa Econômica Aplicada* (the Institute of Applied Economic Research, IPEA) to expand its current work on the quantification, analysis and monitoring of environmental expenditures within the federal government to include also expenditures specifically for biodiversity at both the state and federal levels. MMA also intends to work with the Brazilian Business Council for Sustainable Development and the National Confederation of Industries and IPEA to establish a common methodology for inventorying environmental expenditures within the private sector.

3. Assessment of Outcomes

3.1 Relevance of Objectives, Design and Implementation

40. The Project's objectives, both its PDO and GEO, were relevant at the time it was approved, and continue to be Highly relevant to this day. Brazil is the most biologically diverse country in the world (Section 1.1). Approximately 104,000 animal species and 43,000 plant species are currently known, comprising about 70 percent of the world's catalogued animal and plant species. Brazil hosts between 15 and 20 percent of the world's biological diversity, with the greatest number of endemic species on a global scale. Through its international commitments and internal policies and programs, the GOB has demonstrated its resolve to support the conservation and sustainable use of its biodiversity, and to develop and implement policies and programs to integrate the conservation and sustainable use of biological resources into sustainable development strategies. Since the time of approval, Brazil has presented its Fourth National Report to the CBD, reporting on progress towards the 2010 CBD targets and outlining future priorities and challenges, has following a highly participatory process secured CONABIO's approval in September 2013 of the National Biodiversity Targets for 2020, and has presented its Fifth National Report to the CBD, outlining progress, those targets and future challenges. A key challenge was and continues to be further strengthening the capacity to promote mainstreaming of biodiversity at the national level in key government and private sector planning strategies and practices, and to consolidate and strengthen institutions to produce biodiversity information relevant to mainstreaming. The Project's PDO and GEO focused appropriately on outcomes that, while ambitious, were reasonable to achieve, based on the design of its components and activities and satisfactory progress in their implementation. The Project's PDO continues to be relevant and supported by the World Bank's Country Partnership Strategy FY2012-2015, specifically in its fourth strategic objective (further improve the sustainable management of natural resources and enhance resilience to climatic shocks while maximizing contributions to local economic development, and helping to meet rising global food demand) and a corresponding sub-objective (improving environmental management, biodiversity conservation and climate change mitigation). The Project's GEO continues to be relevant and supported by GEF Strategic Priority BD2 (Reduce Threats to Globally Significant Biodiversity), BD3 (Sustainably Use Biodiversity), and, especially, BD4 (Mainstream Biodiversity Conservation and Sustainable Use into Production

Landscapes/Seascapes and Sectors), and by the corresponding programming priorities outlines in GEF-6 Programming Directions.

41. The Project's design was by definition complex in view of the number of institutions and agencies that necessarily had to be consulted and involved in implementation given the objective of mainstreaming biodiversity across multiple sectors and agencies. It did, however, include three well-defined investment components and arrangements categorizing project activities to responsible executing agencies. The Project's implementation ensured the continued relevance of its design, and two examples of this stand out. The arrangements for activities under Component 1 were adjusted to respond to actual implementation realities (Section 2.2). Second, World Bank's team worked closely with the implementing agencies to improve implementation and correct issues with the Project's original design, as in the case of the Opportunities Fund. Its design was modified in the Project Restructuring when the actual signing of agreements with private sector entities had suffered delays, and that it became clear that private sector subprojects submitted would require longer time for execution than originally contemplated (Section 1.6).

3.2 Achievement of Project Development Objectives

42. The Project decisively made an impact on mainstreaming of biodiversity at the national level in Brazil—both in the public and the private sector planning strategies and practices, and in consolidating and strengthening institutional capacity to produce and disseminate biodiversity information and concepts. It also, through activities it supported in pursuit of its PDO, is expected to have a significant positive impact on reducing the current rate of biodiversity loss (its GEO). The Project achieved and even surpassed many of the originally defined outcome and intermediate outcome indicator targets. The Achievement of the Project Development Objectives is rated Substantial, in accordance with progress towards the achievement of the three Outcome Indicators as summarized below and presented in greater detail in the context of Intermediate Outcomes.

43. Outcome Indicator 1: At least three key government sectors³ apply biodiversity criteria and guidelines in their plans and policies by end of year six of the Project

44. This indicator was complied, with several notable achievements supported by the Project. Several sectors today incorporate biodiversity criteria in their plans and policies, including health, agriculture and energy. In *health*, FIOCRUZ partnered with the MS to incorporate policies for environmental health and surveillance in its plans and policies.

³ "Sector" was defined in the context of the Project as an area of economic activity such as agriculture, forestry, fisheries, mining and energy production and transmission. This was not necessarily aligned with ministerial responsibilities since, for example, both the Ministry of Agriculture and the Ministry of Agrarian Development are responsible for overlapping aspects of agriculture and rural development policy. It was considered essential that both inter- and intra-sectoral strategies be integrated in mainstreaming approaches.

FIOCRUZ included biodiversity research and conservation in its statutes, and established formally the *Centro de Informação em Saúde Silvestre* (CISS), that disseminates information to society about among other things the interrelationships between biodiversity and health (<http://www.biodiversidade.ciss.fiocruz.br/>). FIOCRUZ has been designated a collaborating center of the World Health Organization/Pan-American Health Organization on matters relating to environment and health, and is a scientific member of the CBD and council member participating in the PainelBio (see below). FIOCRUZ included formally several new activities in its Plano Pluriannual 2015-17, such as those relating to biodiversity and urban health. In *agriculture*, the Project contributed in a decisive manner to support MAPA's role in public policies following its adoption in 2012 of a National Policy on Agro-ecology and Organic Production (Decree No. 7,794/2012) and the related National Plan officially launched in October 2013. This Plan has as its objectives to promote, expand and consolidate processes relating to access, sustainable use, management, handling, recomposition and conservation of natural resources and ecosystems in general, with two targets and 24 initiatives directly related to themes of genetic resources, biodiversity, extraction and conservation of natural resources, and budgeted through 2015. MAPA coordinates with the following ministries: MDA, MMA, Education, Health, Social Development, MCTI, Fisheries and Aquaculture, and Finance. In *energy*, the MMA together with ICMBio and the *Empresa de Pesquisas Energéticas* (EPE), under the Ministry of Mines and Energy, carried out hydro-ecological studies on the Tapajós and Juruena River basins, to guide to decisions relating to hydroelectric projects as an input to environmental licensing processes. The study aimed to identify critical areas for biodiversity conservation in the river basins and propose activities that promote maintaining the connectivity of rivers. Several other achievements (MCTI, JBRJ) towards formal incorporation of criteria in plans and programs are described below.

45. Outcome Indicator 2: Tangible progress is made toward achieving at least 16 of the 50 quantitative national targets established for Brazil as part of the CBD targets for 2010; tracked by a strategic set of monitoring indicators;

46. The Project's executing agencies and beneficiary partners contributed to Brazil's progress towards 31 of the 51 the National 2010 CBD targets (Annex 11). Monitoring of progress towards these was carried out by individual agencies and partners, and compiled by MMA. More importantly, the Project made a direct and decisive contribution to the establishment of *PainelBio* (originally expected to be called Virtual Institute for Biodiversity), a multi-stakeholder panel whose mission is to "contribute for the conservation and sustainable use of Brazilian biodiversity by promoting synergy between institutions and knowledge, making scientific information available to society, promoting capacity building at various levels, and supporting decision making processes and public policies for the achievement of the Aichi Targets in Brazil". The International Union for the Conservation of Nature (IUCN)-Brasil is the Executive Secretary of *PainelBio*, and it includes representation of 17 governmental and non-governmental institutions, including MMA, ICMBio, MCTI, FIOCRUZ, World Wildlife Federation-Brasil, among others. Concomitantly, in an initiative known as the "*Dialogos sobre Biodiversidade*" a series of consultations were carried out to establish the National CBD 2020 targets that were adopted formally following the approval of CONABIO Resolution No. 06 dated

September 3, 2013. Targets for the period 2011-2020 (Aichi targets) are more succinct and more easily quantifiable. Project activities already have contributed to progress under at least ten of the 20 national CBD 2020 targets (Aichi targets), as presented in Annex 11.

47. Outcome Indicator 3: At least 1 million hectares of affected landscapes under integrated conservation and sustainable use of biodiversity are established in Biodiversity Priority Areas with significant involvement by the private sector by the end of year six of the Project.

48. MAPA contributed expressively to the achievement of this outcome through the establishment of 1,158,906.8 hectares of organic production units, with agricultural production (735,704 hectares) and sustainable extraction of organic products (432,202.8 hectares).

49. The progress towards intermediate outcomes that contributed to the above were the following.

50. ***Intermediate Outcome Component 1 - Conservation and sustainable use of biodiversity incorporated into select government sectors***

51. The Project financed several activities aimed to incorporate conservation and sustainable use of biodiversity into public policies, although as mentioned in Section 2.2, the process followed for selecting the subprojects was not as originally contemplated and given difficulties by MMA in hiring consultants' services, and many of the activities were in the end carried out by project beneficiaries. These included the following, in addition to those described under Outcome Indicator 1 above:

- MMA – Sustainable Extraction, in which biodiversity criteria were applied at the municipal level to extraction practices, with training programs for the extraction of plants in the *Caatinga* that are used in industry;
- MMA – The consolidation of technical directives and good practices for management of 17 species affected by the extraction of non-timber forestry products;
- MAPA – Publication of phyto-sanitary products approved for use in organic agro-ecological agriculture;
- MAPA – Sustainable organic extraction project;
- MAPA – Study groups on agro-ecological organic agriculture;
- ICMBio – Implementation of Action Plans on threatened species;
- FIOCRUZ and MS – Strengthening of the national health surveillance system by aligning the CISS with the MS' *Centro de Informações Estratégicas e Resposta em Vigilância em Saúde (CIEVS)*'
- FIOCRUZ and MCTI – Aligning SISS-Geo (CISS' on-line, real-time information system on wildlife health) and those of FIOCRUZ' biological collection to the *Sistema de Informação Sobre a Biodiversidade Brasileira (SIBBr)* of the MCTI, an online platform developed with the aim of promoting and facilitating the

- publication, integration, access and use of information on biodiversity (<http://www.sibbr.gov.br/>);
- FIOCRUZ and ICMBio – Aligning, through a formal cooperation agreement, the SISS-Geo with ICMBio’s *Sistema de Autorização e Informação em Biodiversidade* (SISBIO), an on-line system aimed to provide approval for research and the collection of biological material throughout the country, especially threatened species in federal conservation units (<http://www.icmbio.gov.br/sisbio/>); and
 - FIOCRUZ – Establishment of a network of 43 wildlife health laboratories (*Rede de Laboratórios em Saúde Silvestre*), and an interactive network of wildlife health (*Rede Participativa em Saúde Silvestre*).

52. EMBRAPA, the MAPA, ICMBio and FIOCRUZ contributed strongly to the implementation of about 17 subprojects in partnership with government sectors that aimed to transform traditional practices into biodiversity friendly ones, all consistent with Brazil’s National Biodiversity Policy. EMBRAPA, through nine of its decentralized units throughout the country, implemented several subprojects relating to the development and appraisal of techniques and methodology that are favorable to biodiversity in rural areas, thereby minimizing the impact of agricultural practices. These subprojects contributed to public policies related to the use of native flora in regional economies; studies relating to the identification and analysis of soil quality indicators that provided input to public policies related to incentives to direct planting; studies on conservation of species such as the *coqueiro-gigante* and the *butiá*, and the development of conservation and storage methods so that farmers can utilize their own seeds. MAPA’s subprojects contributed to one of the Project’s main achievements: National Policy on Agro-ecology and Organic Production described above. The Project contributed directly to initiatives related to seed production, sustainable extraction, phyto-sanitary products and the development of technical materials. These initiatives resulted in the compilation of a national cadaster of organic production (*Cadastro Nacional de Produtores Orgânicos*) that includes over nine thousand producers in 1,182 municipalities in all Brazilian states. Finally, ICMBio put in place activities for 52 Action Plans for the protection of fauna, covering 62percent of the threatened fauna species, and activities nationwide and involving a large number of stakeholders, related to dissemination, appraisal and monitoring of those Plans.

53. *Intermediate Outcome Component 2 - Conservation and sustainable use of biodiversity incorporated into key private sector planning strategies and practices*

54. FUNBIO, prospecting for potential private sector subprojects, identified twelve areas to be prioritized by mapping productive landscapes within priority conservation areas (http://www.funbio.org.br/wp-content/uploads/2014/11/ProbioII-Territ%C3%B3riosPotenciais_Funbio2.pdf), and reached out to at least 12 private sector and other organizations supporting activities in those areas. Through the creation and operation of the Opportunities Fund, capitalized in the amount US\$18.8 million (US\$5.5 million in Grant financing and US\$13.3 million in counterpart funding), FUNBIO supported the implementation of seven private sector subprojects that will cover

approximately five million hectares of priority biodiversity conservation areas in three biomes (Amazon, Atlantic Forest and Pampa). These subprojects are being implemented by partnerships between private sector companies, producers associations and governmental and non-governmental organizations, and involve various productive sectors including cocoa production, tropical forestry, sugar cane production and biofuels, livestock, fisheries, non-timber forest products, sustainable and organic agriculture, rural tourism, wildlife health and digital inclusion. Oversight of the implementation of the subprojects is being conducted by FUNBIO, in accordance with the Opportunities Fund operational manual. In addition, ten business plans were prepared and are posted in FUNBIO's knowledge base.⁴

55. *Intermediate Outcome Component 3 - A consolidated and coordinated network of key Brazilian institutions working on biodiversity issues and producing relevant information for the development and implementation of biodiversity mainstreaming policies*

56. The Project achieved its goals of strengthening the technical, institutional and organizational capacity of institutions involved in biodiversity conservation and of establishing a network of those institutions, supported by sharing of improved knowledge systems. Its most important achievement was the establishment and functioning of the Brazilian Virtual Institute for Biodiversity (renamed PainelBio) as mentioned above. The Center for Biodiversity Monitoring and Forecasting was not formally established but, in a coordinated manner project beneficiaries opted to and generated inputs for more than ten of the National 2010 CBD indicators. Plans for establishing this center are contingent on further definition of a National Biodiversity Monitoring Strategy. Still MMA has produced a mapping of the various biodiversity information systems, drafted a decree related to biodiversity data both within the ministry and among relevant partners and has established partnerships with other institutions to consolidate information. A technical cooperation agreement is being discussed between ICMBio and MCTI with the World Conservation Monitoring Center to align MMA's biodiversity information systems, possibly based on ICMBio's SISBIO. Still, another achievement included information systems networks exchanging biodiversity information such as the Biodiversity Heritage Library (BHL)/Scientific Electronic Library Online (SciELO) and MAPA's *Sistema de Informações Gerenciais da Produção Orgânica* (SigOrgWeb) <http://sistemasweb.agricultura.gov.br/>. The Consultative Committee of the BHL SciELO network was established, criteria for selection of essential works on biodiversity were

⁴ The business plans include: An Innovative Financial Mechanism: A proposed model to improve the sustainability of FUNBIO's future territorial projects; Sustainable Forests: Vision, challenges and risks for the sustainable forestry sector and role of FUNBIO; *Manejo e Conservação de Polinizadores de Tomateiro*; *Estado da arte de metodologias e ferramentas voluntárias de compensação pelo setor privado*; *Ferramentas e mecanismos para o financiamento socioambiental*; *Plano de Negócios para a Floresta Nacional de Irati*; *Quanto custa o Programa Áreas Protegidas da Amazônia? Uma modelagem financeira para as Unidades de Conservação do Arpa*; *Quanto custa uma Unidade de Conservação Federal? Uma visão estratégica para o Financiamento do Sistema Nacional de Unidades de Conservação (SNUC)*; *Salvaguardas Socioambientais para o setor privado atuar apoiando a criação, ampliação e consolidação de áreas marinhas protegidas no Brasil*; and HCV good practice – guidance for practitioners.

defined, and policies and procedures relating to the input of these works were approved. At completion, 676 essential works had been input to the *Rede de Bibliotecas Brasileiras de Biodiversidade*.

57. Several specialized centers for fauna and flora priority areas were created contributing to biodiversity conservation. The most significant of these are described below, by implementing partner; other important achievements are listed in the RF in Annex 2. JBRJ established the *Centro Nacional de Conservação da Flora* (National Center for the Conservation of Flora, CNCFlora) in 2008 with a mandate to produce and organize scientific knowledge that promotes the conservation of flora, including developing conservation action plans (<http://cncflora.jbrj.gov.br/portal>). CNCFlora's objectives and mandate are aligned with National Biodiversity Targets and Global CBD targets, especially those established by the Global Strategy for Plant Conservation. A major achievement of JBRJ was CNCFlora's compilation of a list of Brazil's flora, and the publishing of *Livro Vermelho da Flora do Brasil* (Red Book of Brazil's Flora) that analyzes 4,617 species of Brazil's flora, of which 2,479 are considered threatened. This massive work is contained in and complemented by an on-line information system supported by operational manuals that allows inputting and validating data regarding species and their habitats. CNCFlora has also published an official list of threatened flora species, an official list and red book of these, and a model of action plans to protect them. Action plans have been developed for 70 threatened species.

58. MS implemented several activities aimed at incorporating the importance of biodiversity in health concerns, including the establishment of an informal *Núcleo de Gestão do Conhecimento no Departamento de Vigilância e Saúde Ambiental e Saúde Trabalhador* (Management Nucleus for Knowledge in the Department of Surveillance and Environmental Health and Worker Health), several workshops and the development of methodologies on the linkages between health and biodiversity, and the issuance of a Ministerial Decree creating a working group on Health and Environmental Licensing, to involve the health sector in environmental licensing processes.

59. FIOCRUZ's *Programa Institucional Biodiversidade e Saúde* (Institutional Program on Biodiversity and Health, PIBS) carried out a workshop that led to the establishment of both the *Rede Participativa em Saúde Silvestre* (Participative Network of Wildlife Health, RePSS) and the *Rede de Laboratórios em Saúde Silvestre* (Laboratory Network of Wildlife Health, ReLSS) in addition to the CISS (described under Project Outcomes). PIBS is established in the office of the President of FIOCRUZ, and its staff participated in the design of the institution's strategic plan for 2011-2014 in which biodiversity and health are designated as a strategic priority.

60. MCTI, through a partnership with JBRJ, collected data and knowledge on the Atlantic Forest biome and formed a network for research and monitoring in biological reserves as a pilot experience for incorporating this biome in MCTI's PPBio.

The Project financed the training of almost eight thousand specialists in MAPA, EMBRAPA, ICMBio, JBRJ, FIOCRUZ and the MMA.

3.3 Efficiency

61. The Project was designed as a stand-alone GEF project, with grant financing of US\$22 million and expected counterpart cash and in-kind contributions of US\$75 million from government ministries and agencies (including an expected US\$13.3 million from FUNBIO). The GEF grant funds were fully disbursed (Section 1.7), roughly in line by component with appraisal estimates (Annex 1).⁵ FUNBIO's operating costs under Component 2(d) were roughly 20 percent higher than originally estimated (see footnote), although this is reasonable in that they only represent around 11 percent of the capitalized amount of the Opportunities Fund.

62. The Project's implementation was efficient in leveraging GEF funds. At Appraisal, it was expected that the GEF's US\$22 million grant would leverage US\$75 million in government and partner agency contributions. By the time of completion, the government, partner agency and other contributions amounted to US\$95.35 million, 27 percent above the amount originally contemplated. Most of the additional funding came from regular budgets of the partner agencies, especially, while the MMA's regular contribution was actually less than originally estimated (Annex 1, Table (b)). It was also successful, although not as much as expected, in leveraging contributions to the Opportunities Fund; US\$13.3 million in counterpart funding were mobilized against a GEF Grant contribution of US\$5.5 million (against the expectation of US\$25.5 in the incremental cost analysis—see below). From the perspective of GEF resource mobilization, the Project was successful in leveraging GEF resources, in amounts above those originally estimated.

63. The Project's PAD contained an incremental cost analysis that estimated incremental costs of US\$97 million over a baseline (without project) scenario, for six years, for creating the technical, institutional, and incentive-based context that would promote the mainstreaming of biodiversity concerns in Brazil, and thereby contribute to the conservation of globally significant biodiversity. Highlighting that the economic valuation of biodiversity conservation is difficult to measure in monetary terms, especially the monetary value of conservation policies that have an indirect and dispersed impact over a long period of time, the PAD also contained a descriptive analysis of the direct and indirect economic benefits that would be expected to accrue from implementation of the Project's components. Given the achievement of its PDO, as measured by Key Indicators in its Results Framework and, actually, the overachievement of several intermediate indicator targets (Annex 2), these originally estimated benefits were achieved. Further, by implementing the Project through established partners (that contributed more than originally expected in counterpart contribution) with existing supply chains, the Project was able to build upon and strengthen existing institutions,

⁵ Table (a) in Annex 1 shows US\$1.42 million in project costs for Project Coordination and Management whereas no funding had been envisaged for this activity under Component 4 of the Project. In reality, this US\$1.42 million represents operating costs under Component 2(d) of the Project that had originally been estimated as costs of US\$1.175 million under Component 2.

thereby minimizing the costs that would otherwise be involved in establishing new programs. Finally, it is almost impossible to quantify the benefits that are accruing from the Project's catalytic influence in setting in motion and formalizing a cross-sectoral, multi agency and sector (public, private, NGO) approach to biodiversity conservation. This was determinant in terms of attracting additional project resources, and in exceeding several originally planned targets; it will undoubtedly continue to produce similar results in the future. Based on the above, Efficiency is rated Modest.

3.4 Justification of Overall Outcome Rating

Rating: Moderately Satisfactory

64. The Project's Overall Outcome Rating is **Moderately Satisfactory based on High relevance, Substantial efficacy and Modest efficiency**. The team decided to take a more conservative approach in assigning this rating as most of the Project's outcome and interim targets were related to process-oriented actions which are harder to measure than quantitative targets such as numbers of hectares under sustainable production. Nonetheless most of the targets were achieved and several were surpassed. These considerations were balanced by the team's assessment that the Project continues to be relevant, both in terms of its objectives, design and implementation, and its significant accomplishments and achievements in terms of mainstreaming biodiversity conservation (including its contribution to National CBD Targets).

3.5 Overarching Themes, Other Outcomes and Impacts

(a) Poverty Impacts, Gender Aspects, and Social Development

65. The Project did not have poverty alleviation as a specific objective. Nevertheless, those living in poverty and extreme poverty are the main beneficiaries of policies, programs and initiative aimed at promoting sustainable production, maintaining and promoting ecosystem services, and supporting the sustainable development of indigenous peoples and traditional communities. In Brazil, an estimated 26 million people or 13.7% of the country's population are considered to live in poverty or extreme poverty, and are considered the most vulnerable to environmental degradation. A large number of the poor live in rural areas; their dependence on the ecosystem is even higher.

(b) Institutional Change/Strengthening

66. The Project was overwhelmingly an institutional development project that aimed to strengthen capacity for and linkages necessary to mainstream biodiversity among various government, non-government, private and other actors. Its main institutional impacts are described in detail in Section 3.2 above. Nevertheless, it is worth reiterating in this Section, that the project beneficiaries almost unanimously during interviews highlighted the importance of the Project not only in terms of the financing that it provided, but its enormous benefit in terms of providing a forum and a catalytic force that served to provide a forum for cooperation, and especially coordination.

67. (c) Other Unintended Outcomes and Impacts (positive or negative)

68. The strengthened partnerships and collaboration fostered through the Project have had far-reaching implications, beyond the original project scope. Several planning

activities tested under the project have now been adopted by the participant institutions. The species action plans are now being developed collaboratively between MMA, ICMBio, FIOCRUZ and JBRJ. The experience gained by ICMBio as an executing agency for some of the CBD targets have enabled it to become a stronger national institute for monitoring and promoting biodiversity conservation.

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

69. The findings of the consultations with partner beneficiaries, carried out together with a final project assessment, are included in the relevant sections of this ICR, including in the section on lessons learned.

70. An evaluation and closing seminar for the Project was held on December 3, 2014. About 60 persons, including representatives of 12 government institutions and private entities participated. A summary of the seminar and its main findings is presented in Annex 6.

4. Assessment of Risk to Development Outcome

Rating: **Negligible**

71. The Risk to Development Outcome is considered **Negligible**. The GOB, and project beneficiaries alike all remain committed to mainstreaming and reversing biodiversity loss. The Project succeeded in putting into place mechanisms for working collaboratively, and multi-sectorally, that will be difficult to reverse, as well as solid institutional and other vehicles that ensure its sustainability, such as PainelBio, CNCFlora, RePSS, ReLSS and the seven private sector subprojects covering five million hectares of priority biodiversity conservation areas. This coupled with tangible, visible international commitments make any backtracking difficult to imagine. The main risk instead is that of a halt in further progress, and that relates not to an issue of commitment but that of continued funding at a level commensurate with implementation of policies and future plans. Nevertheless, reflecting the importance of this as a possible constraint, there are already important initiatives in place to mobilize funding on a recurrent basis, and to ensure the most efficient allocation of existing resources to support the Project's accomplishments and further its objectives (Section 2.5).

5. Assessment of Bank and Borrower Performance

5.1 Bank Performance

(a) Bank Performance in Ensuring Quality at Entry

Rating: **Moderately Satisfactory**

72. The World Bank's Performance in Ensuring Quality at Entry is rated **Moderately Satisfactory**. The Project's design was complex, but well defined, appropriate and necessary for a project that aimed at promoting institutional cooperation and coordination among numerous ministries, agencies and private sector partners, each with distinct mandates and responsibilities on a topic that by definition requires a multi-sectoral

approach. The Project built upon over a decade of World Bank and GEF support for environment generally, and biodiversity specifically, and took into account the lessons of previous experience. Its fiduciary aspects, although not without problem given the differences between World Bank Procurement Guidelines and National Legislation (Section 2.3), were well defined, and the sharing of responsibilities between FUNBIO and Caixa Econômica provided an appropriate and clear division between the two institutions. M&E arrangements were well defined, although the selection of indicators in the RF at times resulted in an overlap of activities as contributing to the achievement of multiple indicator targets. However, the Project's risk assessment was not as detailed as required today, but nevertheless highlighted the main risk of possible lack of support from within the government, affected populations and civil society (that did not materialize). As well, the rating reflects the necessity of Project restructuring in order to adapt the original design for better capitalization of the Opportunities Fund.

(b) Quality of Supervision

Rating: **Satisfactory**

73. The World Bank's Quality of Supervision is rated **Satisfactory**. Implementation support missions were conducted routinely, task managed by staff in the Brazil Country Office to provide just-in-time support, and results focused on project-implemented activities within the broader framework of the country's CBD commitments and process. Project beneficiaries highlighted the usefulness and relevance of implementation support through providing a forum for discussion of relevant issues, both implementation and strategic. Implementation issues were addressed expeditiously (Section 2.2) and resulted in a minor adjustment to the methodology for implementation of subprojects under Subcomponent 1.1 that was necessary to keep implementation of those under Subcomponent 1.2 on track. The restructuring was timely and the team used the opportunity to improve implementation and correct issues with the original design, specifically with respect to the Opportunities Fund under Subcomponent 2.3. External assessments financed under the Project provided inputs to the MTR and this ICR, incorporating beneficiary partners' inputs. Fiduciary aspects were supervised routinely, with periodic post reviews of procurement and financial assessments, and issues that surfaced were addressed timely and pragmatically.

(c) Justification of Rating for Overall Bank Performance

Rating: **Moderately Satisfactory**

74. The World Bank's Overall Performance is rated **Moderately Satisfactory**, based on the ratings attributed for Quality at Entry and for Supervision. Despite the initial shortcomings leading to restructuring, the Bank team worked proactively with the executing agencies to focus the Project on implementing the lagging activities and on the consolidation of key outcomes. The overall quality of the World Bank's support for the Project's design, and of its support provided during implementation was important for achieving the project results.

5.2 Borrower Performance

(a) Government Performance

Rating: **Satisfactory**

75. The Government's Performance is rated **Satisfactory**. The GOB committed to National Targets for CBD 2010, which were more ambitious than the CBD's targets. Although not met in their entirety, good progress was made towards most in part through activities supported by the Project. Further, the process put in place by the Government, in part through activities supported by the Project, built a broader awareness and institutional cooperation around biodiversity conservation and mainstreaming, and towards the development and adoption of more realistic and shared National CBD Targets for 2011-2020. The Government's commitment to its CBD commitments, and to the Project's PDO and GEO, was unwavering throughout which provided a strong and fruitful enabling environment for the Project's implementation.

(b) Implementing Agency or Agencies Performance

Rating: **Moderately Satisfactory**

76. The Implementing Agencies' Performance is rated **Moderately Satisfactory**. The Project had two executing agencies, MMA and FUNBIO, a Project Coordination Unit (PCU) in MMA, two agencies (recipients of Grant funds) responsible for fiduciary aspects FUNBIO for Component 2 and *Caixa Econômica Federal* Components 1, 3, 4(a) and 4(b), as well as numerous beneficiaries that were responsible for implementing subprojects (MMA, JBRJ, ICMBio, FIOCRUZ, MCTI, MS, MAPA, Embrapa, and FapUNIFESP).⁶ In general, the executing agencies, the PCU and the Grant recipients carried out their responsibilities expeditiously, routinely providing required reporting, and addressing issues, as they arose, in a timely manner. The partner beneficiaries, through consultations with them in preparation of the final assessments unanimously expressed positive reviews of the support and assistance provided. *Caixa Econômica Federal*, a federal bank with limited exposure to environmental and biodiversity policies and activities, faced several issues in carrying out its procurement responsibilities, especially in the Project's early phases, impacting the performance of the executing agencies it was supporting. Performance improved, over time, and as input to the final assessment, *Caixa* highlighted the value of its participation in the Project in terms of exposing its staff to these considerations, and embracing the lessons in its operations. The one issue highlighted by project beneficiaries was the shortage of staffing, and lack of continuity, in the PCU (Section 2.2). Performance of project beneficiaries was also strong, albeit differentiated among that of government ministries that are subjected to staffing and other considerations, as that of foundations and agencies. Government

⁶ *Ministério do Meio Ambiente* (Ministry of the Environment, MMA); *Jardim Botânico do Rio de Janeiro* (Botanical Garden of Rio de Janeiro, JBRJ); *Fundação Oswaldo Cruz* (Oswaldo Cruz Foundation, FIOCRUZ), *Ministério da Ciência e Tecnologia* (Ministry of Science and Technology, MCTI); *Ministério da Saúde* (Ministry of Health, MS); *Ministério da Agricultura, Pecuária e Abastecimento* (Ministry of Agriculture, Livestock and Supply, MAPA), *Empresa Brasileira de Pesquisa Agropecuária* (Brazilian Agricultural Research Corporation, Embrapa) and *Fundação de Apoio à Universidade Federal de São Paulo* (Support Foundation of the Federal University of São Paulo, FapUNIFESP).

ministries as project beneficiaries, especially MMA and MS, were on occasion subject to budget limitations that affected participation in specific subprojects. In fact, activities being implemented by MS were stopped in 2012 due to budgetary shortages and staffing issues. Government agencies and foundations embraced the Project not only in terms of the activities and outputs it would permit them to achieve, but, more importantly, for the ability to strengthen their institutions through training, equipping, expert inputs, and also for opportunity it provided for them to network with other institutions and agencies with similar but complementary missions towards the same overall goal.

(c) Justification of Rating for Overall Borrower Performance

Rating: **Moderately Satisfactory**

77. Overall Borrower Performance is rated **Moderately Satisfactory**, in view of ratings for Government and Implementing Agencies' Performance, and the outcomes that this performance allowed the Project to achieve.

6. Lessons Learned

78. Environmental mainstreaming projects invariably involve institutional complexity in view of their multi-sectoral nature and terms of the number of individual ministries and agencies involved. But, it is this very complexity that is required to be successful in terms of sharing of data and information, and of establishing and institutionalizing fluid relations among most or all involved actors. Some institutions are by definition more focused, outside of the central structure of government, and, hence, more agile as they are often not subject to the same constraints as central government ministries. Nevertheless, it is fundamental to incorporate as many involved actors as possible, even if implementation is slower for some, because beyond the specific activities financed by the Project, it is the catalytic mechanism that the Project provides that can serve to put in place a concerted framework for lasting cooperation and coordination.

79. Designing results frameworks for biodiversity mainstreaming projects, where cooperation among institutions is a central objective, can be challenging. First, it is important to target and acknowledge contributions and achievements by individual agencies. Yet, several accomplishments of individual executing agencies could not be achieved by those agencies alone given the multi-sectoral nature of biodiversity conservation. Further, a project that aims to promote that institutional cooperation on a subject that by definition requires coordination among institutions needs also to target and acknowledge achievement of inter-institutional activities. This can often lead to double counting of results, that is, a result by a given agency may contribute to the achievement of an indicator defined as an agency output and at the same time contribute to the achievement of another indicator defined on the basis of multi-sector coordination.

80. Recognizing the difference in institutional capacity and constraints that different agencies face, several of the partner beneficiaries highlighted in the consultations that there should be a mechanism to allow those with greater capacity to absorb more funding, i.e., not including an initial fixed funding allocation by partner beneficiaries. Obviously,

in terms of individual agency outputs there would be advantages to such a mechanism. Nevertheless, this would invariably result in greater financing to those more agile partners, with perhaps stronger initial institutional capacity and flexibility, to the detriment of others that require funding to strengthen theirs. Also, it would likely reduce the impact of a project in terms of promoting inter-agency cooperation. Further thought should be given to strike an optimal balance between both extremes, i.e., full flexibility in funding vs. fixed allocations to partner beneficiaries.

81. Projects that involve funding for private sector initiatives, that require commitment by those partners should define very realistic targets as the broader macroeconomic environment can affect demand.

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

(a) Borrower/implementing agencies

82. **A translation of comments provided by the MMA on June 8, 2015 is provided below. Comments provided by FUNBIO are presented in Annex 7.**

83. The Project provided continuity to the *Ministério do Meio Ambiente*'s agenda of implementing the CBD, which has always emphasized that an agenda for conservation and sustainable use of biodiversity can only be achieved with the involvement of the diverse sectors of society. The Project created the possibility for the MMA to reach out to the Ministry of Science and Technology, the Ministry of Health, the Ministry of Agriculture, Livestock and Supply and associated agencies to involve them in the biodiversity conservation agenda. During preparation and negotiations, efforts were made to reach out to involve also the Ministry of Agrarian Development, but the conditions were not in place for their participation in this Project.

84. It is worth highlighting that to promote “mainstreaming” it is fundamental to take into consideration the degree of institutional maturity and development. On the other hand, recently created institutions, like ICMBIO, were able to take advantage of the opportunity to strengthen institutional capacity and establish a robust structure to evaluate the situation of threatened species and to prepare action plans to address the factors that threaten them

85. During the celebrations of the International Biodiversity Day in Brasil in 2015, awards were granted to the best initiatives that focused on biodiversity conservation and promotion of sustainable use and benefit sharing. Three activities supported by PROBIO II were selected as finalists in several categories. It is worth noting that none of these were developed directly by MMA, since the rules of the competition excluded its nomination for the awards.

86. Another important lesson relates to the institutions' interest on the subject of conservation and sustainable use of biodiversity. In cases where an institution is not interested directly with the subject, they would generally not respond to an invitation to a

discussion session. For MMA, the implementation of this Project consolidated the nucleus established in the framework of the *Secretaria de Biodiversidade e Florestas*, focused on the management of biodiversity, and, in this manner, accomplished its goal on institutional consolidation.

87. Undoubtedly, one of the legacies of the Project is that, in the future, the programs and agendas of either health or agriculture can be counted upon to promote practices that are less harmful to the conservation of biodiversity.

Annex 1. Project Costs and Financing

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

Components	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
1. Mainstreaming Biodiversity into selected government and economic sectors	8.5	6.98	83.1%
2. Mainstreaming Biodiversity into the Private Sector	7.5	7.50	100%
3. Institutional Strengthening and Generation of Biodiversity Information for Policymaking	6.5	6.10	93.8%
4. Project Coordination and Management	0.0	1.42	142%
Total Financing	22.0	22.0	100%

(b) Financing

Source of Funds	Type of Cofinancing	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
Global Environmental Facility (GEF)	Grant	22.0	22.00	100%
Brazilian Agricultural Research Cooperation (EMBRAPA)	Cash + In kind	4.0	11.49	287%
Brazilian Biodiversity Fund (FUNBIO)	Cash + In kind	22.5	13.30	60%
Oswaldo Cruz Foundation (FIOCRUZ)	Cash + In kind	4.0	7.36	184%
Ministry of Agriculture, Livestock and Supply (MAPA)	Cash + In kind	4.0	15.61	390%
Chico Mendes Institute of Biodiversity Conservation (ICMbio)	Cash + In kind	14.4	23.47	163%
Rio de Janeiro Botanical Garden (JBRJ)9	Cash + In kind	8.0	9.55	119%
Ministry of Science and Technology (MCT)	Cash + In kind	7.1	9.43	132.82%
Ministry of the Environment (MMA)	Cash + In kind	8.0	5.84	73.05%
TOTAL		97	118.05	121.7%

Annex 2. Outputs by Component and Project Results Framework

The Project financed technical assistance, training, equipment, vehicles and operating expenses for the following subprojects were implemented by project beneficiaries under Components 1, 2, 3 and 4 of the Project.

Sub component	Subproject	Project Beneficiary
Component 1 – Mainstreaming Biodiversity into Select Public Sectors		
1.1	Assessment of problems in integrating biodiversity in government sectoral policies and recommendations	MMA
1.2	Coordination of PROBIO II in Embrapa	Embrapa
1.2	Sustainable management systems for small agricultural producers	
1.2	Direct planting systems and their impact on biodiversity conservation	
1.2	Conservation and sustainable use of agrobiodiversity	
1.2	Organic agriculture for the conservation of biodiversity	MAPA
1.2	Developing geographic guidelines for agribusiness with biodiversity conservation	
1.2	Implementing action plans for threatened species	ICMBio
Component 2 – Mainstreaming Biodiversity into the Private Sector		
2.1	Diagnostic and selection of regional areas for integrated pilot projects	FUNBIO
2.2	Information Base for mainstreaming biodiversity in the private sector	
2.3	Establishment of the Opportunities Fund for Biodiversity	
2.4	Coordination, Monitoring and Evaluation Unit	
2.4	Monitoring and Evaluation Plan for Component 2	
2.4	Communication Plan for Component 2	
2.4	Diagnostic and selection of regions for integrated subprojects	
Component 3 – Institutional Strengthening and Generation of Biodiversity		

Sub component	Subproject	Project Beneficiary
Information for Policymaking		
3.1	Establishment of the National Center for the Conservation of Flora	JBRJ
3.1	Documenting rare and threatened species maintained in the <i>ex-situ</i> collections of the Botanical Garden (JB) and publication of the first Red Data Book of the Brazilian Flora.	
3.1	Strengthening the Program Biodiversity and Health (PIBS-Fiocruz)	FIOCRUZ
3.1	Health of Wildlife in Brasil	
3.1	Establishing a network of diagnostic reference laboratories	
3.1	Technological development in diagnostic of native fauna pathogens	
3.1	Structuring and establishing the Wildlife Health Center	
3.1	Model to analyze and predict health dangers in border areas between natural and anthropized ecosystems	
3.1	Establishment and implementation of the Virtual Biodiversity Institute	MMA
3.1	Physical and financial project coordination	
3.1	Provision of supplies, materials and furnishings for environmental education, protection and research and management of the Coordinating Unit	ICMBio
3.1	Prognostic of the state of conservation of threatened fauna species	
3.1	Strengthening of ICMBio units (HQ, Specialized Centers) and partners	
3.1	Development of the Biodiversity Monitoring Center and Strengthening of SISBIO	
3.1	Management of PROBIO II in ICMBio	
3.2	Creation of a conservation data base for taxonomy, morphological, ecological, biogeographic and molecular information by species	JBRJ

Sub component	Subproject	Project Beneficiary
3.2	Disclosure and dissemination of biodiversity, its impact on health, and the results of the Project to FIOCRUZ	FIOCRUZ
3.2	Biodiversity of the Atlantic Forest Biome	MCTI
3.2	Development and implementation of indicators to evaluate the achievement of targets under 2010 CBD	MMA
3.2	Development of products such as data analysis, reports, diagnostics, trend analysis, etc.	
3.2	Data input and online publication of essential rare works in biodiversity (BIREME)	
3.2	Integration in the management of water resources and biodiversity	
3.2	Biodiversity data management for managing of non-timber forestry products	
3.2	Analysis of the state of fauna conservation	ICMBio
3.2	Development and publication of action plans for the conservation of threatened species	
3.2	Dissemination of information on biodiversity in Conservation Units	
3.2	Monitoring biodiversity in Conservation Units	
3.2	Biodiversity information system	
Component 4 – Project Coordination and Management		
4.1	Management of Implementation Progress	MMA
4.2	Dissemination of Information	
4.2	Financial Management of the Project	

Results Framework

PDO/Global Environment Objective	Outcome Indicators	Status
<p>Promote mainstreaming of biodiversity principles at national level in key public and private sector planning strategies and practices as well as to consolidate and strengthen institutional capacity to produce and disseminate biodiversity information and concepts</p>	<p>At least three key economic sectors apply biodiversity criteria and guidelines in their plans and policies by end of year six of the Project</p>	<p>ACHIEVED: Total 3</p> <p>Health – MS, through FIOCRUZ through policies for environmental surveillance;</p> <p>Agriculture - MAPA through the National Policy on Agro-ecology and Organic Production and related National Plan coordinated with the following ministries: Agrarian Development, Environment, Education, Health, Social Development, Science and Technology (MCTI), Fisheries and Aquaculture and Finance,</p> <p>MCTI – PPBio</p> <p>JBRJ – Establishment of CNCFlora</p> <p>Energy – MMA, ICMBio, and Ministry of Mines and Energy (MME) – Production of hydro-ecological studies in the Rio Tapajós and Rio Juruena hydro-basins, as input to environmental licensing to identify critical biodiversity conservation.</p>

	<p>Tangible progress is made toward achieving at least 16 of the 50 quantitative national targets established for Brazil as part of the CBD targets for 2010; tracked by a strategic set of monitoring indicators</p>	<p>EXCEEDED: 21 of the 50 quantitative national CBD targets have been achieved (Annex 11)⁷. Project beneficiaries contributed to the achievement of targets as follows:</p> <p>FIOCRUZ – 9 targets MCTI – 1 target Embrapa – 10 targets JBRJ – 5 targets ICMBio – 6 targets FUNBIO – 4 targets MAPA – 7 targets</p> <p>The Project also contributed to progress under 6 of the 20 National CBD 2020 targets, as follows:</p>
--	---	---

	At least 1 million hectares of affected landscapes under integrated conservation and sustainable use of biodiversity are established in Biodiversity Priority Areas with significant involvement by the private sector by the end of year six of the Project	<p>EXCEEDED FUNBIO: <i>Pampa</i> 2.0m ha), Amazon (1.0m ha), Atlantic Forest (790,000 ha)</p> <p>Embrapa: Fazenda São Miguel (750 ha)</p> <p>FIOCRUZ: Partnership with RPPN and SESC, <i>Pantanal</i> (1.175m ha)</p> <p>MAPA: (1.159m ha)</p> <p>Total: >5,376,898ha</p>
Intermediate Results	Results Indicators	Status
<p><i>Component 1: Mainstreaming Biodiversity into Selected Government and Economic Sectors</i></p> <p>Conservation and sustainable use of biodiversity incorporated into select government sectors</p>	At least 6 policy initiatives for mainstreaming biodiversity designed and adopted in selected areas through consultative process with government and private sector institutions (Subcomponent 1.1)	<p>EXCEEDED: More than 6 Policy Initiatives:</p> <ul style="list-style-type: none"> • FIOCRUZ/MS – National Wildlife Health Surveillance System • FIOCRUZ/MCTI – Aligning SISS-Geo and SIBBr • FIOCRUZ/ICMBio – Aligning SISS-GEO and SISBIO • FIOCRUZ - Initiative (underway) to include wildlife health in courses of the Escola Nacional de Saúde Pública and the Escola Politécnica da Saúde; the Center for Information on Wildlife Health disseminating information; Network of Laboratories on Wildlife Health established; including theme of wildlife

		<p>health in master's program on family health;</p> <ul style="list-style-type: none"> • MMA – Project in the Tapajós River Basin to guide decision-making on planning for construction of hydroelectric dams with minimal impact on biodiversity • MMA – Sustainable Extraction applying biodiversity criteria at the municipal level in extractivist sectors with trainings for the extraction of plants in the <i>Caatinga</i> that are used for industry • MAPA – Consolidation of technical directives and good practices for the handling of 17 species related to the extraction of non-timber forestry • MAPA – Phyto-sanitary products approved for organic agro-ecologic agriculture • MAPA – Sustainable Organic Extraction Project • MAPA – Study Groups on Agro-ecology and Organic Production • ICMBio – Implementation of Action Plans for Threatened Species
	<p>At least 12 policy subprojects designed and implemented in selected landscape units in partnership with private sector, to apply policy instruments and technologies promoting</p>	<p>EXCEEDED: 48 Policy Initiatives:</p> <ul style="list-style-type: none"> • FIOCRUZ – 4 initiatives related to SISS-Geo for monitoring warnings on wildlife health. CISS disseminating information to society • EMBRAPA – 10 initiatives

	biodiversity conservation and sustainable use (Subcomponent 1.2)	<ul style="list-style-type: none"> • MAPA – 3 initiatives: Incentives for the Use of Appropriate Products and Processes; Sustainable Organic Extraction; and Geographic Recommendations • ICMBio – Implementation of Action Plans for threatened species •
<p>Component 2: Mainstreaming Biodiversity into the Private Sector</p> <p>Conservation and sustainable use of biodiversity incorporated in key private sector planning strategies and practices</p>	Opportunities Fund capitalized with at least US\$17 million by Y06 (Subcomponent 2.3)	ACHIEVED: 7 subprojects signed for private territorial subprojects totaling US\$5.5 million of Grant funds and US\$17.0 million in counterpart funding
	At least 5 productive landscape units totaling a minimum of 1 million ha adopting criteria associated with biodiversity conservation in their areas of operation (Subcomponent 2.1)	EXCEEDED: Seven subprojects signed for private territorial subprojects covering approximately 4.8 million ha involving 5 productive landscapes.
	At least 5 private sector organizations at a national or subnational level adopting criteria linked with biodiversity conservation and sustainable use (Subcomponent 2.1)	<p>EXCEEDED: 10 private sector organizations:</p> <ul style="list-style-type: none"> • Instituto Arapyaú • TNC • Adecoagro • Senar RS • SESC • Alcoa • Funjus • Conjus • Projeto Saúde e Alegria • Tapajoara • Natura • Votorantim Industrial

	At least 10 biodiversity friendly business plans prepared and disseminated under Knowledge Base Facility (Subcomponent 2.2)	ACHIEVED: 10 sustainable business plans prepared and ready for dissemination, as per above
	Component 2 monitoring strategy under satisfactory implementation at the end of Y01, and where necessary, implementation strategy improved	ACHIEVED: Monitoring Strategy for Component 2 implemented. Logic Framework is revised twice a year and adjustments are made whenever necessary.
	Component 2 results and lessons learned disseminated through national and local-level workshops, publications (by Y06), and internet portal (by Y01)	ACHIEVED <ul style="list-style-type: none"> • FUNBIO - Internet portal established and SIGWeb implemented • FUNBIO - Several publications disseminated: Good Practice Guide to Appraise Conservation; Tools and Mechanisms for Socio-environmental Financing; Appraisal and Proposal of Tools and Mechanisms for Conservation;
<p><i>Component 3: Institutional Strengthening and Generation of Biodiversity Information for Policy Making</i></p> <p>Network of key Brazilian institutions working on biodiversity issues consolidated, coordinated, and producing relevant information for the development and implementation</p>	Brazilian Virtual Institute for Biodiversity established and operational, coordinating activities of at least 10 partner institutions and producing information relevant for policymaking (Subcomponent 3.1)	EXCEEDED <ul style="list-style-type: none"> • MMA - PainelBio established comprising 17 institutions that participated in the meetings that led to its establishment and that participate: IUCN (Executive Secretariat); Insituto IPÊ, APRENDER (Florianópolis) WWF, GIZ, FUNDHAM, CI, FNB, CEBDS, CNI, ISA, Fórum do Mar, Fundação Biodiversitas, and from government, FIOCRUZ, ICMBio, MMA,

of biodiversity mainstreaming policies		<p>MCTI</p> <ul style="list-style-type: none"> • Rede BHL SciELO – 10 institutions: CRIA, FIOCRUZ, FZB, JBRJ, Inst. Botânica/SP, Butantan, Museu Nacional, MPEG, UFPR, USP • ICMBio – Data analysis for ICMBio biodiversity systems/data base
	Center for Biodiversity Monitoring and Forecasting created, fully staffed, and functioning, generating data for at least 10 key biodiversity indicators based on CBD 2010 Targets (Subcomponent 3.1)	<p>EXCEEDED</p> <ul style="list-style-type: none"> • JBRJ - National Center for the Conservation of Flora (CNCFlora) • ICMBio – Biodiversity monitoring and prognosis generating data for at least 6 National CBD 2010 indicators (1.1, 2.4, 2.7, 2.9, 3.11 and 4.3); Biological indicators defined for monitoring coral reefs, <i>Cerrado</i>, and Amazon; Field monitoring of reefs • MAPA – SigOrgWeb: Management information system for organic production • MAPA – Monitoring data for 7 National CBD 2010 indicators (2.14, 3.1, 3.4, 3.8, 6.1, 6.2 and 6.3)
	At least 10 Thematic Specialized Centers for Conservation of Fauna and Flora created and consolidated at national level, with capacity for generating products (technology, management practices, methodologies) for biodiversity	<p>ACHIEVED</p> <ul style="list-style-type: none"> • JBRJ - National Center for the Conservation of Flora (CNCFlora) established and functioning • MS - Biodiversity and Health Program strengthened • FIOCRUZ - Biodiversity and Health Program strengthened

	<p>conservation and sustainable use (Subcomponent 3.1)</p>	<ul style="list-style-type: none"> • FIOCRUZ - State of Wildlife Health • FIOCRUZ - Establishment of Network of Diagnostic Reference Laboratories • FIOCRUZ - Technological Development on Diagnostics of Native Fauna Pathogens • FIOCRUZ - Development and establishment of the Center for Wildlife Health • FIOCRUZ - Methodology for analyzing and preventing dangers to health in border areas between natural and anthropized ecosystems • PIBS/FIOCRUZ, CEPTA, CECAV, RAN, CMA, CECAT, CEPAM, TAMAR, CEMAVE, CENAP AND CNPT
	<p>Action plans for at least 50% of the national endangered species lists (Fauna 2003/2004, Flora 1992) designed and 25% under implementation (Subcomponent 3.2)</p>	<p>ACHIEVED: 50% and 30%</p> <ul style="list-style-type: none"> • JBRJ - Documentation of threatened and rare species maintained in <i>ex-situ</i> collections of the Botanical Gardens • JBRJ - Establishment of data base for conservation and information on taxonomy, morphology, ecology, bio-geographic and molecular composition of species • FIOCRUZ - Distribution and dissemination of information on biodiversity and its relation with health, and the outcomes of the Project • MCTI - Biodiversity of the Atlantic Forest Biome

		<ul style="list-style-type: none"> • ICMBio – 415 threatened species have action plans developed; of the total 3,044 actions in 55 Action Plans (52 for fauna and 3 for flora), 2,385 were monitored (37 plans in 83 monitoring plans)
	At least 3,000 technical specialists from partner institutions trained in biodiversity themes in order to incorporate biodiversity into sectoral work (Subcomponent 1.3)	<p>EXCEEDED: 7,973 specialists</p> <ul style="list-style-type: none"> • MAPA: 4,689 specialists • Embrapa: 1,476 specialists • ICMBio: 852 specialists <p>MMA: 310 specialists</p>
<p>Component 4: Project Coordination and Management</p> <p>Improved institutional capacity to coordinate multisectoral and cross-sectoral interventions, to monitor project implementation and impacts, and to disseminate lessons.</p>	Project monitoring strategy under satisfactory implementation at the end of Y01, and where necessary, implementation strategy improved (Subcomponent 4.1)	ACHIEVED: Monitoring Strategy implemented. Indicator data and Progress Reports revised and presented every six months. Completed by monitoring (in loco) of beneficiaries (subprojects).
	Project results and lessons learned disseminated through national and local-level workshops, publications (by Y06), media campaigns (by Y03) and homepage (by Y01) (Subcomponent 4.2)	ACHIEVED: Participation of PROBIO's stakeholders in national media campaigns informing on subprojects supported by PROBIO II. Publication of Results from National Seminar on Lessons Learned (December 2014) scheduled for 2015.

Annex 3. Economic and Financial Analysis

1. In accordance with GEF requirements, Project preparation included an Incremental Cost Analysis to assess the incremental GEF costs of achieving global biodiversity benefits. These incremental costs were calculated to be US\$ 97 million (World Bank 2007). The biodiversity-related global environmental benefits identified for each Component in the Project Appraisal Document have mostly been fully achieved, with some specific indicators being surpassed, including ‘areas under integrated conservation and sustainable use’ and ‘progress in CBD targets’.

2. The available data strongly suggests that implementation of the Project was (i) efficient in terms of leveraging GEF funds; and (ii) cost-effective in terms of achieving the PDO. With respect to the leveraging of available GEF funds, this was expected at appraisal to be at a ratio of over 3:1 with Government, together with the private sector, expected to contribute a total of US\$75 million funding from counterparts (from MMA, FUNBIO, MAPA, EMBRAPA, ICMBio, MCT, Fiocruz, and others), in addition to the \$22 million from GEF. The actual co-funding at the end of the Project totaled US\$ 96.05 million representing an additional US\$ 21.05 million. Much of this co-funding came from regular government budgets where programs were re-aligned with the Project’s priorities from a thematic as well as geographical standpoint, and includes US \$13.3 million from private sector sources. From a GEF resource mobilization perspective, the Project was efficient with the GEF contribution leveraging substantial co-funding from regular government budgets and programs. Thus, many activities initiated with Project funds are expected to continue to be implemented through these regular government budgets and programs.

3. During project implementation ten business plans were elaborated and/or made available through the Knowledge Base hosted at Funbio’s website. These business plans included analysis of the current context, challenges and opportunities for the development of private sector subprojects focusing on a particular sector such as sustainable forest management or voluntary offsetting mechanisms. Business plans also included review of potential strategies, such as experiences with various financial mechanisms, landscape planning concepts and tools, so that they could be adapted to specific sectors and locations. These experiences have been disseminated and are currently being further developed by FUNBio to expand private sector funding for biodiversity. No further economic and financial analysis was done.

4. The economic valuation of biodiversity conservation is difficult to measure in monetary terms, especially the monetary value of conservation policies that have an indirect and dispersed impact over a long period of time. Therefore, the PAD contained a descriptive analysis of the direct and indirect economic benefits that would be expected to accrue from implementation of the Project’s components. Given the achievement of its PDO as measured by Key Indicators in its Results Framework, and indeed the overachievement of several intermediate indicator targets (Annex 2), these originally

estimated benefits should be achieved. Further, by implementing the Project through established partners (that contributed more than originally expected in counterpart co-funding) within existing supply chains, the Project was able to build upon and strengthen existing institutions. This has minimized the costs that would otherwise be involved in establishing new programs. Finally, it is almost impossible to quantify the benefits that are accruing from the Project's catalytic influence in setting in motion and formalizing a cross-sectoral, multi agency and sector (public, private, NGO) approach to biodiversity conservation. This was a determining factor in attracting additional project resources, and in exceeding several originally planned targets; it will undoubtedly continue to produce similar results in the future.

Annex 4. Bank Lending and Implementation Support/Supervision Processes

(a) Task Team members

Names	Title	Unit	Responsibility/ Specialty
Lending			
Adriana Gonçalves Moreira	Senior Environmental Specialist		Team Leader
Susana Amaral	Senior Financial Management Specialist		Financial Management Specialist
Keiko Ashida Tao	Environmental Specialist		
Daniella Ziller Arruda Karagiannis	Program Assistant		Program Assistant
Frederico Rabello T. Costa	Senior Procurement Specialist		Procurement Specialist
Hugo Rosa da Conceição	Junior Professional Associate		
Supervision/ICR			
Adriana Gonçalves Moreira	Senior Environmental Specialist	GENDR	Team Leader
Frederico Rabello T. Costa	Senior Procurement Specialist	GGODR	Procurement Specialist
Maria Joao Pagarim Ribeir Kaizeler	Financial Management Specialist	GGODR	Financial Management Specialist
Alberto Costa	Senior Social Development Specialist	GSURR	Social Safeguards
Agnes Velloso	Safeguards Specialist	GENDR	Environmental Safeguards
Guadalupe Romero Silva	Consultant	GENDR	Consultant
Cassia Coutinho Barreto	Consultant	GENDR	Consultant
Sofia Keller Neiva	Program Assistant	LCC5C	Program Assistant

(b) Staff Time and Cost

Stage of Project Cycle	Staff Time and Cost (Bank Budget Only)	
	No. of staff weeks	USD Thousands (including travel and consultant costs)
Lending		
FY06	17.24	84.23

FY07	16.37	67.84
FY08	4.44	15.41
Total:	38.05	167.48
Supervision/ICR		
FY09	17.79	42.33
FY10	11.69	48.80
FY11	9.42	59.38
FY12	11.47	51.68
FY13	7.83	69.88
FY14	6.59	45.98
FY15	4.07	49.87
Total:	68.86	367.92

Annex 5. Beneficiary Survey Results
Not applicable.

Annex 6. Stakeholder Workshop Report and Results

PROBIO II Closing Workshop

1. About 60 collaborators, partners of 12 governmental institutions and private entities participated, on December 3, 2014, of the evaluation and closing activities seminar of the National Biodiversity Mainstreaming and Institutional Consolidation Project (PROBIO II). In presenting the results, the beneficiary institutions highlighted the Project success and that Brazil has faced the challenge of treating the national biodiversity in a unified and transversal way.
2. The Project was executed in partnership between the Ministry of the Environment (MMA), the Brazilian Biodiversity Fund (Funbio) and the Federal Government Bank (CAIXA), and for its implementation it has also established strategic partnerships with the Ministry of Agriculture, Livestock and Supply (MAPA), Ministry of Agrarian Development (MDA), Ministry of Health (MS), Ministry of Science and Technology (MCTI), in addition to the Chico Mendes Institute of Biodiversity Conservation (ICMBio), the Rio de Janeiro Botanical Garden (JBRJ), the Brazilian Agricultural Research Corporation (EMBRAPA), and the Oswaldo Cruz Foundation (FIOCRUZ).
3. The seminars opening table included the World Bank's Task Manager, Adriana Moreira, the Secretariat of Biodiversity and Forests of the MMA, Carlos Alberto de Matos Scaramuzza, the Executive Director of Funds of Caixa, Deusdina dos Reis Pereira, and the General Secretary of Funbio, Rosa Lemos de Sá.
4. The beneficiary institutions on five round tables presented the main results and lessons learned, the challenges, and the integration between different areas:
 - "Biodiversity and the Private Sector", mediated by Fernanda Marques (Funbio) with participation of Rosa Lemos de Sá (Funbio), Roberto Wack (USP) and Bruno Mariani (Funbio Council);
 - "Progress and Challenges on Threatened Species Management", mediated by Ugo Vercillo (ICMBio), with participation of Rosana Subirá (ICMBio), Gustavo Martinelli (JBRJ) and Luís Fábio Silveira (USP Zoology Museum);
 - "Biodiversity and Health", mediated by Marcia Chame (Fiocruz), with participation of Carlos Corvalan (OPAS), Renato (SVS in MS) and Fernando de Ávila Pires (Fiocruz);
 - "Biodiversity and Agriculture", mediated by Rogério Dias with participation of Josias Miranda (MAPA), Rosa Lia Barbieri e Juliano Gomes Pádua (EMBRAPA);
 - "Biodiversity Information Accessibility (PainelBio, Rare Works, SIBBR, Biodiversity Monitoring and Information Systems)", mediated by Pablo Pena Rodrigues (JBRJ) with participation of Fabiana Montanari (SciELO), Luiz Merico (IUCN), Andréia Portela (MCTI) and Eduardo Dalcin (JBRJ).

5. The specialists concluded that, the PROBIO II, which counted upon US\$22 million in grant funding from the Global Environmental Facility – GEF, contributed to the strengthening of the Ministry of the Environment's of its different participant institutions.
6. In the MMA's opinion, "all developed activities managed to strengthen and promote the biodiversity conservation from actions of various partners, such as the Agricultural Ministry of Agriculture, Livestock and Supply (MAPA), specially with agro ecology and organic agricultural practices".
7. According to the Ministry of Agriculture, Livestock and Supply (MAPA), participating in the PROBIO II, has given the institution the opportunity to integrate consultants with knowledge in areas different than the ones developed by MAPA, with exclusive dedication in extractive good practices, which, without support from PROBIO II support, they would not have been able to do.
8. Oswaldo Cruz Foundation's (FIOCRUZ) researchers, stated that the Project's resources allowed them to develop a series of research and surveys, such as the reports on invasive exotic species and the creation of the *Centro de Informação em Saúde Silvestre* (CISS), a "Virtual Center, open to researchers in all areas and to collaboration with the broader society, since anyone can include information on any event involving animals and insects". With this information, FIOCRUZ can anticipate events and make predictions about diseases before they reach people.

Sustainability

9. The PROBIO II funds were managed by the Federal Government Bank (CAIXA), a partner whose approach to actions promoting biodiversity conservation was also impacted. According to CAIXA's operational area, "this partnership with MMA was interesting from an institutional point of view, because it allowed CAIXA to put into practice one of its missions, which is the sustainable development promotion".
10. The National Biodiversity Mainstreaming and Institutional Consolidation Project (PROBIO II), was considered by the partners as a milestone that improved the transformation of production models, national territory use and occupation, beginning with the agricultural, science, fishing, forestry and health sectors.

Although the Project will not be continued, the partner institutions that participated in PROBIO II should give sequence to the activities and research it generated, with the aim of generating and spreading information and knowledge on biodiversity. The result is in the conservation areas priority update, sustainable use, and fair and equal distribution of the Brazilian biodiversity benefits, as part of the Convention on Biological Diversity (CBD).

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

Fernanda F. C. Marques, Probio II Project Manager at FUNBIO

1. The National Biodiversity Mainstreaming and Institutional Consolidation Project (Probio II) proposed an innovative, challenging approach for promoting the adoption of biodiversity friendly practices and strategies by the productive sector in Brazil. It sought to foster cooperation and collaboration for effecting change in how businesses assessed and addressed biodiversity related issues in their everyday operations, at a time when dialog between the private sector and the environmental community was limited. In addition, project implementation coincided with the onset of the 2008 global financial crisis, a period during which the private sector became reluctant to make additional investments as the consequences of the crisis were not yet entirely clear. These factors impacted prospecting for private sector subprojects and, combined with the complex institutional arrangements and consequently long negotiation periods, delayed their implementation.

2. The restructuring of the Opportunities Fund, allowing for subprojects to continue beyond the project's closing date, was critical for the achievement of the project's objectives. Seven private sector subprojects were negotiated and are under implementation in 6 productive landscapes totaling almost 5 million hectares. These subprojects are catalyzing and scaling up successful initiatives, and provide examples of biodiversity mainstreaming strategies for various sectors. Based on partnerships between private sector companies, producers associations and governmental and non-governmental organizations, private sector subprojects often congregate multiple agendas, including cocoa production, tropical forestry, sugar cane production and biofuels, livestock, fisheries, non-timber forest products, sustainable and organic agriculture, rural tourism, wildlife health and digital inclusion. Despite being one of the main contributing factors for the delayed implementation of private sector subprojects, one of the positive outcomes of the often complex institutional arrangements was the establishment of a long term dialog between diverse stakeholders – companies, NGOs, government agencies and producers. These institutional arrangements are also generating considerable interest as a potential model to be replicated in other contexts.

3. The investment of GEF funds on private sector subprojects through the Opportunities Fund was critical for the successful achievement of the project's capitalization targets. Despite the requirement for a 3:1 co-financing ratio - by no means a trivial proportion -, subproject proponents perceived the Fund's investment as a risk reduction factor. In many cases this investment was also critical for allowing successful small scale initiatives to be expanded.

4. An important lesson learned, however, is that prospecting and negotiations involving multiple actors, especially when developing innovative approaches, will more often than not be a lengthy process, even under the best economic and financial scenarios. This should be taken into account when designing and/or implementing such projects in the future.

Annex 8. Comments of Cofinanciers and Other Partners/Stakeholders

Not applicable

Annex 9. List of Supporting Documents

Global Environment Facility, GEF-6 Programming Directions, (Extract from GEF Assembly Document GEF/A.5/07/Rev.01, May 22, 2014)

<http://www.biodiversidade.ciss.fiocruz.br/>

(http://www.funbio.org.br/wp-content/uploads/2014/11/ProbioII-Territ%C3%B3riosPotenciais_Funbio2.pdf)

<http://www.sibbr.gov.br/>

<http://www.icmbio.gov.br/sisbio/>

Ministério do Meio Ambiente, Projeto Nacional de Ações Integradas Público Privadas para a Biodiversidade (PROBIO II), Produto 3 – Versão Final do Relatório de Avaliação Independente (two reports), December 2014.

Ministério do Meio Ambiente, Fourth National Report to the Convention on Biological Diversity, COP-10 Special Edition, October 2010.

Ministério do Meio Ambiente, Fifth National Report to the CBD, January 2015.

World Bank, National Biodiversity Mainstreaming and Institutional Consolidation Project, Project Appraisal Document, Report No. 39011-BR dated February 23, 2007.

World Bank, National Biodiversity Mainstreaming and Institutional Consolidation Project, Implementation Status and Results Reports.

World Bank, Country Partnership Strategy for the Federative Republic of Brazil for the Period FY2012-2015, Report No. 63731-BR September 21, 2011

Annex 10: Project Institutional Arrangements

Component/Subcomponent	Recipient of Grant Proceeds ⁸	Transfer Mechanism	Executing Agency(ies)	Responsibility for M&E
Component 1: Mainstreaming Biodiversity into Selected Government and Economic Sectors				
1.1 Planning and Refinement of Public Sectoral Policies and Policy Instruments	CAIXA	CAIXA Cooperation Agreement	MMA	MMA
1.2 Sectoral Activities Incorporating Biodiversity Mainstreaming Applied at the National Level	CAIXA	CAIXA Cooperation Agreement and Public Sector Transfer Agreement (for Subprojects)	Project Beneficiaries ⁹ and Public Sector Sub-beneficiary ¹⁰ : MAPA MS ICMBio EMBRAPA	MMA
Component 2: Mainstreaming Biodiversity into the Private Sector				
2.1 Territorial Mainstreaming Subprojects	FUNBIO	Private Sector Transfer Agreement (for Subprojects)	Private Sector Sub-beneficiary	FUNBIO
2.2 Best Practices and Productive/Management Innovations	FUNBIO			FUNBIO
2.3 Coordination and Fund Management	FUNBIO		Opportunities Fund	FUNBIO
2.4 Project Administration, Evaluation, Dissemination,	FUNBIO	FUNBIO Cooperation		FUNBIO

⁸ The recipients were responsible for financial management, auditing, and ensuring the procurement requirements and other fiduciary functions were carried out as per the Trust Fund Grant Agreement.

⁹ Project beneficiaries, according to the Trust Fund Grant Agreement, included entities that executed Cooperation Agreements with CAIXA and FUNBIO, namely, MMA, MAPA, BIREME, MS, MCT, FIOCRUZ, *Instituto Chico Mendes*, Rio de Janeiro Botanic Garden, and EMBRAPA.

¹⁰ Public Sector Sub-beneficiaries, according to the Trust Fund Grant Agreement, included foundations, associations, non-governmental organization, universities, public sector companies, or public sector agencies, with legal personality, that would receive funding under a Public Sector Transfer Agreement

Coordination and Oversight under Component 2 of the Project ¹¹		Agreement with MMA		
Component 3: Institutional Strengthening and Generation of Biodiversity Information for Policymaking				
3.1 Institutional Strengthening	CAIXA	CAIXA Cooperation Agreement	Project Beneficiaries: MMA JBRJ ICMBio FIOCRUZ MS	MMA
3.2 Management of Biodiversity Information	CAIXA	CAIXA Cooperation Agreement and Public Sector Transfer Agreement (for Subprojects)	Project Beneficiaries and Public Sector Sub-beneficiary: MMA JBRJ ICMBio FIOCRUZ MCTI MS	MMA
Component 4: Project Coordination and Management				
4.1 Project administration, and Project Monitoring and Evaluation	CAIXA	CAIXA Cooperation Agreement	MMA	MMA
4.2 Information Dissemination and Communication Strategies	CAIXA	CAIXA Cooperation Agreement	MMA	MMA
4.3 Project Financial Administration ¹²	CAIXA	CAIXA Cooperation Agreement	CAIXA	MMA

¹¹ The Project Appraisal Document included this Subcomponent under Component 4 whereas the Trust Fund Grant Agreement presented it as a separate Subcomponent (2.4) under Component 2. This table follows the breakdown in the Trust Fund Grant Agreement in order to present clearly the institutional arrangements and obligations.

¹² The Project Appraisal Document included only two Subcomponents under Component 4 whereas the Trust Fund Grant Agreement presented an additional separate Subcomponent (4.3) under Component 4. This table follows the breakdown in the Trust Fund Grant Agreement in order to present clearly the institutional arrangements and obligations.

Annex 11: 2010 Convention on Biological Diversity Targets, and National Biodiversity Targets 2011-2020, Indicators

The Project's second PDO or Global Environmental Objective Indicator was: Progress toward the 2010 CBD targets for Brazil tracked by a strategy for monitoring selected indicators. Brazil had defined 51 national biodiversity targets for 2010, developed under a broad participatory process, that were even more ambitious than the global targets. Notable progress was obtained for most of the national targets and the Project contributed to the achievement of 21 of these. The National 2010 Biodiversity Targets, progress in achievement, and support by the Project are presented in the table below:

National 2010 Biodiversity Target	Target Achieved ¹⁴	Target Support ed by Project	Project Beneficiaries that Supported Achievements through Project Activities
Component 1 – Knowledge on Biodiversity			
1.1 An expanded and accessible list of formally described species of Brazilian plants and vertebrates, and of invertebrates and micro-organisms, these possibly selectively developed, in the form of permanent databases	*****	✓✓✓	ICMBio, JBRJ, MCTI
1.2 National Taxonomy Program established, aiming at a 50% increase in scientific records with an emphasis on new species descriptions	***	✓	JBRJ
1.3 Virtual Brazilian Biodiversity Institute created and the expansion of the Biodiversity Research Program (PPBIO) from the Amazon and the <i>Caatinga</i> to the remaining biomes in order to	**	✓✓	MMA, JBRJ

¹³ Brazil Fourth National Report to the Convention on Biological Diversity, Ministry of the Environment, Secretariat of Biodiversity and Forest, Office of the National Program for Biodiversity Conservation, October 2010.

¹⁴ ***** Indicates a fully achieved target; **** indicates significant progress; *** indicates not achieved, but with important progress; ** indicates not achieved, but with some progress; * indicates insignificant or no progress, and ND indicates insufficient information to reach a conclusion on achievement status.

increase availability of information on biodiversity			
Component 2 – Biodiversity Conservation			
2.1 At least 30% of the Amazon biome and 10% of the remaining biomes and the coastal and marine zone effectively conserved through protected areas within the National Protected Areas System (SNCU)	****		
2.2 Protection of biodiversity guaranteed in at least 2/3 of the Priority Areas for Biodiversity by means of SNUC Protected Areas, Indigenous Lands, and <i>Quilombola</i> Territories	***		
2.3 Temporary or permanent no-fishing zones, to protect fish stocks and integrated with protected areas, comprising 10% of the marine zone	**		
2.4 All species officially recognized as threatened with extinction in Brazil as object of action plans and active advisory groups	**	✓✓	ICMBio, JBRJ
2.5 100% of threatened species effectively conserved in protected areas.	***		
2.6 25% reduction in the annual rate of increase of threatened species of fauna on the National List and de-listing of 25% of species currently on the National List	**		
2.7 A preliminary national-level assessment of the conservation status of all known plant and vertebrate species and a selective assessment of invertebrate species	**	✓✓✓	ICMBio, JBRJ, FIOCRUZ
2.8 60% of threatened plant species conserved in <i>ex situ</i> collections and 10% of threatened plant species included in recovery and restoration programs	**	✓	JBRJ
2.9 60% of migratory species		✓	ICMBio

are the object of action plans and 30% of these have conservation programs implemented	**		
2.10 70% of the genetic diversity of socio-economically valuable cultivated or exploited wild plant species and associated indigenous and local knowledge maintained	**	✓	Embrapa
2.11 50% of priority species under the Plants for the Future Project conserved <i>in situ</i> and on-farm	**	✓	Embrapa
2.12 60% of the genetic diversity of Brazilian wild relatives of cultivated plant species of the ten priority genera effectively conserved <i>in situ</i> and/or <i>ex situ</i>	**	✓	Embrapa
2.13 Capacity of ecosystems within Priority Areas for Biodiversity to deliver goods and services maintained or increased	***	✓✓✓✓	MAPA, Embrapa, FIOCRUZ, FUNBIO
2.14 Significant increase in actions to support <i>on-farm</i> conservation of the components of agro-biodiversity that ensure maintenance of sustainable livelihoods, local food security and health care, especially for local communities and indigenous peoples	**	✓✓✓	MAPA, Embrapa, FIOCRUZ
Component 3 – Sustainable Use of biodiversity components			
3.1 30% of non-timber plant products obtained from sustainably managed sources	**	✓✓	MAPA, Embrapa
3.2 Recovery of at least 30% of main fish stocks through participative management and capture control	*		
3.3 40% of the area in the Amazon under forest management plans certified	***		
3.4 80% of Extractive Reserves and Sustainable Development Reserves benefit	**		

from sustainable management of fauna and flora species important for food or economically, with management plans prepared and implemented			
3.5 80% reduction in unsustainable consumption of fauna and flora resources in sustainable development protected areas	ND		
3.6 No species of wild fauna or flora endangered by international trade in accordance with CITES provisions	***		
3.7 Significant reduction in illegal trade in fauna and flora species within Brazil	**	✓	FUNBIO
3.8 80% increase in innovation and added value for new biodiversity-based products	**	✓✓	MAPA, Embrapa
3.9 80% increase in new sustainable uses of biodiversity in medicine and foods leading to marketable products	**	✓✓	MAPA, Embrapa
3.10 Significant increase in detection control and repression of bio-piracy	**		
3.11 Significant increase of investment in studies, projects, and research on sustainable use of biodiversity	****	✓✓✓	Embrapa, ICMBio, FUNBIO
3.12 80% increase in the number of patents deriving from components of biodiversity	****		
3.13 Support of the Commission for Coordination of Ecological and Economic Zoning for the preparation and conclusion of ecological and economic zoning plans for at least 50% of Brazilian states	***		
Component 4 - Monitoring, assessment, prevention and mitigation of impacts on biodiversity			
4.1 100% reduction in the rate of deforestation in the Atlantic Forest biome, 75% in the Amazon	***	✓	FUNBIO

biome and 50% in the remaining biomes			
4.2 Overall reduction of 25% in the number of fires (heat sources) in each biome	*****		
4.3 Creation and consolidation of a systematic and standardized nation-wide biodiversity monitoring network	**	✓✓✓✓	MMA, ICMBio, FIOCRUZ, MCTI
4.4 Actions plans for prevention and control prepared for all species listed under the National Assessment of Alien Invasive Species	**	✓✓	FIOCRUZ, MCTI
4.5 Management plans implemented for the control of at least 25 of the principal invasive exotic species that threaten ecosystems, habitats or species in Brazil	*	✓✓	FIOCRUZ, MCTI
4.6 50% of sources of water and soil pollution and their impacts on biodiversity controlled	**		
4.7 Support to biogeographic studies to include the predictability of species occurrence associated with potential climate changes using Geographic Information System	**	✓	FIOCRUZ
Component 5 - Access to genetic resources, associated traditional knowledge and benefit sharing			
5.1 All public policies relevant to traditional knowledge implemented in accordance with Article 8(j) of the CBD	**		
5.2 Knowledge, innovations and practices of indigenous peoples and traditional communities protected	**		
5.3 100% of scientific and general publications deriving from access to traditional knowledge identify the origin of the traditional knowledge	ND		
5.4 100% of cases of access to traditional knowledge include	*		

prior informed consent, obligatory sharing of knowledge generated and sharing of benefits with knowledge holders			
5.5 Access and benefit sharing legislation, consistent with the CBD, approved by the National Congress and implemented and 100% of access and shipment activities conform to national legislation	**		
5.6 Benefits resulting from commercial utilization of genetic resources effectively shared fairly and equitably in support of biodiversity conservation	*		
5.7 100% of applications for patents on inventions of products or processes deriving from access to genetic resources and associated traditional knowledge include identification of origin and proof of authorized access	ND		
5.8 Sharing of benefits in accordance with the International Treaty on Plant Genetic Resources for Food and Agriculture implemented in Brazil	*		
Component 6 - Education, public awareness, information and outreach on biodiversity			
6.1 Inclusion of the importance of biological diversity and the need for its conservation, sustainable use and benefit sharing in communication, education and public awareness programs	**	✓✓✓	MAPA, FIOCRUZ, MCTI
6.2 Increased access to high quality information on conservation, sustainable use and sharing of benefits on biodiversity	**	✓✓✓	MAPA, FIOCRUZ, MCTI
6.3 Establishment and strengthening of action networks for the conservation, sustainable use and sharing of benefits of biodiversity	**	✓✓✓	Embrapa, FIOCRUZ, MCTI

Component 7 - Increased legal and institutional capacity for biodiversity management			
7.1 New and additional financial resources, from public and private, domestic and international sources obtained and available for use in Brazil making possible the effective implementation of its commitments to the CBD programs of work, in accordance with Article 20	**		
7.2 Implementation of initiatives that promote the transfer to Brazil of environmentally sustainable technologies developed in other countries for the effective implementation of the CBD programs of work, in accordance with Article 20, paragraph 4, and Article 16	**	✓	JBRJ
7.3 Promotion of the exchange and transfer of environmentally sustainable technologies between developing countries for the effective implementation of the CBD programs of work, in accordance with Article 20, paragraph 4 and Article 16	***	✓✓	JBRJ, FIOCRUZ

In addition, the Project contributed to several activities in support of the National Biodiversity Targets 2011-2020, as presented in the table below:

National Biodiversity Target	Targets Supported by Project
Strategic Objective A – Address the underlying causes of biodiversity loss by mainstreaming biodiversity considerations across government and society	
National Target 1: By 2020, at the latest, Brazilian people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably	✓
National Target 2: By 2020, at the latest, biodiversity values, geo-diversity values, and socio-diversity values have been integrated into national and local development and poverty reduction and inequality reduction strategies, and are being incorporated into national accounting, as appropriate, and into planning procedures and reporting systems	✓
National Target 3: By 2020, at the latest, incentives harmful to biodiversity, including so-called perverse subsidies, are eliminated, phased out or reformed in order to minimize negative impacts. Positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the CBD, taking into account national and regional socio-economic conditions.	
National Target 4: By 2020, at the latest, governments, private sector and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption to mitigate or prevent negative impacts from the use of natural resources	✓
Strategic Objective B – Reduce the direct pressures on biodiversity and promote sustainable use	
National Target 5: By 2020, the rate of loss of native habitats is reduced by at least 50% (in comparison with the 2009 rate) and, as much as possible, brought close to zero, and degradation and fragmentation is significantly reduced in all biomes	
National Target 6: By 2020 all stocks of any aquatic organism are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overharvesting is avoided, recovery plans and measures are in place for depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems, and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits, when scientifically established	
National Target 7: By 2020 the incorporation of sustainable management practices is disseminated and promoted in agriculture, livestock production, aquaculture, silviculture, extractive activities, and forest and fauna management, ensuring conservation of biodiversity	✓
National Target 8: By 2020, pollution, including from excess nutrients,	

has been brought to levels that are not detrimental to ecosystem function and biodiversity	
National Target 9: By 2020, the National Strategy on Invasive Alien Species is fully implemented, with the participation and commitment of states and the elaboration of a National Policy, ensuring the continuous and updated diagnosis of species and the effectiveness of Action Plans for Prevention, Contention and Control	
National Target 10: By 2015, the multiple anthropogenic pressures on coral reefs, and other marine and coastal ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning	✓
Strategic Objective C – To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity	
National Target 11: By 2020, at least 30% of the Amazon, 17% of each of the other terrestrial biomes, and 10% of the marine and coastal areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through protected areas such as Permanent Protection Areas, legal reserves, and indigenous lands with native vegetation, ensuring and respecting the demarcation, regularization, and effective and equitable management, so as to ensure ecological interconnection, integration and representation in broader landscapes and seascapes	
National Target 12: By 2020, the risk of extinction of threatened species has been significantly reduced, tending to zero, and their conservation status, particularly of those most in decline, has been improved	✓
National Target 13: By 2020, the genetic diversity of microorganisms, cultivated plants, farmed and domesticated animals and of wild relatives, including socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing the loss of genetic diversity	✓
Strategic Objective D – Enhance the benefits to all from biodiversity and ecosystem services	
National Target 14: By 2020, ecosystems that provided essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, traditional peoples and communities, indigenous peoples and local communities, and the poor and vulnerable	✓
National Target 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced through conservation and restoration actions, including restoration of at least 15% of degraded ecosystems, prioritizing the most degraded biomes, hydrographic regions and ecoregions, thereby contributing to climate change mitigation and adaptation and to combating desertification	
National Target 16: By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national	

legislation	
Strategic Objective E – Enhance the implementation through participatory planning, knowledge management and capacity building	
National Target 17: By 2014, the national biodiversity strategy is updated and adopted as policy instrument, with effective, participatory and updated actions plans, which foresee periodic monitoring and evaluation	✓
National Target 18: By 2020, the traditional knowledge, innovations and practices of indigenous peoples, family rural producers and traditional communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, in accordance with their uses, customs and traditions, national legislation and relevant international commitments, and fully integrated and reflected in the implementation of the CBD, with the full and effective participation of indigenous peoples, family rural producers and traditional communities, at all relevant levels	
National Target 19: By 2020, the science base and technologies necessary for enhancing knowledge on biodiversity, its values, functioning and trends, and the consequences of its loss, are improved and shared, and the sustainable use of biodiversity, as well as the generation of biodiversity-based technology and innovation are supported, duly transferred and applied. By 2017, the complete compilation of existing records on aquatic and terrestrial fauna, flora and microbiota is finalized and made available through permanent and open access databases, with specificities safeguarded, with a view to identify knowledge gaps related to biomes and taxonomic groups	✓
National Target 20: Immediately following the approval of the Brazilian targets, resources needs assessments are carried out for the implementation of national targets, followed by the mobilization and allocation of financial resources to enable, from 2015 on, the implementation and monitoring of the Strategic Plan for Biodiversity 2011-2020, as well as the achievement of its targets.	

