# Document of The World Bank

Report No: ICR2232

# IMPLEMENTATION COMPLETION AND RESULTS REPORT (IDA 36072-NI/HN; TF-56599)

#### ON A

GRANT FROM THE GLOBAL ENVIRONMENT FACILITY

TRUST FUND IN THE AMOUNT OF US\$12.0 MILLION TO THE

CENTRAL AMERICAN COMMISSION ON ENVIRONMENT AND
DEVELOPMENT

TO

NICARAGUA/HONDURAS FOR A
CORAZON TRANSBOUNDARY BIOSPHERE RESERVE PROJECT

December 15, 2013

Environmentally and Socially Sustainable Development

Central America Country Management Unit

Latin America and the Caribbean Region

### **CURRENCY EQUIVALENTS**

(Exchange Rate Effective June 13, 2006) Currency Unit = Lempiras, Cordobas and Quetzales

> 19.7 Lempiras = \$1 17.9 Córdobas = \$1 8.0 Quetzales = \$1

#### RECIPIENT'S FISCAL YEAR

January 1 - December 31

(Exchange Rate Effective 04/24/2013)

Currency Unit = Córdobas, Lempiras Córdobas 1.00 = US\$ 0.040 Lempiras 1.00 = US\$ 0.052 US\$ 1.00 = 24.7500 NIO US\$ 1.00 = 19.3574 HNL

FISCAL YEAR
January 1 - December 31

#### ABBREVIATIONS AND ACRONYMS

ATP-I1 Second Agricultural Technology Project, World Bank, Nicaragua

BNC BOSAWAS National Commission BTA Biosphere Tawahka Asangni CAS Country Assistance Strategy

CCAD Comisión Centroamericana de Ambiente y Desarrollo (Central

American Commission on Environment and Development)

CONADETI Comisión Nacional de Demarcación y Titulación (National

Commission for Demarcation and Titling), Nicaragua

CTBR Corazón Transboundary Biosphere Reserve

DAF Department of Financial Administration (MARENA)

EA Environmental Assessment

EOP End of Project

FAPVS Fund for Protected Areas and Wildlife of Honduras (Fondo

Ambiental de Areas Protegidas y Vida Silvestre, FAPVS)

GEF Global Environment Facility

IBRD International Bank for Reconstruction and Development (WB

Group)

IDB Inter-American Development Bank

INA Instituto Nacional Agrario (National Agrarian Institute), Honduras

INTA National Institute for Agricultural Technology, Nicaragua

M&E Monitoring and evaluation

MARENA Ministry Agriculture, Livestock, and Forestry, Nicaragua

MBC Mesoamerican Biological Corridor NGO Nongovernmental organization

OP Operational Program (GEF) or Operational Policy (World Bank)

PAAR Rural Land Management Project, Honduras

PATH Proyecto de Administración de Tierras de Honduras (Land

Administration Project), Honduras

PBPR Forests and Rural Productivity Project, Honduras

PCU Project Coordination Unit

PDF-B Project Development Facility Block B Grant (GEF preparatory

grant)

PDO Project development objective PIU Project Implementation Unit

PNP Patuca National Parc (*Parque Nacional Patuca*)

PROARCA Program Assessment of the Regional Environmental Program
PRODEP Proyecto de Ordenamiento de la Propiedad (Land Administration

Project), Nicaragua

PRORURAL Rural sector SWAP of Nicaragua

RAAN Autonomous Region of the North Atlantic RAAS Autonomous Region of the South Atlantic

RBB BOSAWAS Biosphere Reserve (Reserva Biosfera de BOSAWAS)
RBRP Rio Plátano Biosphere Reserve (Reserva Biosfera Rio Plátano)
SEPCA Secretaria de la Presidencia para Asuntos de la Costa Atlántica

(Presidential Secretariat for Atlantic Coast Affairs), Nicaragua

SERNA Secretariat of Natural Resources and the Environment, Honduras

SETAB Technical Secretariat for BOSAWAS of MARENA

SICAP Central American System of Protected Areas

SINAP National Protected Areas System

SINIA National Environmental Information System

UNESCO United Nations Educational, Scientific and Cultural Organization

Vice President: Hasan Tuluy

Country Director: Carlos Felipe Jaramillo

Acting Sector Manager: Emilia Battaglini
Project Team Leader: Catalina Marulanda
ICR Team Leader Catalina Marulanda

# CENTRAL AMERICAN COMMISSION ON ENVIRONMENT AND DEVELOPMENT

# FOR THE NICARAGUA AND HONDURAS CORAZON TRANSBOUNDARY BIOSPHERE RESERVE PROJECT

### **CONTENTS**

Data Sheet	
A. Basic Information	
B. Key Dates	
C. Ratings Summary	
D. Sector and Theme Codes	
E. Bank Staff	
F. Results Framework Analysis	
G. Ratings of Project Performance in ISRs	
H. Restructuring	
I. Disbursement Graph	
1. Project Context, Global Environment Objectives and Design	1
2. Key Factors Affecting Implementation and Outcomes	5
3. Assessment of Outcomes	
4. Assessment of Risk to Development Outcome	17
5. Assessment of Bank and Borrower Performance	18
6. Lessons Learned	
7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners	22
Annex 1. Project Costs and Financing	
Annex 2. Outputs by Component	
Annex 3. Economic and Financial Analysis	
Annex 4. Bank Lending and Implementation Support/Supervision Processes	
Annex 5. Beneficiary Survey Results	
Annex 6. Stakeholder Workshop Report and Results	
Annex 7. Summary of Borrower's ICR and/or Comments on Draft ICR	86

A. Basic Information	on		
Country:	Central America	Project Name:	Corazon Transboundary Biosphere Reserve Project
Project ID:	P085488	L/C/TF Number(s):	TF-56599
ICR Date:	12/03/2013	ICR Type:	Core ICR
Lending Instrument:	SIL	Borrower:	CCAD
Original Total Commitment:	USD 12.00M	Disbursed Amount:	USD 11.78M
Revised Amount:	USD 12.00M		
<b>Environmental Cates</b>	gory: B	Global Focal Area: I	3

# **Implementing Agencies:**

Ministry of Environment and Natural Resources (MARENA)

SERNA (Sec. of Environment and Natural Resources)

# **Cofinanciers and Other External Partners:**

B. Key Dates				
Process	Date	Process	Original Date	Revised / Actual Date(s)
Concept Review:	01/14/2004	Effectiveness:	12/18/2006	11/22/2006
Appraisal:	03/16/2006	Restructuring(s):		10/07/2011
Approval:	06/13/2006	Mid-term Review:	10/11/2010	10/18/2010
		Closing:	08/01/2012	12/15/2012

C. Ratings Summary	
C.1 Performance Rating by ICR	
Outcomes:	Moderately Unsatisfactory
Risk to Global Environment Outcome	Substantial
Bank Performance:	Moderately Unsatisfactory
Borrower Performance:	Moderately Unsatisfactory

C.2 Detailed Ratings of Bank and Borrower Performance				
Bank	Ratings	Borrower	Ratings	
Quality at Entry:	Moderately Unsatisfactory	Government:	Moderately Unsatisfactory	
Quality of Supervision:	Moderately Unsatisfactory	Implementing Agency/Agencies:	Moderately Unsatisfactory	
Overall Bank Performance:	Moderately Unsatisfactory	Overall Borrower Performance:	Moderately Unsatisfactory	

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):	Yes	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	37	37		
Forestry	22	22		
General agriculture, fishing and forestry sector	23	23		
Other social services	6	6		
Sub-national government administration	12	12		
Theme Code (as % of total Bank financing)				
Biodiversity	33	33		
Environmental policies and institutions	17	17		
Indigenous peoples	33	33		
Other rural development	17	17		

E. Bank Staff		
Positions	At ICR	At Approval
Vice President:	Hasan A. Tuluy	Pamela Cox
Country Director:	Carlos Felipe Jaramillo	Jane Armitage
Sector Manager:	Emilia Battaglini	Abel Mejia
Project Team Leader:	Catalina Marulanda	Douglas J. Graham
ICR Team Leader:	Catalina Marulanda	
ICR Primary Author:	Catalina Marulanda	
	Gherda Cleofe Barreto Cajina	

#### F. Results Framework Analysis

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

The project development objective (PDO) of the proposed project is to improve the national and binational management of the area of the proposed Corazon Transboundary Biosphere Reserve (CTBR), respecting the rights of traditional populations.

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

The project development objective (PDO) of the proposed project is to improve the national management of the area of the proposed Corazon Transboundary Biosphere Reserve (CTBR), respecting the rights of traditional populations.

#### (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 :	Targeted protected areas ( conservation outcomes, w PROARCA and GEF Trace	ith a rating of 2 (Re		
Value (quantitative or Qualitative)	Nicaragua: Fair (56%) in RBB Honduras: Good (51%) RBRP; Poor (37.5%) PNP; Good (63%) BTA Tracking Tool: RBRP 51.11%, BTA 47.31%, PNP 45% and RBB 42.41%.	Honduras and Nicaragua: Fair (75%)	Improved management effectiveness in the 4 protected areas.  Regular in Nicaragua (51-75%); Regular in Honduras (51-70%)	Honduras - Average: Fair (62.0%): (64.3%) RBRP -Fair; (54.5%) PNP-Fair; (67.3) BTA-Fair  Nicaragua Average Good/ Fair: RBB - Fair (60.0%) and Indigenous territories - Good (61%)
Date achieved	05/22/2006	06/14/2006	09/02/2011	12/14/2012
Comments (incl. % achievement)	100%			
Indicator 2 :	Increased participation by Honduras respectively, en management plans in orde	gaging in sustainab	le conservation	activities related to
Value (quantitative or Qualitative)	Honduras: 0 Nicaragua: 0	Honduras and Nicaragua: 75%	Honduras: 60% Nicaragua: 60%	Honduras: 89% Nicaragua: 70%
Date achieved	05/22/2006	06/14/2006	09/02/2011	12/14/2012
Comments	100%			

(incl. %				
achievement)				
Indicator 3 :	At least 8 institutionalized participatory management processes and policy instruments consistent with protected areas management plans developed in Nicaragua and Honduras, respectively			
Value (quantitative or Qualitative)	Participatory management processes and policy instruments in the reserve not standardized or institutionalized in Honduras or Nicaragua		Honduras: 8 instruments Nicaragua: 8 instruments	Honduras: 17 instruments Nicaragua: 8 instruments
Date achieved	05/22/2006	06/14/2006	09/02/2011	12/14/2012
Comments (incl. % achievement)	100%			

# (b) Intermediate Outcome Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Target Years
Indicator 1:	Update of 1 and 3 manage Nicaragua and Honduras,		ected Areas wit	hin the CTBR in
Value (quantitative or Qualitative)	Management plans had not been updated for several years.	NA		Management Plans Nicaragua: 1 Management Plan
Date achieved	05/22/2006	06/14/2006	09/02/2011	12/14/2012
Comments (incl. % achievement)	100%			
Indicator 2 :	22 and 10 protected area n strengthened in Nicaragua			eveloped, updated or
Value (quantitative or Qualitative)	No management policies or instruments developed or updated for protected areas management in Nicaragua or Honduras	NA	22 and 10 protected area management policies/ instruments developed, updated or strengthened	Honduras: 25 Nicaragua: 22

Date achieved	09/02/2011	06/14/2006	in Nicaragua and Honduras, respectively 09/02/2011	12/14/2012
Comments (incl. % achievement)	100%			
Indicator 3 :	Overall effectiveness ratin (SINAPs) based on the and PROARCA system improve	nual country repo		•
Value (quantitative or Qualitative)	Honduras Average Poor (44.6%): RBRP - Poor (49.6%); PNP - Poor (37.5%); BTA - Poor(47.6).  Nicaragua: Average - Fair (55.9%)	Overall effectiveness rating of the two National Protected Areas System (SINAPs) 5%); BTA - r(47.6).  NA based on the annual count reports to CCAD's		Honduras Average - Fair (62.0%): RBRP - Fair (64.3%); PNP - Fair (54.5%); BTA - Fair (67.3).  Nicaragua Average - Good/ Fair: RBB - Fair (60.0%) and Indigenous territories - Good (61%)
Date achieved	09/02/2011	06/14/2006	09/02/2011	12/14/2012
Comments (incl. % achievement)	100%		'	
Indicator 4 :	Technical proposal for fut endorsed by national gove	•	•	CO elaborated, and
Value (quantitative or Qualitative)	Technical proposal not prepared or endorsed by governments or indigenous groups	NA	Technical proposal for future recognition of CTBR by UNESCO elaborated, and endorsed by national governments and indigenous groups.	Binational technical document elaborated. In Nicaragua the nomination form was signed by the 7 indigenous territories representatives. In Honduras the nomination was signed by Mayor of municipalities.
Date achieved	09/02/2011	06/14/2006	09/02/2011	12/14/2012
Comments (incl. % achievement)	100%			

Indicator 5 :	Functioning of a Protected set in the grant agreement			
Value (quantitative or Qualitative)	Honduras: Protected Areas Fund established	NA	Functioning of a Protected Areas Fund for Honduras, according to the guidelines set in the grant agreement, with a transfer of funds from GEF	Transfer of GEF funds to Protected
Date achieved	09/02/2011	06/14/2006	09/02/2011	12/14/2012
Comments (incl. % achievement)	100%			
Indicator 6 :	Action Plan for the manag Fund for Nicaragua develo			
Value (quantitative or Qualitative)	Protected Areas Fund for Nicaragua not established; Action Plan not developed.	NA	Agreement and development of next steps with other key organizations and ministries in order to prepare for the future establishment of the Protected Areas Fund for Nicaragua	developed and agreed with relevant authorities
Date achieved	09/02/2011	06/14/2006	09/02/2011	12/14/2012
Comments (incl. % achievement)	100% At least 1 and 3PAs streng	othened managemen	nt and protection	with a rating of 2
Indicator 7 :	(Regular) as measured by and Honduras, respectivel	the PROARCA and y		Tool in Nicaragua
Value (quantitative or Qualitative)	Honduras Average Poor (44.6%): RBRP - Poor (49.6%); PNP - Poor (37.5%); BTA - Poor (47.6). Nicaragua Average Regular (55.9%)	Improved management effectiveness in the 4 protected areas.  Fair in Nicaragua (51-75%); Fair in Honduras (51-	Honduras: Fair (51-70%) Nicaragua: Fair (51-70%)	Honduras Average Fair (62.0%): RBRP - Fair (64.3%); PNP - Fair (54.5%); BTA - Fair (67.3) Nicaragua Average Good/Regular:

		70%)		RBB - FAir (60.0%) and Indigenous territories - Good (61%)
Date achieved	09/02/2011	06/14/2006	09/02/2011	12/14/2012
Comments (incl. % achievement)	100%			
Indicator 8 :	Rate of deforestation in the results linked to activities			n annual basis and
Qualitative)	No measurements of deforestation rate for Bosawas	NA	baseline, and data used as input for activities of Bosawas Management Plan	Nicaragua: 0.3% annual rated for the monitoring period 1987-2012
Date achieved	09/02/2011	06/14/2006	09/02/2011	12/14/2012
Comments (incl. % achievement)	100% At least 1,500 targeted far			
Indicator 9 :	successfully implement su Honduras, respectively	ibprojects with cons	servation benefi	ts in Nicaragua and
Qualitative)	No families prepared or implemented subprojects with conservation benefits in Nicaragua or Honduras	NA	At least 1,500 targeted families in Honduras and 4,500 in Nicaragua prepare and successfully implement subprojects with conservation benefits in Nicaragua and Honduras, respectively	
Date achieved	09/02/2011	06/14/2006	09/02/2011	12/14/2012

Comments (incl. % achievement)	100%							
Indicator 10:		Regularization of 7 and 6 manuals for participatory management processes in protected areas in Nicaragua and Honduras, respectively						
Value (quantitative or Qualitative)	Participatory management processes in the reserve not standardized or institutionalized in Honduras or Nicaragua.	NA	Honduras: 6 Nicaragua: 7	Honduras: 6 Nicaragua: 7				
Date achieved	09/02/2011	06/14/2006	09/02/2011	12/14/2012				
Comments (incl. % achievement)	100%							
Indicator 11 :	1,600 and 1,000 hectares, zone under rehabilitation/							
Value (quantitative or Qualitative)	Participatory management processes in the reserve not standardized or institutionalized in Honduras or Nicaragua. 0 hectares, in Nicaragua and Honduras, in the CTBR zone under rehabilitation/protection and sustainable use by local communities	NA	Honduras: 1,000 Nicaragua: 1,600	Honduras: 4,115 Nicaragua: 3,090				
Date achieved	09/02/2011	06/14/2006	09/02/2011	12/14/2012				
Comments (incl. % achievement)	100%							
Indicator 12 :	At least 20% and 30% of Nicaragua and Honduras,		ies executing sul	oprojects in				
Value (quantitative or Qualitative)	0% of women beneficiaries executing subprojects in Nicaragua and Honduras	NA	Honduras: 30% Nicaragua: 20%	Honduras: 35% Nicaragua: 54%				
Date achieved	09/02/2011	06/14/2006	09/02/2011	12/14/2012				
Comments (incl. % achievement)	100%							
Indicator 13:	At least 85% and 50% ind Nicaragua and Honduras,		ties benefiting fi	rom subprojects in				
Value (quantitative or Qualitative)	No indigenous communities benefiting from subprojects in Nicaragua or Honduras	NA	Honduras: 50% Nicaragua: 85%	Honduras: 81% Nicaragua: 89%				
Date achieved	09/02/2011	06/14/2006	09/02/2011	12/14/2012				
Comments	100%							

(incl. %						
(inci. % achievement)						
Indicator 14:	Capacity building/ institut building	ional strengthening	/ consultation a	nd consensus		
Qualitative)	No workshops given for indigenous or non-indigenous communities in Nicaragua or Honduras on sustainable management and conservation of the CTBR		70 indigenous workshops)  Nicaragua: 140 (60 non- indigenous workshop and 80 indigenous workshops)	Honduras: 267 (177 non-indigenous workshop and 90 indigenous workshops) Nicaragua: 140 (60 non-indigenous workshop and 80 indigenous workshops)		
Date achieved	09/02/2011	06/14/2006	09/02/2011	12/14/2012		
Comments (incl. % achievement)	100%					
Indicator 15 :	At least 75 and 60 grants genvironmental science, and Honduras, respectively		•			
Value (quantitative or Qualitative)	No grants given to local individuals for study of conservation, environmental science, and protected areas management in Nicaragua and Honduras,	NA	Honduras: 60 Nicaragua:75	Honduras: 158 Nicaragua:75		
Date achieved	· · · · · · · · · · · · · · · · · · ·	06/14/2006	09/02/2011	12/14/2012		
Comments (incl. % achievement)	100%	1	1	1		
Indicator 16 :	In Nicaragua, % of field d programs that are integrate from 5% to 75% by end of	ed into coordinated				
Value (quantitative or Qualitative)	5%	75% of field data from biological and socioeconomic monitoring programs integrated into coordinated and accessible database.	75%	95%		
	The state of the s	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
Date achieved	05/22/2006	06/14/2006	09/02/2011	12/14/2012		

(incl. % achievement)				
Indicator 17 :	In Honduras, establishmer public.	nt of a website with	biodiversity da	ta accessible to the
Value (quantitative or Qualitative)	No website or system to publish biodiversity data available.	NA	Establishment of a website with biodiversity data accessible to the public in Honduras.	datahase
Date achieved	09/02/2011	06/14/2006	09/02/2011	12/14/2012
Comments (incl. % achievement)	100			
Indicator 18 :	In Honduras, establishment protected areas, to be monthle future		and biodiversi	ty indicators for
Value (quantitative or Qualitative)	Indicators for protected areas have not been established.	NA	Honduras: Establishment of indicators for protected areas, to be monitored in the future	Honduras: socioeconomic and biodiversity indicators for protected areas and the monitoring program were established
Date achieved	09/02/2011	06/14/2006	09/02/2011	12/14/2012
Comments (incl. % achievement)	100%			
Indicator 19 :	At least 6 research studies by CCAD in conjunction			
Value (quantitative or Qualitative)	1 study on the "Knowledge of the Mayangna People, Man's Coexistence with Nature" completed in alliance with UN conducted by CCAD.		priority management issues in the CTBR conducted by CCAD in conjunction	7 studies completed
Date achieved	05/22/2006	06/14/2006	09/02/2011	12/14/2012
Comments (incl. % achievement)	100%			

Indicator 20 :	indicator of ecological condition of the Reserve							
Value (quantitative or Qualitative)	NA	NA	Jaguar Population measured through research and monitoring on jaguars in the CTBR led by CCAD in conjunction with the Jaguar Corridor Program	CCAD: 0 - National PIUs established contact with academic and research institutes working in the protected areas of the Project that were monitoring jaguar populations. These institutions provided 3 monitoring studies of jaguars.				
Date achieved	05/22/2006	06/14/2006	09/02/2011	12/14/2012				
Comments (incl. % achievement)	Partially completed by Na	tional Country tean	ns, not by CCAl	D				
Indicator 21 :	Project management syste according to World Bank CCAD requirements. To be disbursement reports, etc	rules and national a	and	uch as audits,				
Value (quantitative or Qualitative)	NA	Satisfactory	Satisfactory	Satisfactory Nicaragua and CCAD. Honduras final documentation pending				
Date achieved	05/22/2006 06/14/2006 09/02/2011 12/14/2012							
Comments (incl. % achievement)	Achieved partially.			,				

# **G. Ratings of Project Performance in ISRs**

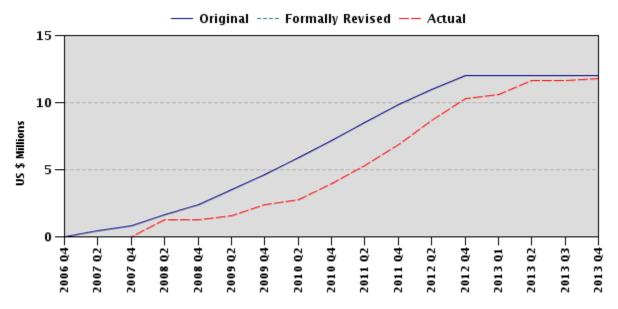
No.	Date ISR Archived	GEO	IP	Actual Disbursements (USD millions)
1	08/22/2006	Satisfactory	Satisfactory	0.00
2	03/29/2007	Satisfactory	Satisfactory	0.00
3	10/12/2007	Satisfactory	Moderately Unsatisfactory	1.24
4	06/17/2008	Moderately Unsatisfactory	Moderately Unsatisfactory	1.24
5	12/18/2008	Unsatisfactory	Unsatisfactory	1.57
6	04/18/2009	Unsatisfactory	Unsatisfactory	2.23

7	09/24/2009	Unsatisfactory	Unsatisfactory	2.58
8	03/01/2010	Moderately Unsatisfactory	Unsatisfactory	3.04
9	04/26/2010	Moderately Unsatisfactory	Unsatisfactory	3.30
10	02/14/2011	Moderately Unsatisfactory	Unsatisfactory	5.50
11	08/13/2011	Moderately Unsatisfactory	Moderately Unsatisfactory	7.29
12	12/03/2011	Satisfactory	Moderately Satisfactory	8.00
13	06/11/2012	Satisfactory	Satisfactory	9.89
14	12/29/2012	Satisfactory	Satisfactory	11.64

# H. Restructuring (if any)

	Restructuring	Board	ISR Ra Restru	0	Amount Disbursed at	Reason for Restructuring &
	Data(c)	Approved GEO Change	GEO	IP	Restructuring in USD millions	Key Changes Made
ľ	10/07/2011		S	MS	7.90	

# I. Disbursement Profile



#### 1. Project Context, Global Environment Objectives and Design

#### 1.1 Context at Appraisal

- 1. The Corazón Transboundary Biosphere Reserve (CTBR), the "Corazón Reserve" is the largest remaining area of humid tropical forest in Central America, located at the "heart" of the Mesoamerican Biological Corridor (MBC), straddling Nicaragua and Honduras. This area harbors many threatened and endangered species that require large intact areas of pristine forest to survive, such as Harpy eagles, jaguars, and tapirs. With natural areas increasingly fragmented in Mesoamerica, the Corazón Reserve is the last refuge for many species in the region dependent on large areas.
- 2. The Project area spanned 34,595 km² (3.46 million ha) along the Honduras-Nicaragua border, and encompassed four established protected areas: the BOSAWAS Biosphere Reserve in Nicaragua (20,008 km² or 2.0 million ha), and in Honduras, the Tawahka Asagni Indigenous Reserve, the Patuca National Park, and the Río Plátano Biosphere Reserve (with a combined total of 14,587 km² or 1.46 million ha). The CTBR is home to approximately 70,000 indigenous peoples from five ethnic groups including the Tawahka, Mayangna, Pech, Garifuna, and Miskito peoples. Roughly the same number of *mestizo* settlers also live in the Reserve.
- 3. The existence of protected areas has not been sufficient to protect the ecosystems and populations within the Reserve from encroaching threats. The National Protected Areas Systems (Sistema Nacional de Areas Protegidas, SINAPs) of Nicaragua and Honduras are staffed by dedicated professionals, but they are underfunded and lack the capacity and legal frameworks necessary to carry out their mandate.
- 4. Therefore, despite a concerted effort by national and local authorities, and technical and financial assistance from international donors, the area's integrity is threatened, primarily, by a lack of sustainable income-generating activities and weak protection and enforcement practices. Deforestation is a major problem, with rapid losses still occurring at the agricultural frontier. While local agricultural and forest management techniques are partially responsible for the loss of forest cover, the greatest problem is seen along the western agricultural frontier, where recent arrivals are clearing land for farming and cattle ranching at alarming rates. Among the indigenous communities, poverty and a lack of economic options contribute to suboptimal land use practices.

#### Rationale for Bank Engagement

5. To address these challenges, the governments of Honduras and Nicaragua requested the assistance of the World Bank and the Global Environment Facility (GEF) for the implementation of a project that contributed to efforts to reduce rural poverty, strengthen protection for vulnerable groups, and enhance environmental sustainability in the CTBR.

### 1.2 Original Global Environment Objectives (GEO) and Key Indicators

- 6. The Project's original GEO was the conservation of the globally critical biodiversity of the CTBR through more effective protection, and improved, sustainable use of natural resources within the project area. Given that the Reserve lies along the border between Nicaragua and Honduras, and that there is a continuity of ecosystems and populations across the region, a promising element of the Project's original design was its binational approach that aimed at promoting a better coordinated, more consistent and thus more effective management and conservation of cross-boundary natural resources.
- 7. The original Project Development Objective (PDO) was: To improve the national and binational management of the area of the proposed Corazón Transboundary Biosphere Reserve, respecting the rights of traditional populations.
- 8. The original key PDO indicators included:
  - The management effectiveness rating of the CTBR area improves from an estimated baseline rating of Poor (1) to Regular (2) using the ratings of the Regional Environmental Program (PROARCA) scorecard system in use in Central America. The baseline value is to be confirmed at a workshop within two months of project start-up. The GEF Protected Areas Tracking Tool values would also be revalidated during the same workshop.
  - The percentage of indigenous residents in the CTBR which participate fully in the implementation of management plans for their respective protected areas increases to at least 75 percent by end of Project EOP (based on viewpoints of organizations representing local indigenous populations).
  - Deforestation rate of core areas of the Reserve declines by at least 25 percent from the baseline value to be determined at project start-up (biannual measures to be made by the National Environmental Information Systems of each country).

#### 1.3 Revised GEO and Key Indicators, and Reasons/justification

- 9. The Project's mid-term review<sup>2</sup> (MTR) concluded that while the Project had significantly contributed to improving the management effectiveness in the area of the CTBR, and that it was contributing to the conservation of this global asset, it would likely not achieve its original PDO in terms of binational, coordinated management efforts. As a result, a Level One restructuring was carried out<sup>3</sup>, which: (i) modified the PDO; (ii) simplified Project design; (iii) reallocated resources; and (iv) better aligned the Project's monitoring framework with its objectives. The Project's GEO remained unchanged.
- 10. Revised PDO (after restructuring) To improve the national management of the area of the proposed Corazón Transboundary Biosphere Reserve (CTBR), in Honduras and Nicaragua, respecting the rights of traditional populations.

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<sup>&</sup>lt;sup>1</sup> The Project was approved on June 13, 2006 and became effective on November 22, 2006. The original closing date was August 1, 2012.

<sup>&</sup>lt;sup>2</sup> October 2010 - February 2011

<sup>&</sup>lt;sup>3</sup> The restructuring proposal was in development throughout 2011. It was approved by GEF on September 12, 2011 and by the World Bank's Executive Board on October 7, 2011. The restructured Project became effective on January 6, 2012.

- 11. The restructured indicators included:
  - Targeted protected areas (4) within CTBR more effectively managed for conservation outcomes, with a rating of 2 (Regular) as measured by the PROARCA and GEF Tracking Tools.
  - Increased participation by 60 percent of local communities, in both Nicaragua and Honduras, engaging in sustainable conservation activities related to management plans in order to reduce pressure in the target area.
  - Institutionalized participatory management processes and policy instruments consistent with protected areas management plans.

#### 1.4 Main Beneficiaries

- 12. Primary beneficiaries of the Project were poor communities of the Corazón Reserve. The operations and subprojects manuals defined as Project beneficiaries the inhabitants of the Project's area of influence, within their respective constituencies, which included: i) indigenous communities represented by their territorial governments; ii) farmers associations and/or cooperatives; iii) indigenous women organizations; and iv) women farmer organizations.
- 13. SERNA and MARENA were the central government institutions that benefitted from the Project in Honduras and Nicaragua, respectively. The Central American Commission for Environment and Development (CCAD) was the recipient of the Grant, responsible for overall regional coordination. As a whole, the National Systems for Protected Areas in both countries were targeted indirect beneficiaries.

#### 1.5 Original Components

- 14. Originally, the Project included the following six components:
  - i. *Consolidation of the CBTR* Activities aimed at supporting the creation, consolidation, and strengthening of binational coordination mechanisms for the Reserve, permitting the involvement of all stakeholders.
  - ii. Strengthening of the National Protected Areas Systems This component aimed at ensuring the financial sustainability of the Nicaragua and Honduras SINAPs, thus contributing to the sustainability of the CTBR.
  - iii. *Implementation of Protected Area Management Plans* Activities aimed at financing the implementation of protected areas management plans through community-based co-management initiatives.
  - iv. Community-Based Natural Resource Management This component focused on community-level management of natural resources as a tool to mainstream biodiversity conservation into productive activities.
  - v. *Monitoring and Information Management* Funding was provided to strengthen biological monitoring programs for the entire project area.
  - vi. *Project Administration* This component supported the administration and operation of the Project.

*Table 1 – Original Project Budget by Components (US\$ Million)* 

Original Components	Cost	%	GEF	%
				<b>GEF</b>
(1) Consolidation of the CBTR	0.82	2	0.79	7
(2) Strengthening of the SINAPs	9.57	28	2.12	18
(3) Implementation of Protected Area Management Plans	5.11	15	2.73	23
(4) Community-based Natural Resource Management	14.73	43	3.56	30
(5) Monitoring and Information Management	1.09	3	0.99	8
(6) Project Administration	3.03	9	1.80	15
Total Project Cost	34.36	100	12.00	100

Co-financing sources: Governments, CCAD, PBPR Honduras Project, and PRORURAL Nicaragua's Project

#### 1.6 Revised Components

- 15. Simplifications to Project design were undertaken as part of the restructuring, in order to focus on activities and components that were progressing well at mid-term, and for which results had been achieved. Specifically, modifications included:
  - i. *Elimination of Component 1* The MTR concluded that the consolidation of the CTBR could not be achieved by EOP due to the difficulties and delays in binational coordination. Some of the activities that remained relevant were reallocated to Component 2.
  - ii. Component 2 further focused on strengthening of National Protected Areas Systems

     The revised scope focused on two priorities: (a) updating and developing policy instruments for the management of protected areas, including management plans for protected areas, and promotion of binational coordination activities at a technical level; and (b) strengthening of financial mechanisms, particularly in Honduras, with the endowment of the Protected Areas Fund. Most of the resources originally approved for the creation of the Fund in Nicaragua were reallocated to finance additional sub-projects;
  - iii. *Merging of Components 3 and 4* The focus of the new Component 2 was on: (a) implementation of sub-projects (without distinction between protective area management and natural resource management); and (b) local governance initiatives including scholarships, limited research, knowledge management and support to the governments of Nicaragua and Honduras on matters related to land regularization in indigenous communities within the CTBR;
  - iv. Reduction of scope of Component 5 in Honduras Activities focused on the development and dissemination of a strategy for the creation of a national environmental information system.

#### 1.7 Other significant changes

16. The following changes were also introduced to the original Project design during restructuring:

- i. *Monitoring framework* The monitoring and evaluation framework was modified to better capture results. This involved: (a) improving consistency between intermediate indicators and scope of components; (b) disaggregated, country specific indicators; (c) inclusion of baselines; (d) establishment of monitoring framework for sub-projects; (e) definition of monitoring arrangements; and (f) establishment of budget for monitoring and evaluation.
- ii. CCAD's role The overall role of CCAD was redefined to focus on the following: (i) coordination of technical teams; (ii) processing the application to UNESCO for Biosphere Reserve Status; (iii) monitoring results from sub-project implementation and compiling overall global indicators; (iv) training of field personnel and sub-project beneficiaries on monitoring; (v) knowledge management and (vi) administrative/reporting responsibilities.
- iii. *Closing date* The Project's closing was extended to December 15, 2012 during a subsequent Level Two restructuring that was approved on June 25, 2012.

#### 2. Key Factors Affecting Implementation and Outcomes

#### 2.1 Project Preparation, Design and Quality at Entry

- 17. The preparation of the Corazon Project was done as a careful effort to incorporate a number of converging interests, including: i) national conservation policies of Honduras and Nicaragua, which aimed at using the Project to improve protected areas management, with a focus on promoting decentralization of responsibilities to local governments and traditional authorities; ii) the needs and demands of indigenous leaders, which saw the Project as an opportunity to increase the role of indigenous peoples in management of protected areas, as well as to improve the living conditions of communities in the Reserve; and iii) donor strategies and priorities in the area. Participation of local communities and national governments was therefore maintained throughout preparation4, and commitments were made to sustain the involvement of the various actors throughout implementation.
- 18. A detailed and participative preparation resulted in the identification of multiple needs and areas for involvement, in both countries. Unfortunately, the final Project's scope was overly ambitious and it aimed to address too many of these needs. The complexities of implementation were underestimated, in spite of the efforts to build on local knowledge and experience from previous operations in the region, and this had a significant impact on the pace of implementation and on results during the first two years. Specifically:
  - Complexity of design The Project involved a two-country initiative, which included six components, 17 sub-components and 52 individual activities. The scope of these components was too complex and diverse;

Declaration" in support of the Project.

<sup>&</sup>lt;sup>4</sup> Over 800 people representing civil society, indigenous peoples, and other stakeholders participated in consultation meetings on Project design from August 2004 to January 2006. Over 45 representatives of all major indigenous and ladino stakeholder groups in both countries, as well as from CCAD, national governments, and the World Bank, met in Ocotal, Nicaragua on January 2006 to discuss the proposed Corazón Project. At the end of this meeting, representatives of all stakeholder groups signed the "Ocotal

- Extensive area of influence The target area was roughly 34,595 km<sup>2</sup> in Nicaragua and Honduras, consisting of very remote areas with very limited access. This made it very difficult to maintain a presence throughout the area, and made it costly to reach potential beneficiaries;
- *Limited budget* The complexities described above were further compounded by a budget that was relatively small, given the expected scope of the Project. The US\$5.4 million corresponding to each country was divided between many activities, which made implementation difficult.
- 19. Risks identified during preparation primarily involved the limited capacity of implementing agencies and potential risks due to inadequate participation of relevant stakeholders in such a widespread, binational effort. Measures were put in place to mitigate these risks, which proved to be insufficient and/or inadequate to address the difficulties of implementing such a complex Project. Specifically:
  - Inadequate coordination at Project level The agency that was selected to be in charge of binational coordination was the Central American Commission for Environment and Development (CCAD). An assessment of CCAD's presence in the region and expertise was deemed adequate, and thus it was given the mandate to lead all coordination efforts between the two countries, including the presentation of the CTBR as a Biosphere Reserve to UNESCO. However, the agency's capacity to coordinate the development and implementation of binational strategies and action plans was highly overestimated. The role ultimately played by CCAD was primarily administrative, and its impact in terms of driving policy dialogue at a high political level was minimal.
  - Ineffective coordination at the regional level The binational nature of the Project and the complexities this involved were addressed primarily in terms of avoiding potential conflicts along the borders, i.e. supporting participative mechanisms for indigenous peoples in border areas. However, the political relationship between the two countries, and the need to ensure adequate high level coordination was not sufficiently built into the design. The strained political relations between Honduras and Nicaragua between 2009 and 2010 had a significant impact on the Project, as diplomatic tensions resulted in major setbacks to all activities with a binational scope. CCAD was not able to mitigate the impacts of that political impasse.
  - Reliance on ineffective participative mechanisms The mechanisms established during preparation to ensure binational participation of indigenous peoples proved difficult to implement and lacked the strategic focus that would have made them useful to support Project objectives. Indeed, the Binational Forum and the Binational Indigenous Coordination (Muika) were created by CCAD without clear objectives, no operational structure, and without a framework for coordination with MARENA and/or SERNA. Moreover, members of these groups often did not represent the interests of indigenous communities in the Project area. The Forum and Muika were maintained without a definite role, and thus their actions were ultimately not relevant to the overall objectives of the Project.
  - Ambitious and impractical participative decision-making processes During preparation, expectations were raised that annual operating plans would be prepared during consultative meetings with binational indigenous representation.

While this was presented as a participatory mechanism aimed at better integrating the binational dimension, in reality, it became an inefficient process that lacked leadership, coordination with national priorities, strategic focus, and that did not contribute to overall Project objectives;

- Low capacity of implementing agencies The experience and the capacity of MARENA and SERNA to implement the Project as designed were rated low at appraisal. Mitigating efforts to strengthen that capacity were not sufficient, and this resulted in major delays during the first years of implementation. Main difficulties primarily involved: (i) insufficient management, technical and fiduciary capacities of PIUs; (ii) lack of established framework to decentralize tasks to communities and local governments; (iii) inability to communicate with local populations in their native languages, particularly in remote areas; and (iv) insufficient budget to provide assistance to and to supervise operations in communities.
- 20. One issue that was not identified during preparation, and that the original Project was not equipped to address, was the significant differences in capacities of the two implementing agencies. MARENA has a central role as the agency that coordinates the environmental agenda, including management of protected areas and biodiversity. The PIU was fully integrated to the administrative protocols and institutional responsibilities of MARENA. In Honduras, SERNA is also an important player in the environmental policy arena, but responsibilities are shared with other agencies, notably the Institute for Forestry Conservation (ICF), which is responsible for the management of protected areas. This creates coordination issues at times, and results in the division of limited funding that is allocated for conservation and natural resource management between multiple agencies. In Honduras, the PIU was created as an external, consultant-staffed unit, physically and institutionally detached from SERNA.
- 21. This disparity was difficult to capture and to address through a Project where results indicators were defined in an aggregated manner, and where the performance of each country towards Project objectives could not be tracked independently. The restructuring addressed this problem essentially by separating the Project into two simultaneous, parallel operations, with binational objectives to be pursued jointly and with a coordination component handled by CCAD. This allowed both countries to move forward independently within their existing institutional structure. Ultimately, the targets agreed at restructuring were achieved by EOP. However, this difference of institutional framework was not addressed, and thus the long-term sustainability of the results will likely be different in the two countries.

#### 2.2 Implementation

- 22. Since its effectiveness in November 2006, overall Project implementation was slow. Implementation progress was rated *satisfactory* in early 2007, *moderately unsatisfactory* by the end of 2007 and *unsatisfactory* in December 2008. Performance remained *unsatisfactory* until August 2011. PIUs were changed in 2009 in Nicaragua and in the CCAD, and in 2010 in Honduras.
- 23. Changes to Project implementation as a result of restructuring were introduced in 2011 as the 2011 Operating Plans were prepared. Priority was given to improving the efficiency of subproject approval and implementation, by reinforcing support and capacity of the

PIUs and field staff, strengthening monitoring and ensuring consistency between local needs and Project objectives. The results of these changes were clear within one year: by the end of 2011 disbursement rates had doubled, morale in Project Units was high, binational coordination improved significantly, progress was made under all components, and overall performance improved. Implementation progress was rated *moderately unsatisfactory* in August 2011, *moderately satisfactory* in December 2011, and *satisfactory* from June 2012 until Project closure.

- 24. Implementation of the Corazón Project can be divided into two phases. During the first phase, from approval to mid-2010, implementing agencies struggled with a Project that was of high priority for both countries but failing. This affected the dialogue between the Bank and the governments and impacted the morale of Project teams. By late 2010 the Project was on the verge of being cancelled. However, during this first phase, the foundations for achieving the PDO were laid out, at least in some components, which made it possible to propose a restructuring that was ultimately successful. As part of the restructuring the countries committed to working within a simplified scope and to demonstrate results within tight deadlines. During its final two years (2011-2012), implementation advanced at a fast pace. Disbursements increased, results in the field became evident, the PIUs worked effectively and focused on results, morale was high, communication within teams increased, and the dialogue between the Bank and the agencies improved.
- 25. While this ICR presents information relevant to the Project's performance from approval to closure, it is important to highlight the fact that the large majority of the results were achieved in the last two years of implementation. Indeed, by December 31, 2010 when the MTR was completed and the restructured design was proposed, less than 40 percent of the total grant resources had been disbursed, and a quarter of those had been spent on management costs. Half of the resources had been spent on implementation of community sub-projects, but no link had yet been drawn between results of individual sub-projects and overall Project development objectives. Moreover, no progress had been achieved in any of the critical components aimed at straightening management of protected areas (in either country) or natural resource management.

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

26. The MTR concluded that a major problem associated with the design of the Project involved the framework for monitoring and evaluation, including the monitoring arrangements, which made it challenging to quantify the progress under the various components towards the global objectives of the Project. Important modifications were made to improve the M&E system, including: (i) Improved consistency between intermediate indicators and scope of components; (ii) Disaggregated indicators by implementing agency; (iii) estimation/confirmation of baselines; (iv) establishment of monitoring framework for sub-projects, linked to Project's targets; (v) definition of Monitoring arrangements; and (vi) allocation of budget for monitoring and evaluation.

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<sup>&</sup>lt;sup>5</sup> Although results were already noticeable in August 2011, the Project's indicators had not been formally restructured, and thus progress could not be adequately captured. Ratings by the end of 2011 were evaluated using a revised results framework.

### 2.4 Safeguard and Fiduciary Compliance

- 27. **Safeguards** The project was classified as Category B. In accordance with OP 4.01, an Environmental Analysis was carried out. The Project's Operations Manual defined mechanisms for implementation and monitoring of social and environmental safeguards that the Project and sub-projects were required to follow. With regards to sub-projects, a screening mechanism was established, through which sub-project Evaluation Committees reviewed and assessed (with the help of a standardized evaluation matrix) the potential environmental and social impacts of each proposal. Those that would have had negative impacts that merited mitigation plans were not selected for financing under the Project. With its screening mechanisms in place, environmental safeguards were well managed throughout implementation, and compliance was considered satisfactory.
- 28. **Fiduciary compliance** Supervision of fiduciary compliance for this Project was challenging, as insufficient capacity of the three implementing agencies during the early years of implementation created significant needs for support from the Bank team. Fiduciary risks were rated high at preparation and accordingly, mitigation measures were incorporated throughout the lifetime of the Project to assist Implementation Units with their fiduciary controls. Indeed, special provisions were taken to address the exceptional characteristics of the Project (e.g. remoteness of subprojects, limited availability of financial services, limited capacity of beneficiaries, limited suppliers and logistical options) in sub-project manuals, and standardized operating guidelines.
  - Financial management The performance of the various country units at the start of the Project was rated low. After the second year of the Project, MARENA put in place a solid Financial Management structure which performed in a satisfactory manner through the end of the Project. CCAD and SERNA's FM teams changed a few times during implementation, and this caused repeated disruptions and difficulties at the end of the Project. In Honduras, this led to requiring more Project implementation support, including unplanned procurement reviews and addressing red flags for increased risks to project management to meet objectives.
  - Procurement Both country teams faced procurement challenges during the first
    two years of implementation, although these were overcome with the hiring of
    qualified Procurement Specialists. Changes in the procurement team in Honduras
    during the final year of implementation resulted in delays, which contributed to
    the inability to use the total amount of funding. Procurement capacity at CCAD
    was adequate.

#### 2.5 Post-completion Operation/Next Phase

- 29. The sustainability of Project outcomes will depend on: (i) the governments of Nicaragua and Honduras ability to maintain biodiversity conservation policies in the CTBR through agencies with the human and technical capacity to develop and implement these policies; (ii) continuous institutional support in both countries to communities and local government in the Reserve; and (iii) availability of resources to continue financing initiatives that promote sustainable management of natural resources and good environmental practices.
- 30. Substantial efforts were made during implementation to: (i) promote the institutionalization of procedures, methodologies, guidelines and results developed under

the Project to ensure that lessons learned would be preserved and could be replicated; (ii) create institutional mechanisms for decentralization of protected areas management that used local governments and organizations that would remain in place by EOP; (iii) promote activities based on local knowledge, incorporating cultural elements and known practices, which would guarantee continuity after Project completion; and (iv) set up mechanisms to ensure the financial sustainability of protected area management systems (i.e. national endowment funds). As described in detail in later sections, the Project contributed in a major way to developing mechanisms and instruments that would support all of these efforts.

- 31. The issue of institutional sustainability, as indicated earlier in the document, will likely not be a concern in Nicaragua. The Project's PIU was well integrated within MARENA, both at the central level with the BOSAWAS Technical Secretariat (Secretaría Técnica de BOSAWAS, SETAB), and with the seven territorial delegations that are responsible for decentralized management of protected areas. Therefore, the outcomes and the institutional legacy left by the Project in Nicaragua will likely remain relevant in the medium to long term.
- 32. In Honduras, the future of the outcomes that were achieved will be more uncertain, as the legacy of the Project within SERNA and ICF, in the absence of the PIU, does not have a clear repository. The instruments developed were disseminated within the agencies and will remain available, but it will be difficult to determine how much they will be used in the future. It is expected that the Fund for Protected Areas and Wildlife of Honduras (FAPVS) established under the Project will provide a minimum amount of resources to ensure that ICF can carry out basic management actions in priority areas.

#### 3. Assessment of Outcomes

#### 3.1 Relevance of Objectives, Design and Implementation

- 33. The Project design was fully consistent and complementary with the National Poverty Reduction Strategies of Honduras and Nicaragua as well as with their Environmental Strategies, in terms of enhancing the sustainability of National Protected Areas Systems of through a highly participatory and inclusive process with the communities of the Reserve, especially indigenous.
- 34. The objectives of the Project remain well framed within the current National Human Development Plan of Nicaragua (2012-2016) and the National Plan of Honduras (2010-2022), which focus on promoting new approaches to poverty reduction, through equitable and sustainable economic transformations that foster equal opportunities for the common good of communities. The promotion of conservation and sustainable use of natural resources and biodiversity are some of the strategic lines of action of these Plans, which further set specific targets related to providing assistance to poor indigenous communities. These objectives are fully consistent with those of the Corazón Project.
- 35. Given the alignment of Project objectives with strategic priorities of Honduras and Nicaragua, as outlined in their PRSPs at the time of Project appraisal and prior to restructuring, as well as in their current national development strategies and after restructuring, the ICR rates the relevance of the Project as "High".

#### 3.2 Achievement of Global Environmental Objectives

- 36. The Corazón Project achieved satisfactory results in terms of promoting the sustainable use of natural resources in a critical area for global biodiversity. This was accomplished through the combination of actions aimed at: (i) strengthening institutional local capacities for the management of protected areas; (ii) promoting initiatives for participative management of natural resources and protected areas through community-based sub-projects; (iii) promoting conservation of ancestral territories through joint efforts with communities, local and indigenous governments and federations; and (iv) supporting the national and binational dialog for the protection, conservation and sustainable development of shared natural resources. More specifically the Project's GEO was achieved, as the Project:
  - a. *Promoted the conservation of biodiversity of the Corazón Reserve*, as demonstrated by the following indicators:
    - i. Management effectiveness assessments measured with PROARCA tracking tool for the protected areas within the area of influence, which had an average rating of "Poor/Fair" at the onset of the Project improved to an average rating between "Fair" and "Good" during Project implementation, and this rating was maintained until EOP. Improving and maintaining the management effectiveness rating of the CTBR means retaining the attributes of its protected areas that will make them eligible to receive the designation of Biosphere Reserve, demonstrating successful conservation and natural resource management action in these areas;
    - ii. Low deforestation rates were measured in nucleus areas of the Reserve during Project execution, with primary forest cover rates reaching high values of 81 and 94 percent in Nicaragua and Honduras, respectively. The implementation of sub-projects in *mestizo* buffer zones, where deforestation rates are the highest, promoted the incorporation of best practices in productive systems and contributed to reducing pressures on biodiversity and conservation, both on buffer and on nucleus zones;
    - iii. Good quality of primary forest cover, as demonstrated by research studies on the presence of jaguars in protected areas within the Project's area of influence. Forested areas in the Reserve are linked across the Rio Coco maintain connectivity, mobility, and sustain adequate reproduction of emblematic, native species (i.e. sub-projects for ecological restoration and promotion of productive systems had positive impacts on forest cover, which contributed to maintaining jaguar corridors in the area<sup>6</sup>).

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<sup>&</sup>lt;sup>6</sup> Research studies carried out during Project implementation confirm that there is still a presence of jaguars in the Reserve. While no specific study demonstrates a direct link between activities financed under the Corazón Project and the jaguar population, the increased forest cover supported by sub-project activities is expected to contribute to maintaining jaguar habitats in the Reserve.

b. Through more effective protection and sustainable use of natural resources in Honduras and Nicaragua –

The high participation and involvement of local communities in Project activities resulted in effective experiences in terms of decentralized, participatory, and multiethnic management of protected areas. The protection of natural resources is integral to the vision of native communities of the Reserve, which became a central a pillar of initiatives supported by the Project. Specifically, 647 local communities in both countries participated in the implementation of 247 sub-projects, which covered roughly 7,205 hectares, and benefitted 11,629 families. More than 50 best practices for sustainable management of natural resources were demonstrated, and can be replicated.

Moreover, the empowerment of communities and their participation in the development of tools for managing protected areas contributed for the first time to integrating the local context and local needs into government-led strategies of biodiversity conservation and use of natural resources. This will contribute to ensuring that proposed policies for the Reserve will be more relevant to local communities, making them more sustainable in the long term. Specifically, the Project contributed to: (i) promoting participation of communities within the Reserve in the development of four management plans and in the assessment of protected areas management effectiveness; (ii) building capacity in local communities through 407 workshops in both countries. These capacity building activities contributed to the promotion of environmental governance and to the removal of barriers for administrative processing that prevented direct involvement of the communities in the development and implementation of their own projects of participatory resource management; and (iii) strengthening the SINAP in technical and financial management matters, through 47 management tools that are widely applicable in all protected areas and were made with highly participatory processes<sup>7</sup>.

37. The Project's revised PDO that aimed at improving the national management of the Corazón Reserve, respecting the rights of traditional populations, measured through three PDO indicators, was achieved by EOP, as summarized in datasheet and Annex 2. In addition, targets for all intermediate indicators were met and/or exceeded, as is reported in detail in Annex 2. Considering these outcomes, the efficacy in achievement of GEO and PDO is rated as "High".

#### 3.3 Efficiency

38. Net Present Value (NPV) was not estimated at the beginning of the Project. An ex post analysis of two activities financed under the Project was conducted, where efficiency is assessed by evaluating the extent to which these activities contributed to achieving the GEO and PDO. Specifically:

<sup>&</sup>lt;sup>7</sup> The GEO baseline for management effectiveness was developed using the methodologies PROARCA and GEF tracking tool. Deforestation rates were estimated following multi-temporal analyses of land use before and after the project in both countries. Social assessments carried out prior to the implementation of the Project determined the total number of communities in the area of influence.

- i. Cost- benefits of sub-projects implemented in protected areas The analysis was conducted on the portfolio of sub-projects that financed agro-forestry systems (AFS) based on cocoa crops in association with plantain and timber trees. This specific portfolio represents roughly 17 percent of all the sub-projects financed under the Corazón Project, corresponding to approximately US\$1.2 million, and impacting an estimated area of 1,198 ha. NPV was estimated for local and international market scenarios, both of which were encountered during Project implementation. The extent of the assistance provided by the Corazón Project amounted to US\$991 per ha. Beneficiaries consisted of poor families in protected areas with limited access to financing. The assistance received contributed to the implementation of sustainable practices within the Reserve, promoting conservation and contributing to reforestation. Moreover, it gave beneficiaries the possibility to carry out sustainable, income-generating activities (see Annex 3 for details).
- ii. Cost-benefit analysis of monitoring sub-projects follow-up activities Close monitoring and follow-up of sub-project activities has been identified as one of the supervision activities that contributed the most to the successful achievement of Project objectives. The total costs of sub-project monitoring were estimated as roughly US\$1 million, which correspond to approximately 13-16 percent of the costs of individual sub-projects (see Annex 3). The added costs of monitoring are a necessary and useful tool to avoid costs of failed sub-projects, or sub-projects that do not contribute to Project objectives.
- 39. On the basis of the analysis of two types of activities financed under the Project, the ICR's rating for efficiency is "Modest".

#### 3.4 Justification of Overall Outcome Rating

Rating: *Moderately Unsatisfactory*.

- 40. The ICR also assessed project outcomes against <u>original project objectives</u>. At the time of Project restructuring, 38.7 percent of all approved funds had been disbursed and performance was rated "*Unsatisfactory*". The ICR rates the overall outcomes of the Project <u>with restructured project objectives</u> as *Satisfactory* based on a "High" rating for relevance, "High" rating for efficacy and "Modest" rating for efficiency. After restructuring, additional 55 percent of the Grant was disbursed.
- 41. Based upon these two ratings, the resulting overall Project outcome rating, estimated on as the weighted average of performances pre and post restructuring is "Moderately Unsatisfactory".

## 3.5 Overarching Themes, Other Outcomes and Impacts

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

Poverty Impacts

42. In the short term, the Project contributed to ensuring food security in very poor communities, through financing sub-projects that promoted productive crop diversification, as well as agricultural activities that led to the production of basic grains and fruits. The Project contributed modestly to the generation of additional incomes in local communities. In the medium to long-term, sub-projects may represent potentially significant financial contributions to local economies, from the adoption of best practices

in agricultural activities, to the sale of seedlings, wood and agricultural crops. Subprojects that financed the production of cocoa and coffee represented particularly higher opportunities of income generation within local communities given the higher prices that can be obtained from these commodities, particularly when commercialized through cooperatives, and/or when products were branded, certified as organic and exported.

43. Other sub-projects that promoted cultivation of medicinal plants, ecotourism activities and the production of handcrafts represented alternative options for local communities. These types of sustainable production sub-projects were popular in both countries and have more opportunities to increase the investment with additional financial sources. In Nicaragua, for example, 35% of the beneficiaries of Corazón Project are receiving additional resources from the projects to complement their economics activities.

#### Gender Aspects

- 44. The Project promoted gender equity by strengthening the capacity of 14,248 women (2,946 in Nicaragua and 11,302 in Honduras). The Project established a minimum female participation target of 20% of sub-project beneficiaries. This target was broadly surpassed, ultimately reaching 45% of women beneficiaries in both countries (54% in Nicaragua and 35% in Honduras). Women executed sub-projects that supported productive activities such as ecotourism, medicinal plants production, chocolate production, handcrafts and others.
- 45. The Project supported activities that empowered women, particularly in indigenous communities, demonstrating their potential to have leadership roles within their communities. Indeed, the Project acknowledged and sought out indigenous women organizations and associations as important partners for sub-project execution, giving them a platform to carry out activities in their communities that traditionally would have exclusively reserved to male leaders (e.g. productive activities, territorial limit patrols, management of financial resources, and administration and execution of sub-projects).

#### Social Development – Indigenous peoples

- 46. The Project established direct links with Territorial Governments and Indigenous Federations, which represent the indigenous communities in Nicaragua and Honduras, respectively. This close relationship and continuous coordination throughout Project implementation guaranteed the participation of indigenous communities in activities such as: i) formulation and approval of Protected Areas Management Plans; ii) formulation and endorsement of the UNESCO file for nomination of the Reserve as a Biosphere Reserve; iii) socialization of Project Operations, sub-projects and scholarship manuals; iv) cooperation in the preparation, approval and implementation of 124 sub-projects implemented by indigenous communities in the Reserve.
- 47. A concerted effort was done in both countries to incorporate elements from local indigenous cultures in the design and implementation of activities. As a result, subprojects responded to community demands in a manner that was consistent with their local beliefs and traditional practices for the management their vital natural resources. In the end, roughly fifty percent of all sub-projects that received financing were implemented by indigenous peoples. The Project supported the strengthening of administrative capacities for the formulation, and execution of sub-projects as well as to the management of economic gains that resulted from the activities.

- 48. The Project contributed in a modest way to the regularization of indigenous lands. In Nicaragua, support was provided for demarcation of indigenous lands and for conflict resolution activities between various stakeholders. In Honduras, the project supported a consultation process on the mechanisms for regularization of ancestral lands. Specifically, the Project financed the preparation of background documentation aimed at informing a debate at the nation's Congress on land titling reform for indigenous people.
- 49. In Nicaragua, the Project supported the creation of the first Indigenous Office for Environmental Management in the BOSAWAS Reserve. This office coordinates efforts between indigenous communities and MARENA and provides a number of specific services to the communities of the Reserve (e.g. volunteer fire fighters). In Honduras, the Project supported the first SEDINAFROH territorial office in the Mosquitia, an institutional presence in a remote area of the country, with the objective of providing assistance to indigenous communities.

#### (b) Institutional Change/Strengthening

50. The Project supported institutional strengthening efforts in Honduras and Nicaragua, including: (i) SINAPs through the development and/or update and validation of 47 policy instruments (25 in Honduras and 22 in Nicaragua), which will contribute to improving management of protected areas. Most of these instruments were endorsed and incorporated into the administrative and technical areas of MARENA and SERNA and will be available to be reused in years to come; (ii) capacities in local governments and in communities were strengthened, procedures were demonstrated, administrative and institutional barriers were resolved, and best practices were disseminated, which will allow communities of the Reserve to replicate past experiences, and potentially to access other sources of funding; (iii) participatory processes were supported at each step of implementation, making sure that local communities, indigenous peoples, women, and local governments had an active role in the development and application of policy instruments, aiming at making these instruments relevant and sustainable; and (iv) the National Fund for Protected Areas was established in Honduras, which will provide a small but consistent source of funds to ICF for carrying out annual evaluations of management effectiveness in protected areas.

#### (c) Other Unintended Outcomes and Impacts (positive or negative, if any)

51. The project strengthened the Mesoamerican Environmental Information System (SIAM-CCAD) by establishing a platform for knowledge sharing and partnership between SINIAs in Nicaragua and Honduras. The design and management experience of a more developed system in Nicaragua was transferred to Honduras. As a result, the SINIA-HN was strengthened through internships and workshops that facilitated information sharing on management tools and coordination of national information networks. This in turn strengthened the overall regional (Central American) system.

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

Beneficiary survey

52. A limited beneficiary survey was conducted, which covered a sample size of 57 people (24 in Honduras and 33 in Nicaragua). Approximately 42 percent those interviewed were representatives from indigenous groups and 39% were women. Table 2 summarizes the

- main results of the survey. The questionnaire, list of people interviewed, and a detailed presentation of results are included in Annex 5.
- 53. Overall, beneficiaries noted that the Project had contributed in a substantial way to its objectives of biodiversity conservation and protected area management. Most of the beneficiaries interviewed rated as high the incidence of sub-projects on conservation (68 percent) and on rehabilitation of degraded areas within the protected areas (54 percent). Sub-projects promoting agroforestry practices and reforestation systems were the ones believed to have the highest impacts.
- 54. Roughly 89 percent of those interviewed stated that the Project had supported activities that respected indigenous rights, also critical to the Project PDO. Opinions varied on the economic impacts of sub-project, in terms of their potential to increase incomes of people in the Reserve in the longer term. In the short term those interviewed considered that the Project had positively contributed to generating income-generating activities. In the long-term, factors such as local market prices, availability of technologies, options for additional investments, access to markets and commercialization strategies are still important challenges to address in order to ensure the sustainability of financial gains.

*Table 2 – Summary of beneficiaries' survey* 

Evaluation area	Distribution of beneficiaries response by impact (%)			
	High	Moderate	Low	None
Project's contribution to conservation of critical	70	28	2	0
biodiversity through more effective protection, and				
improved sustainable use of natural resources				
Project's contribution to improving national	61	37	2	0
management of the area of the CTBR				
Sub-projects' impacts on overall conservation	68	30	2	0
efforts in protected areas				

High corresponds to a score of 90-100%; Moderate: 61-89%; Low: 50-60%; and None: 0

#### Stakeholder workshop

55. A final stakeholder workshop was carried out Managua, on November 28, 2012, which included participation of the entire technical teams from Honduras and Nicaragua, and limited participation from CCAD. The main objectives of the workshop were to review the overall results of the Project, to exchange lessons learned, and to collect additional information needed to prepare the Project's ICR. The workshop was an opportunity for field and technical staff to meet for the last time, to reflect on the history of the Project and on the accomplishments achieved, and to reinforce plans for sustaining binational cooperation and exchanges. Detailed information about the event in included in Annex 6.

#### 4. Assessment of Risk to Development Outcome

Rating: Significant

- 56. In spite of Project achievements, there are significant risks that Nicaragua and Honduras may not be able to sustain some of the gains in the long term. While the Project attempted to put in place actions to help mitigate these potential risks, there was limited opportunity to address financial and political uncertainties that are outside of the control of the implementation agencies. The risks vary by country, and they are more significant in Honduras than in Nicaragua. Specifically:
- 57. In Nicaragua, main risks are related to the availability of funding for MARENA to maintain a visible presence in BOSAWAS Reserve, both in terms of management actions and of development and monitoring of community subprojects promoting conservation and natural resource management. BOSAWAS Biosphere Reserve amounts to 91% of the total protected areas in Nicaragua. In the current context of limited resources, in spite of the high priority level of natural resource management to the government, less funding will be available to continue the work in the Project area and this will have a direct impact on future conservation efforts.
- 58. There are three important mitigating circumstances: (i) the Corazon Project team, whose leadership and commitment to the objectives of the Project were outstanding, remained in MARENA and is currently implementing a Climate Change project<sup>8</sup>. This implies that there is continuity in the policy efforts, and that mechanisms developed under the Project will in fact continue to be used and perfected by MARENA; (ii) efforts that were made to strengthen local capacity at the community level within BOSAWAS were fruitful. There are documented cases of local associations and communities that have received funding from other donors to continue working in sustainable productive activities within the Reserve, such as organic crops, crafts and others. The scale of these activities will be much smaller than those financed by the Project, but is expected that they will continue. Moreover, the results in terms of improvements of protective area management tools will remain (i.e. participative mechanisms, incorporation of local characteristics) and will continue to support the gains that were obtained through the Project; and (iii) the Project contributed to defining the action plan to set up and the operations manual to manage an National Environmental Fund (Fondo Nacional del Ambiente, FNA), which will have protected areas management as one of its areas of priority. While the FNA was not established under the Project, discussions between MARENA and the Ministry of Finance are underway regarding the capitalization of the Fund. If the FNA is successfully established in the medium term, some financial risks identified above may be reduced.
- 59. In Honduras, the risks that development outcomes are not maintained are more significant. These risks are driven by limited financial resources, the level to which the results of the Project will be continued within SERNA, and even more so within the Institute of Forest Conservation (ICF), the agency with the actual mandate to oversee protected areas and the SINAPH, are not known. The Project area represents 77% of the

<sup>&</sup>lt;sup>8</sup> The Project Adaptation of Nicaragua's Water Supplies to Climate Change, financed by the Special Climate Change Fund (SCCF) was approved in 2012. The approved amount of this grant was US\$ 6 million.

- total protected areas in Honduras, and ICF's financial situation is very weak. Therefore, in the absence of GEF funds, the continuation of activities will be challenging.
- 60. Throughout Project implementation, the sustainability of results beyond the Project was always highlighted as a concern. Explicit efforts were made, in addition to strengthening local governments in the protected areas and updating management tools, to promote institutional coordination between SERNA and ICF, team building, and institutional uptake of procedures and guidelines. Moreover, one potentially significant result that may mitigate some of the risks to sustainability of Project outcomes was the capitalization of the Fund for Protected Areas and Wildlife of Honduras (FAPVS)<sup>9</sup>. Annual interests generated by this Fund<sup>10</sup> are earmarked for management effectiveness evaluations, as per SINAPH's Strategic Plan, guaranteeing that a minimum number of policy-level actions will be maintained, in support of protected area management.
- 61. The risks that results pertaining to binational coordination and are not maintained beyond the Project are very substantial. While political relations between the two countries are stable and high level dialogue is possible, little is expected in terms of joint management of the CTBR, even with the process to UNESCO underway. Coordination between indigenous leaders has been suspended in the absence of funding. While there are lessons learned in terms of approaches that would work in the future to facilitate binational coordination, these are unlikely to continue beyond the Project.

#### 5. Assessment of Bank and Recipient Performance

#### 5.1 Bank

(a) Bank Performance in Ensuring Quality at Entry

Rating: Moderately Unsatisfactory

62. Project preparation was detailed, highly participatory and well-coordinated with stakeholders. A comprehensive assessment of issues was carried out, and priorities for involvement were determined. However, Project design was overly ambitious and complex, and it failed to prioritize the top issues that could realistically be tackled by an intervention of regional scale, constrained by capacity, financial resources and time. The known capacity limitations of the main implementing agencies were underestimated, particularly in terms of the effort required to set up an adequate framework for decentralizing management of subprojects to local communities. The difficulties of working in a regional initiative were underestimated, and the agency that was selected to oversee binational coordination was highly inadequate and unable to fulfill its responsibilities. Overall, although assessed as high, the risks of implementation were underestimated and mitigation measures were not sufficient to address all challenges in a timely manner. These shortcomings in preparation had a substantial impact on Project performance for the first years of implementation.

<sup>&</sup>lt;sup>9</sup> The Fund is managed by BANADESA, under the supervision of a Steering Committee including representatives from SERNA and ICF.

<sup>&</sup>lt;sup>10</sup> The principal of US\$500,000 provided by GEF cannot be spent, only the annual interest is available to the Steering Committee, to be used according to a set of eligibility criteria and guidelines included in the Operations Manual.

#### (b) Quality of Supervision

(including of fiduciary and safeguards policies)

Rating: Moderately Unsatisfactory

- 63. As is the case of Project implementation, the quality of Bank supervision needs to be evaluated in two phases: a first phase spanning from 2007 to late 2010, and a second phase from early 2011 until Project closure. During the first phase, the Project faced a series of challenges related to implementation pace, procurement, financial management and broader institutional issues. Through that period, this ICR rates quality of supervision as *Unsatisfactory*. Indeed, while some of the most significant challenges to implementation were identified during these first years of Project execution, the measures taken were not sufficient to address the challenges that Honduras and Nicaragua were facing. The countries' perception of this period is that the Bank was not sufficiently responsive to the capacity gaps that existed, and that they were largely left alone to address the problems.
- 64. By early 2011 a first level restructuring was undertaken, the Project was simplified and support was provided to country teams to improve implementation. With a revised Project scope and with continuous technical and fiduciary support from the Bank's team, most administrative, technical and operational issues were resolved. Close contact with country units, and an overall intensive quality of supervision was maintained during the final two years of implementation. Results were a turnover in execution and overall Project implementation: objectives were achieved, and there was a significant improvement in the relationship between the Bank and MARENA/SERNA. This ICR rates quality of supervision during this second phase as *Satisfactory*.
- 65. Considering that Project supervision was rated *Unsatisfactory* over the first four years of implementation and *Satisfactory* during the final two, the overall rating given by this ICR to supervision is *Moderately Unsatisfactory*.

#### (c) Justification of Rating for Overall Bank Performance

Rating: Moderately Unsatisfactory

66. The ICR rates the overall Bank performance as *Moderately Unsatisfactory* given that Bank performance during preparation and during overall implementation has been rated *Moderately Unsatisfactory*.

#### **5.2 Recipient**

#### (a) Government Performance

67. The performance of both government agencies (MARENA and SERNA) and that of CCAD are evaluated in the next section.

#### (b) Implementing Agency or Agencies Performance

68. MARENA's Performance was split into two distinct phases. During the first part of implementation, prior to restructuring, the Project faced significant delays and inefficiencies related to insufficient capacity of the PIU to execute the various activities. The agency's performance during that first phase is rated as *Unsatisfactory*. During the second stage of implementation, after restructuring, MARENA overcame all its earlier

- challenges, and within the context of the restructured operation, it completed all commitments without delays. Moreover, MARENA's implementation strategy, with its mainstreaming of the PIU, made it likely that institutional strengthening efforts will be sustainable in the future. This ICR rates MARENA's performance during that second phase as *Satisfactory*.
- 69. SERNA faced similar circumstances as MARENA during the first phase of implementation, and therefore the overall performance of the agency prior to restructuring was rated *Unsatisfactory*. During the second phase, after restructuring, in spite of improvements on implementation, SERNA was not able to address all the issues and overcome the delays, and ultimately 12% of the funding was not disbursed. Moreover, SERNA's implementation strategy did not aim at incorporating the PIU into its institutional framework. Administrative weaknesses and ineligible expenditures were identified during the final year of implementation<sup>11</sup>. This led to requiring more Project implementation support, including unplanned procurement reviews and addressing red flags for increased risks to project management to meet objectives. This ICR rates SERNA's performance after restructuring as *Moderately Unsatisfactory*.
- 70. CCAD's performance did not meet expectations during the first phase of Project implementation. The agency's role as coordinator of binational efforts and policy dialogue between Honduras and Nicaragua was not carried out effectively, and the agency did little more than fulfilling administrative obligations. CCAD's performance after the Project was restructured continued to be unsatisfactory, even after the scope of its actions had been greatly reduced. CCAD failed to meet the fiduciary obligations it had been assigned under the Grant Agreement and did not carry out the activities it committed to completing during the last year of the Project. This resulted in undisbursed funds and in one unfulfilled Project indicator for which the agency was responsible. This ICR rates CCAD's overall performance *Unsatisfactory*.

#### (c) Justification of Rating for Overall Recipient Performance

71. The ICR rates overall Recipient performance, calculated as a weighted average of the three agencies' performance before and after the restructuring, as *Moderately* Unsatisfactory.

#### 6. Lessons Learned

72. Lesson #1 – The development of operational tools that take into account the local socioenvironmental realities is critical to ensuring that operations in difficult contexts can be executed in reasonable times. The majority of the beneficiaries of the Project live in very remote areas, some of which are days away from the nearest bank and/or supplier. Given the difficulties in accessing and in transporting goods to these areas, a number of adjustments were made to Bank guidelines, aimed at facilitating processes. These adjustments, for example, eliminated the requirement of having bank accounts, made it simpler to utilize local providers, reduced the number of disbursements for individual sub-projects, and simplified the format of some of the documents needed to document

<sup>&</sup>lt;sup>11</sup> In the weeks prior to ICR delivery the Bank notified the Government of Honduras of expenditures that were not adequately documented and were therefore considered ineligible.

- payments. All adjustments to Bank procurement and disbursement guidelines maintained the principle of the original guidelines and included sufficient provisions to allow accurate documentation of expenditures. These adjustments were documented in Sub-Projects Manuals, and were approved and controlled by the World Bank team. They revised very strict guidelines that were impossible to implement in a very difficult local context, ensuring that fiduciary responsibilities and accountabilities were maintained.
- 73. Lesson #2 Direct sub-project implementation by local governments and communities requires previous investments in capacity building. The Project was expected to achieve a high level of community participation. However, local communities within the area of influence of the Project did not have the capacity to prepare and directly implement their own sub-projects. Even though a number of earlier Projects have been implemented in the area, the typical mechanism used was to contract intermediaries and third parties, who would manage funds on behalf of the communities and assist them in the implementation of their sub-projects. The Corazón Project is the first to have transferred resources to the communities for their direct implementation of activities. However, given the local poverty and education levels in the area, it would have been impossible to carry out direct execution of activities without first ensuring that capacity was built in these communities for management of protected areas, formulation of sub-projects, administrative processes, procurement, financial management and monitoring and evaluation, among others.
- 74. Lesson #3 Assessment of operational risks under binational Projects must take into account overall political conditions and should offer options to surpass barriers and ensure continuity of activities. During Project implementation, and particularly during the time of political tensions between Nicaragua and Honduras, political barriers arose that were not considered in the analysis of risks of the Project. It was important to have binational coordination mechanisms at the technical level in place, even though at a higher political level relationships were difficult. The technical coordination that was maintained throughout implementation of the Corazón Project was important to ensure continuity of ongoing initiatives, and to advance on established agreements while the complications at a higher political level were resolved.
- 75. Lesson #4 Understanding the indigenous cosmovision is central to the participation of indigenous peoples in Projects' execution and to the sustainability of interventions. The involvement of National Secretariats of Indigenous People and representation from Territorial Governments and Indigenous Federations at various stages of Project's implementation, including sub-project preparation, evaluation and execution, facilitated the comprehension of the indigenous cosmovision and a better understanding of the communities' needs, demands, and sustainable ways to address them. The strong participation of indigenous communities in the overall Project is a result of the attention that was given to incorporating their cultural and social concerns in the development of sub-projects, generating a sense of community ownership and relevance for the activities that were financed and for the results obtained.
- 76. Lesson #5 A minimum of 13 percent of the total investment is required to cover the costs of adequate monitoring of sub-projects in remote areas. Close and continuous monitoring of sub-project implementation emerged as critical to ensuring adequate provision of technical assistance to beneficiaries, a good implementation of sub-project activities, and adequate fiduciary management of funds. The cost of monitoring the subprojects was between 13 and 16 percent of the total project investment in both

countries. A standardized format was designed for sub-project monitoring, which included a detailed questionnaire applied to beneficiaries. The majority of sub-projects were visited three times (at the onset, mid-term and closure of the sub-project), and only those in the most remote areas were visited twice. These scheduled visits allowed executing agencies to establish baselines for each subproject, to assess the progress of each activity, to measure final results and to establish each sub-project contribution to the macro indicators of the Project.

- 77. Lesson #6 Setting explicit targets for women participation in implementation of subprojects in indigenous communities ensures their involvement and promotes their empowerment. The Project's requirement that 20 percent of all sub-project beneficiaries were women in order for the communities to have access to sub-projects funds initiated a necessary reflection within these communities about the roles of women, their capacity and leadership potential and their ability to contribute to sustainability of the Biosphere Reserve. Groups of women organized themselves and obtained legal documentation that allowed them to become direct beneficiaries as well as financial administrators of their own sub-projects. By doing this, the Project empowered indigenous women, demonstrating they eagerness to become more actively involved in community matters, their organization skills and their capacity to execute sub-projects that resulted in concrete impacts to their families and the environment.
- 78. Lesson #7 The PROARCA and GEF tracking tools can be adapted to better capture the socio-environmental conditions of local protected areas. In Nicaragua, the PROARCA tool was revised and adjusted to achieve separate evaluations of management effectiveness accounting for natural resources and the biodiversity criteria, as well as risk management criteria that allowed evaluating actions relevant to climate change adaptation. The tool was also modified to include an indigenous focus, included local socio-economic criteria that made results more relevant to the area of the Project, such as: a) management of indigenous territories and communities; b) territorial and indigenous community governability; c) sustainable development and the treatment of Mother Earth; and d) vulnerable zones, emergencies and community prevention in indigenous territories.

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

#### (a) Borrower/implementing agencies

79. Annex 8 transcribes the comments received from MARENA and SERNA. No comments were received from CCAD. MARENA rated overall Project performance as *Highly Satisfactory*, in terms of government ownership, commitment and achievement of PDO. The participatory nature of the Project and the integration of local considerations (including indigenous) in the design and implementation of sub-projects were highly rated. The ability to respond to specific implementation needs, in terms of capacity, methodologies, procedures and instruments for project execution was perceived as a key element to the success of the Project. The World Bank performance was rated as *Moderately Satisfactory* prior to restructuring and *Highly Satisfactory* following the restructuring. Challenges faced during the first years of implementation were recognized, but the support of the Bank throughout implementation was acknowledged.

80. SERNA rated overall Project performance as satisfactory, but identified serious challenges and limitations with the original design and funding allocation. The performance of the Bank was rated as *Unsatisfactory* in the period preceding the MTR and restructuring. A notable improvement in the level of support provided to the agency following the restructuring was recognized.

#### (b) Cofinanciers

N/A

#### (c) Other partners and stakeholders

(e.g. NGOs/private sector/civil society) N/A

### **Annex 1. Project Costs and Financing**

The following tables summarize the status of project costs and expenditures at approval, restructuring and at the end of the Project.

Table A1.1 – Original project costs

ORIGINAL PROJECT COMPONENTS	GEF financing (USD)				
	Honduras Nicaragua CCAD				
Component 1 - Consolidation of CTBR				765,000	
1.1 Support to the regularization of land tenure	174,000	174,000		348,000	
1.2 Efficient binational coordination mechanisms for the CBTR			317,000	317,000	
1.3 Recognition of the CTBR by UNESCO			100,000	100,000	
Component 2 - Strengthening of the National Protected Areas Systems				2,118,000	
2.1 Modernization of the Nicaraguan SINAP through support to management					
and policy instruments		539,000		539,000	
2.2 Establishment of financial sustainability mechanisms for the Nicaraguan					
SINAP		520,000		520,000	
2.3 Modernization of the Honduran SINAP	310,000			310,000	
2.4 Support to financial sustainability mechanisms for the Honduran SINAP	749,000			749,000	
Component 3 - Implementation of CBTR protected areas management				2,734,000	
3.1 Harmonization, updating, and implementation of protected areas					
management plans	471,000	478,000		949,000	
3.2 Strengthening community, indigenous and civil society participation in the					
implementation of management plans	892,500	892,500		1,785,000	
Component 4 - Community-based natural resource management				3,564,200	
4.1 Local governance for natural resource management	352,100	352,100		704,200	
4.2 Community subprojects	1,430,000	1,430,000		2,860,000	
Component 5 - Monitoring and information management				960,000	
5.1 Biodiversity and social monitoring system incorporated and linked to					
information systems	295,700	317,300		613,000	
5.2 Promotion of scientific biodiversity research in the CTBR			152,000	152,000	
5.3 Promotion of environmentally friendly views and actions	97,500	97,500		195,000	
Component 6 - Project administration				1,858,800	
6.1 Project administration (CCAD)			523,000	523,000	
6.2 Project administration (Nicaragua)		653,600		653,600	
6.3 Project administration (Honduras)	682,200			682,200	
Total GEF	5,454,000	5,454,000	1,092,000	12,000,000	

Table A1.2 – Restructured Project Costs (USD), as of December 31, 2010

		GEF Funding (USD)						
Component name		Original	Disbursed	Balance	Reallocated balance	Total revised		
	HN	174,000	140,327	33,673				
Component 1 - Consolidation of	NI	174,000	138,739	35,261				
CTBR	CC	417,000	186,961	230,039				
	TOT	765,000	466,027	298,973				
Component 2 - Strengthening of	HN	1,059,000	13,861	1,045,139	1,178,629	1,192,490		
the National Protected Areas	NI	1,059,000	196,772	862,228	486,295	683,067		
	CC	-	-	-	230,039	417,000		
Systems	TOT	2,118,000	210,633	1,907,367	1,894,963	2,292,557		
Component 3 - Implementation	HN	1,363,500	545,171	818,329	2,130,407	3,273,274		
of protected areas management	NI	1,370,500	670,453	700,047	2,214,556	3,776,133		
plans	TOT	2,734,000	1,215,624	1,518,376	4,344,963	7,049,407		
Component 4 - Community-	HN	1,782,100	457,369	1,324,731				
based natural resource	NI	1,782,100	752,385	1,029,715				
management	TOT	3,564,200	1,209,754	2,354,446				
	HN	393,200	155,235	237,965	150,801	306,036		
Component 5 - Monitoring and	NI	414,800	147,414	267,386	193,784	341,198		
information management	CC	152,000	25,502	126,498	126,498	152,000		
	TOT	960,000	328,151	631,849	471,083	799,234		
	HN	682,200	498,083	184,117	184,117	682,200		
Component 6 - Project	NI	653,600	447,937	205,663	205,663	653,600		
administration	CC	523,000	270,767	252,233	252,233	523,000		
	TOT	1,858,800	1,216,787	642,013	642,013	1,858,800		
Total		12,000,000	4,646,976	7,353,024	7,353,022	11,999,998		

<sup>(\*)</sup> As of December 31, 2010

(\*\*) With the elimination of components 1 and 4, undisbursed balances for HN and NI were essentially transferred to component 3. Some resources from components 2 and 5 were also reallocated to component 3, as indicated in Table 1. Component 6 was left unchanged.

Table A1.3 – Restructured project components and amounts of GEF resources remaining after restructuring

Project components	Honduras	Nicaragua	CCAD
Component 1 - Strengthening of the National Protected Areas Systems	1,178,629	486,295	230,039
1.1 Update of Management Plans and Development of Policy Instruments	429,629	466,295	230,039
1.2 Strengthening of Financial Sustainability Mechanisms	749,000	20,000	-
<b>Component 2 - Implementation of Management Plans and Conservation Actions</b>	2,130,407	2,214,556	126,498
2.1 Participative Management and Sustainable Production Sub-Projects to Promote			
Community, Indigenous and Civil Society Participation in the Implementation of			
Management Plans in Protected Areas	1,885,157	1,864,307	-
2.2 Strengthening Local Governance for Natural Resource Management	245,250	354,249	126,498
Component 3 - Monitoring and information management	150,801	193,784	-
3.1 Strengthening of the National Information Management System with			
Socioeconomic and Biodiversity Monitoring at the CBTR	100,000	178,784	-
3.2 Monitoring and Evaluation	50,801	15,000	-
Component 4 - Project administration	184,117	205,663	252,233
4.1 Project Administration	184,117	205,663	252,233
TOTAL	3,643,954	3,100,298	608,770

Table A1.4 – Status of counterpart funding at restructuring

		Co-finan	cing (USD)
Component name	Executing agency	Committed	Actual disbursed (12/31/10)
	HN	-	1,795
Commonant 1 Compolidation of CTDD	NI	-	i
Component 1 - Consolidation of CTBR	CC	34,000	159,578
	TOT	34,000	161,373
	HN	3,038,000	3,191,368
Component 2 - Strengthening of the	NI	418,000	27,000
National Protected Areas Systems	CC	-	1
	TOT	3,456,000	3,218,368
Component 2 Implementation of	HN	470,000	19,483
Component 3 - Implementation of	NI	492,500	633,896
protected areas management plans	TOT	962,500	653,379
Comment A. Comment to be and	HN	300,000	8,588
Component 4 - Community-based	NI	370,000	293,152
natural resource management	TOT	670,000	301,740
	HN	12,500	8,807
Component 5 - Monitoring and	NI	32,500	65,250
information management	CC	45,000	-
	TOT	90,000	74,057
	HN	384,700	335,667
Component 6 Duciest administration	NI	601,320	206,889
Component 6 - Project administration	CC	120,000	33,300
	TOT	1,106,020	649,913
TOTAL		6,318,520	5,058,830

Table A1.5 – Disbursements by component by the end of the project – Nicaragua

Project components	Disbursed prior to restructuring - See table A2 (USD)	Balance of allocation after restructuring (USD)	Total disbursement (USD)
Component 1 - Strengthening of the National Protected Areas Systems		486,295	486,295
1.1 Update of Management Plans and Development of Policy Instruments		466,295	
1.2 Strengthening of Financial Sustainability Mechanisms		20,000	
<b>Component 2 - Implementation of Management Plans and Conservation Actions</b>		2,214,556	2,214,556
2.1 Participative Management and Sustainable Production Sub-Projects to Promote			
Community, Indigenous and Civil Society Participation in the Implementation of			
Management Plans in Protected Areas		1,864,307	
2.2 Strengthening Local Governance for Natural Resource Management		354,249	
Component 3 - Monitoring and information management		193,784	193,784
3.1 Strengthening of the National Information Management System with			
Socioeconomic and Biodiversity Monitoring at the CBTR		178,784	
3.2 Monitoring and Evaluation		15,000	
Component 4 - Project administration		205,663	205,663
4.1 Project Administration		205,663	
TOTAL	2,353,700	3,100,298	5,453,998

Table A 1.6 – Disbursements by component by the end of the project – Honduras

Project components	Disbursed prior to restructuring - See table A2 (USD)	Balance of allocation after restructuring (USD)	Total disbursement after restructuring (USD)	Total disbursement (USD)
Component 1 - Strengthening of the National Protected Areas Systems		1,178,629	542,770	
1.1 Update of Management Plans and Development of Policy Instruments		429,629		
1.2 Strengthening of Financial Sustainability Mechanisms		749,000		
Component 2 - Implementation of Management Plans and Conservation Actions		2,130,407	1,981,636	-
2.1 Participative Management and Sustainable Production Sub-Projects to Promote				
Community, Indigenous and Civil Society Participation in the Implementation of				
Management Plans in Protected Areas		1,885,157		
2.2 Strengthening Local Governance for Natural Resource Management		245,250		
Component 3 - Monitoring and information management		150,801	284,630	-
3.1 Strengthening of the National Information Management System with				
Socioeconomic and Biodiversity Monitoring at the CBTR		100,000		
3.2 Monitoring and Evaluation		50,801		
Component 4 - Project administration		184,117	181,215	-
4.1 Project Administration		184,117		
TOTAL	1,810,046	3,643,954	2,990,251	4,800,297

Table A 1.7 – Expected Disbursements by component by the end of the project – CCAD

Project components	Disbursed prior to restructuring (USD)	Balance of allocation after restructuring (USD)	Total disbursement after restructuring (USD)	Total disbursement (USD)
Component 1 - Strengthening of the National Protected Areas Systems		230,039		
1.1 Update of Management Plans and Development of Policy Instruments				
1.2 Strengthening of Financial Sustainability Mechanisms				
Component 2 - Implementation of Management Plans and Conservation Actions				
Community, Indigenous and Civil Society Participation in the Implementation of				
2.2 Strengthening Local Governance for Natural Resource Management				
Component 3 - Monitoring and information management		126,498		
Socioeconomic and Biodiversity Monitoring at the CBTR				
3.2 Monitoring and Evaluation				
Component 4 - Project administration		252,233		
4.1 Project Administration				
TOTAL	483,230	608,770	505,585	988,815

Table A 1.8 – Final co-financing amounts

Source of Funds	Type of Cofinancing	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
Nicaragua	Overall	4.75	5.19	109
	In kind Communities	0.48	0.92	190
	Cash (Marena and local govts.)	0.27	0.27	100
	Other grants	4.00	4.00	100
Honduras	Overall	15.53	16.92	109
	In kind Communities	0.26	0.47	180
	Cash SERNA	0.27	0.33	120
	Cash Env. Fund	3.00	4.12	137
	Other grants	12.00	12.00	
CCAD	Cash CCAD	0.32	0.32	100
Ove	Overall Counterparts		22.43	109
Global En	vironment Facility (GEF)	12.00	11.10	92

#### **Annex 2. Outputs by Component**

## Component 1: Strengthening of National Protected Areas Systems (Sistemas Nacionales de Áreas Protegidas, SINAPs)

Component 1 contributed to strengthening the Honduras and Nicaragua SINAPs through the development and/or updating of technical instruments aimed at promoting effective management of Protected Areas (e.g. Management Plans, manuals, guidelines, and management effectiveness evaluations). These tools were developed through highly participatory mechanisms. The active participation of communities and local governments in the various activities funded by the Project was one of the most remarkable and most effective achievements of this component.

The Project also contributed to the development of financial tools aimed at providing sources of funding to ensure the sustainability of the SINAPs. In Nicaragua, an operations manual and an action plan for the establishment of the National Protected Areas Fund (Fondo Nacional de Áreas Protegidas, FNAP) were prepared under the Project, and policy dialogue was carried out to support its creation. In Honduras, the FAPVS was capitalized with one million dollars (50% GEF resources and 50% of government counterpart). The governance structure for the FAPVS Honduras involves a Steering Committee that includes participation of SERNA and ICF, and which periodically reports to a Ministerial Committee.

## 1.1. Updating Protected Areas Management Plans and Development of Management Tools for the SINAPs

#### <u>Indicator #1 – Achieved: Management plans for the four (4) protected areas in</u> <u>the Corazón Reserve were updated under the Project</u>

- In Nicaragua, the management plan "Plan de Protección y Manejo Conjunto de la Reserva Biosfera de BOSAWAS (RBB)" was updated, respecting the rights and integrity of the 7 indigenous territories that live in the Reserve. This involved incorporating indigenous environmental standards (normas ecológicas) and development plans, as well as their customs, beliefs, and communal organization structure, underpinned by their consmovision and respect for Mother Earth. The updated plan is a new system of joint management that was agreed by government and indigenous peoples, with the objective of ensuring equal participation in the decision-making process of initiatives, actions and investments aimed at improving the management effectiveness of the RBB.
- In Honduras, the process of upgrading of the management plans for the three protected areas (*Reserva del Hombre and Biosfera del Río Plátano, Reserva de Biosfera Tawahka Asangni, and the Parque Nacional Patuca*) was also carried out ensuring wide participation of actors at regional and local levels, involving state agencies, local governments, academia, civil society, business and production industry, and local communities (indigenous and Ladino). The update of the management plan of the *Reserva de Biosfera Tawahka Asangni* was particularly important, as it was done under the leadership of the NGO *Alianza Verde*, of Tawahka origin. For the first time in the history of Honduras, an

indigenous federation became responsible of the preparation of the management plan for their own ancestral land, with full support and endorsement from the central government.

In both countries, organized training to communities, local governments, indigenous federations and indigenous territorial governments was carried out during the formulation of these plans, as well as during activities leading to the measurement of management effectiveness of the protected areas. Other relevant central institutions (in addition to MARENA and SERNA) participated and became partners in the process of updating these management plans, including, ICF and SEDINAFROH in Honduras, and the Secretariat of the Caribbean Coast of Nicaragua

## <u>Indicator #2 – Achieved: 47 policies and/or instruments for protected area management developed and/or updated under the Project in the two countries.</u>

The actions of SERNA and MARENA, SINAP coordinators in Honduras and Nicaragua, respectively, were strengthened through the development and/or update of 47 protected area management tools (22 in Nicaragua and 25 in Honduras). These instruments includes: (i) operations manuals to strengthen the technical and financial management of the SINAPs, such as guidelines for development of management plans for protected areas, for farms within the Reserves; (ii) operations manuals for sub-projects, highlighting good practices in terms of local development and community participation; (iii) updated environmental standards; (iv) technical and scientific information used in the generation of baselines; (v) monitoring systems for biodiversity, land use and forestry; (vi) materials for environmental education; and others. Included among these instruments are 25 manuals for participatory management processes (8 in Nicaragua and 17 in Honduras), which were generated and validated with local communities. Through this formalization of combined of technical and scientific knowledge with local, traditional knowledge, the Project aimed at promoting sustainability in the application of these tools in the long term.

Table A 2.1. Summary SINAP's Instruments

#### SINAP Instruments –NICARAGUA

- 1. Guía metodológica para elaborar planes de manejo en áreas protegidas del SINAP
- Guía técnica y metodológica para la armonización de los planes de manejo de la Reserva de Biosfera Transfronteriza Corazón del Corredor Biológico Mesoamericano
- 3. Guía metodológica para elaborar planes de manejo de fincas en áreas protegidas
- 4. Normativa criterios técnicos y proceso metodológico para la elaboración de los planes operativos anuales en el SINAP y procedimiento administrativo para su aprobación
- 5. Plan de protección y manejo conjunto de la Reserva de Biosfera BOSAWAS
- 6. Plan de manejo de la Reserva Natural Kilambé
- 7. Actualización de las normas ecológicas o planes de manejo en los territorios indígenas de la RBB
- 8. Sistema de monitoreo y evaluación integral de efectividad de manejo en las áreas protegidas del SINAP
- 9. Metodología de la efectividad de manejo para los territorios indígenas
- 10. Guía Técnica para los comités de manejo y protección de áreas protegidas en la

**RBB** 

- 11. Manual de prácticas para la regeneración natural y enriquecimiento de especies en la RBB
- 12. Establecimiento de parcelas demostrativas de regeneración natural en la Reserva Natural Macizo de Peñas Blancas (3 hectáreas
- 13. Aplicación de Instrumentos de Monitoreo de la Biodiversidad en la RBB (GLOBIO3-PROMEBIO
- 14. Declaratorias de Parques Ecológicos Municipales (PEM
- 15. Actualización de la Estrategia Nacional de Biodiversidad
- 16. Resolución ministerial para establecer las regulaciones para el otorgamiento del permiso ambiental en el SINAP
- 17. Procedimiento administrativo para el aprovechamiento de flora menor
- 18. Procedimiento administrativo para declarar Reservas Silvestres Privadas
- 19. Estrategia de Educación Ambiental para la RBB
- 20. Curriculum de guardaparques.
- 21. Manual de operaciones de guardaparques
- 22. Sistema de monitoreo Socio-ambiental y de Biodiversidad para la RBB y la RAAN

#### **SINAP Instruments- HONDURAS**

- 1. Actualización del manual de monitoreo de la Efectividad de Manejo del SINAPH (versión 2010):
- 2. Actualización de las escalas y Base de datos del Monitoreo de Efectividad de Manejo del SINAPH (Versión 2010):
- 3. Actualización del Diagnóstico de actores locales en la RBT (2009):
- 4. Estrategia para el Fortalecimiento Institucional de Federaciones Indígenas en al RBT (2008):
- 5. Lineamientos para la construcción de Infraestructura en las Áreas Protegidas del SINAPH (2011):
- 6. Identificación de sitios Estratégicos para Establecer Estaciones de Monitoreo en las Zonas Culturales, Zonas de Amortiguamiento y Zonas Núcleo de las Áreas Protegidas de la RBT (2008):
- 7. Diagnóstico Biofísico y socioeconómico del Parque Nacional Patuca:
- 8. Diagnóstico Biofísico y Socioeconómico de la Reserva Tawahka Asangni:
- 9. Diagnóstico Biofísico y Socioeconómico de la Reserva del Hombre y Biosfera Río Plátano
- 10. Diagnóstico Situacional fortaleciendo la Red Nacional para la Conservación de las Tortugas Marinas de Honduras:
- 11. Censo Poblacional de Jaguar en la Reserva Biosfera Tawahka, La Mosquitia (2009):
- 12. Estudio de los estados de conservación en Flora y Fauna en el Sudeste del Parque Nacional Patuca
- 13. Actualización del Plan de Manejo del Parque Nacional Patuca (2011):
- 14. Actualización del Plan de Manejo Reserva de Biosfera Tawahka Asangni (2012)
- 15. Actualización del Plan de Manejo Reserva del Hombre y Biosfera Río Plátano (2012)
- 16. Elaboración del Plan de Manejo del Parque Nacional La Montaña El Carbón:
- 17. Estimación de la efectividad de manejo en las áreas protegidas de la propuesta

#### RBT:

- 18. Actualización de la Ficha Técnica de la RBT con información actualizada de las áreas protegidas de Honduras
- 19. Informe de Efectividad de Manejo Monumento Natural Marino Archipiélago Cayos Cochinos (MNMACC):
- 20. Actualización de la Ficha Técnica de la RBT con información actualizada de las áreas protegidas de Honduras:
- 21. Estrategia de monitoreo y manejo de la Información en el Corazón del Corredor Biológico Mesoamericano en Honduras (2008):
- 22. Estrategia de Implementación del Sistema Nacional de Información Ambiental (SINIA) de Honduras:
- 23. Estudio de Interpretación de Imágenes Satelitales para la Determinación de cambios en el Uso del Suelo (2011)
- 24. Programa de Monitoreo de la Integridad Ecológica del parque Nacional Patuca y las Reservas de Biosfera del Río Plátano, y Tawahka-Asangna
- 25. Efecto del Cambio Climático en la Dinámica De Producción En Tres Comunidades Garífunas

# <u>Indicator # 3 – Achieved: Improvement in the management effectiveness rating of the two National Protected Areas Systems (SINAPs) according to the PROARCA methodology.</u>

The management effectiveness rating of the four protective areas show the contributions made to biodiversity conservation by sub-projects that supported participatory management and community governance. The same positive assessment is given to Project investments that focused on strengthening organizational structures and supported training for administrative and business management in the territories.

- The *Reserva Biosfera de BOSAWAS (RBB)* is being managed more effectively, with an "good" rating in the areas inhabited by indigenous populations, and it has maintained a score of "fair" in areas inhabited by mestizos. These ratings were consistent in every monitoring of management effectiveness conducted annually under the Project since 2009, using 2006 as base year.
- The Reserva del Hombre and Biosfera del Río Plátano received a "fair" rating in consecutive annual monitoring events conducted from 2010 to 2012. This rating is strongly associated to the high weighting assigned by PROARCA to economic and financial criteria, as relevant interest groups receive direct benefits under Project activities.
- The Reserva de Biosfera Tawahka Asangni Tawahka maintained a rating of "Regular" throughout annual monitoring events conducted from 2010 to 2012.
- The *Parque Nacional Patuca* maintained its "*Fair*" rating throughout the period of Project implementation. This rating is low relative to the others PAs primarily due to low scores under criteria related to administrative capacity, which points to the lack of personnel necessary for an adequate management of the protected area (a responsibility of ICF), and the lack of maintenance of infrastructure in the area.

Table A 2.2: Summary of protected areas management effectiveness ratings during the Project

Protected	Ra-	Qualifica	Ra-	Qualifica	Ra-	Qualifi-	Ra-	Quali-
Areas (PAs) –	ting	-tion	ting	-tion	ting	cation	ting	fication
CTBR	200		201		201		201	
	6		0		1		2	
Average	44.6	Poor	49.5	Poor	66.4	Regular	62.0	Regular
Honduras								
PAs								
Reserva	49.6	Poor	45.2	Poor	69.6	Regular	64.3	Regular
Hombre de								
Biosfera del								
Río								
Plátano(RBR								
Parque	37.5	Poor	39.9	Poor	55.0	Regular	54.5	Regular
Nacional								
Patuca (PNP)								
Reserva de	46.7	Poor	63.5	Regular	74.6	Good	67.3	Regular
Biosfera								
Tawahka								
Asangni								
(BTA)								
Average		Regular		Regular		Good/		Good/
Nicaragua						Regular		Regular
RBB								C
Indigenous	NA/	NA	50.0	Regular	52.8	Good	61.0	Good
RBB PAs	2							
Territories								
Non	55.9	Regular	65.0	Regular	74.4	Regular	60.0	Regular
Indigenous		U						U
PΔc								

1/: Since 2010 Nicaragua PROARCA Tracking tool methodology version was modified to include the indigenous vision. The rating has different scale: Indigenous Nicaragua PAs Rating: Satisfactory (80-100%), Acceptable (51-79%), Regular (30-50%) and Poor (<25%).

Non Indigenous Nicaragua PAs Rating: Very Good (90-100%), Good (76-89%), Regular (51-75%), Poor (25-50), unsatisfactory (<25%).

Honduras PAs Rating: Very Good (90-100%), Good (71-89%), Regular (51-70%), Poor (50-25%) and unsatisfactory (<25%).

2/ NA: Not applicable

## <u>Indicator # 4 – Achieved: Technical Proposal for the recognition of the CTBR by</u> UNESCO prepared, and endorsed by national governments and indigenous peoples

The technical proposal to UNESCO for the nomination of the CTBR was approved and endorsed through a long process that involved broad participation of local municipalities and indigenous territories, in both countries. The Project supported a final binational meeting that was conducted in Nicaragua, in November 2012, with the objective of

agreeing on the final name for the Reserve, to be included in the UNESCO proposal. The name unanimously approved at the meeting was: *PATRIMONIO ANCESTRAL INDÍGENA DE LA RESERVA DE LA BIOSFERA TRANSFRONTERIZA ABYAYALA* (INDIGENOUS ANCESTRAL HERITAGE OF THE TRANSBOUNDARY BIOSPHERE RESERVE *ABYAYALA*). The indigenous word *Abyayala* means Ancestral Earth, Mother Earth or Life for All, and also stands for American Land. Indigenous history books use this name for the area when referring to historic indigenous efforts to defend ancestral natural resources.

The preparation of the technical proposal involved extensive binational work and coordination between binational teams at all levels (central and municipal governments, Territories and Indigenous Federations, SERNA and MARENA, as well as technical teams). The document consolidated information that the Nicaragua and Honduras country teams worked at compiling (e.g. scientific, social, economic, and environmental) including data generated by the Project (e.g. administrative and participatory management data, zoning information). This information was added into a binational geographic information system unifying the classification categories of information for both countries, generating maps for the proposed harmonized binational Corazón Reserve.

At the end of the Project, the endorsed technical proposal was delivered to the Ministry of Environment in Nicaragua, and the Secretary of Environment in Honduras. The final steps of submitting the proposal to UNESCO will need to be undertaken by Foreign Affairs ministries in both countries, following the steps and the timeline prepared by the technical country teams.

#### 1.2. Strengthening mechanisms for sustainability financing

## <u>Indicator # 1 – Achieved:</u> Establishment of Fund for Protected Areas and Wildlife of Honduras.

The Fund for Protected Areas and Wildlife of Honduras (Fondo Ambiental de Areas Protegidas y Vida Silvestre, FAPVS) was established under the Protected Areas and Wildlife and Forestry Act (Article 35) in 2006. The Technical Implementation Unit of the Fund started operations in 2009, with the responsibility for the administration of resources allocated by the State (60 million Lempiras). In 2012, after Honduras met all of the conditions established in the Grant Agreement, the Corazón Project contributed US\$500,000 to the capitalization of FAPVS. The endowment fund was established in BANADESA, and will be administered by the Bank's endowment fund unit, which will report directly to the Steering Committee of the FAPVS. In 2013, the Committee of the SINAP (Comité de Apoyo del SINAP), the technical arm of the Fund's Steering Committee has the responsibility of announcing the establishment of the Fund to national and international agencies currently working on issues related to protected areas in Honduras, as well as of promoting the use and implementation of available resources, according to the Operating Manual of the Fund. The annual interests generated from the principal amount, will finance annual measurement of management effectiveness in protected areas of the SINAP.

<u>Indicator # 2 – Achieved:</u> Action Plan for the establishment of a Fund for Protected Areas in Nicaragua developed and endorsed by relevant authorities.

In Nicaragua, the Project's contribution to the strengthening of financial mechanisms for sustainability of protected areas within the SINAP consisted in developing instruments aimed at promoting the creation of a Protected Areas Fund (FAP). The proposed FAP is expected to be administered by MARENA and promoted within state institutions, the donor community, and international organizations as a financial mechanism of the SINAP. The Corazón Project developed proposed methodology and procedures that MARENA could use to establish and manage the Fund. Specifically, the Project contributed to the preparation of the following documents: (i) concept paper and proposal for the design of the FAP; (ii) FAP Operating Manual; and (iii) FAP action plan.

## Component 2 - Implementation of CTBR protected areas management plans and conservation measures.

#### 2.1. Sub-projects for Participatory Management and Sustainable Production

<u>Indicator # 1 – Achieved: Management and Protection of the CTBR strengthened, with a rating of "fair" according to the PROARCA and GEF Tracking Tool methodologies.</u>

#### PROARCA Methodology

The management effectiveness rating of the four protective areas show the contributions made to biodiversity conservation by sub-projects that supported participatory management and community governance. The same positive assessment is given to Project investments that focused on strengthening organizational structures and supported training for administrative and business management in the territories.

- The *Reserva Biosfera de BOSAWAS (RBB)* is being managed more effectively, with a "good" rating in the areas inhabited by indigenous populations, and it has maintained a score of "fair" in areas inhabited by mestizos. These ratings were consistent in every monitoring of management effectiveness conducted annually under the Project since 2009, using 2006 as base year.
- The *Reserva del Hombre and Biosfera del Río Plátano* received a "fair" rating in consecutive annual monitoring events conducted from 2010 to 2012. This rating is strongly associated to the high weighting assigned by PROARCA to economic and financial criteria, as relevant interest groups receive direct benefits under Project activities.
- The Reserva de Biosfera Tawahka Asangni Tawahka maintained a rating of "Regular" throughout annual monitoring events conducted from 2010 to 2012.
- The *Parque Nacional Patuca* maintained its "*Fair*" rating throughout the period of Project implementation. This rating is low relative to the others PAs primarily due to low scores under criteria related to administrative capacity, which points to the lack of personnel necessary for an adequate management of the protected area (a responsibility of ICF), and the lack of maintenance of infrastructure in the area.

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Biosfera del								
Río								
Plátano(RBR								
Parque	37.5	Poor	39.9	Poor	55.0	Regular	54.5	Regular
Nacional								
Patuca (PNP)								
Reserva de	46.7	Poor	63.5	Regular	74.6	Good	67.3	Regular
Biosfera				-				
Tawahka								
Asangni								
(RTA)								
Average		Regular		Regular		Good/		Good/
Nicaragua						Regular		Regular
RBB								
Indigenous	NA/	NA	50.0	Regular	52.8	Good	61.0	Good
RBB PAs	2							
Territories								
Non	55.9	Regular	65.0	Regular	74.4	Regular	60.0	Regular
Indigenous				Ü		Ü		
PΔc								

1/: Since 2010 Nicaragua PROARCA Tracking tool methodology version was modified to include the indigenous vision. The rating has different scale: Indigenous Nicaragua PAs Rating: Satisfactory (80-100%), Acceptable (51-79%), Regular (30-50%) and Poor (<25%).

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2/ NA: Not applicable

#### GEF Tracking Tool

The management effectiveness rating of the four protective areas, with PROARCA and GEF tracking tools, show the importance of contributions made to biodiversity conservation by sub-projects that supported participatory management and community governance. The rating obtained using the GEF tracking tool methodology is consistent with the results using the PROARCA methodology.

Using the GEF Tracking Tool methodology, for evaluating the management effectiveness in the four protected areas of the Corazón Reserve is "Fair". Summary ratings are presented in the table below. Important factors contributing to this rating are: (i) participation of indigenous territories and local communities in the decision-making

process for the protected areas; (ii) training and research conducted in the areas; (iii) development of community framework for supporting environmental management within the protected areas (e.g. guards, fire-fighting brigades); and (iv) number of sub-projects financing sustainable production, which are contributing to the management and conservation of biodiversity in protected areas.

Table A 2.3: Summary of GEF Tracking Tool indicators evaluated throughout Project implementation (Percentage)

Protected Area	Rating April 2006	Rating December 2010	Rating November 2012
Reserva de Biosfera BOSAWAS	42.4	69.7	70.7
(Nicaragua)			
Reserva del Hombre y Biosfera del	51.1	69.7	64.3
Río Plátano (Honduras)			
Reserva de Biosfera Tawahka	47.3	59.6	67.3
Asangni (Honduras)			
Parque Nacional Patuca (Honduras)	45.0	65.7	54.6

## <u>Indicator # 2 - Achieved:</u> Deforestation rates in the CTBR estimated annually and <u>linked to activities included in management plans for the protected areas</u>

The rate of deforestation in both countries is estimated using multitemporal studies of land use using satellite imagery cross checked with field verification. In Nicaragua, the deforestation rate evaluated in the Reserva de Biosfera BOSAWAS (RBB) from 1987 to 2012 remained low for nucleus zones and high for buffer zones, with rates of -0.6% and -3.2%, respectively. Results showed that in areas of the RBB with primary forest cover at the nucleus zones, coverage rates have remained at 81 to 94% in Nicaragua and Honduras, respectivily. Most of the preserved primary forest cover is located in indigenous territories of the Reserve.

In Honduras, the assessed annual deforestation rate is low (0.59%). Forest loss in the period 2005 to 2010 was estimated at 65,150 hectares. Average primary forest cover in the three protected areas covered under the Project remained high at 90% of the total, equivalent to about 1,325,536 hectares (2010).

Table A 2.4: Summary of CTBR Forest Cover and deforestation rate monitoring

Protected Area (PAs)	Forest	Deforestation	Deforestation
	Cover	Rating	Qualification
	Rating		
Overall RBB/1	51	-1.8	Medium
Nucleus Zone	81	-0.6	Low
Buffer Zone	32	-3.2	High

Overall Honduras PAs/2	90	0.59	Low
Reserva de Biosfera y Hombre			
Río Plátano	94	0.06	Low
Parque Nacional Patuca	83	1.75	Medium
Reserva de Biosfera Tawahka			
Asagni	93	0.63	Low

1/Nicaragua Deforestation rating was estimated for the period 1987-2012. The forest cover rating is 2012 valuation

2/Honduras Deforestation rating was estimated for the period 2005-2010. The forest cover rating is 2010 valuation

## <u>Indicator # 3 – Achieved: 4,500 families in Nicaragua and 1,500 in Honduras develop and implement conservation sub-projects</u>

Sub-projects implemented under the Project in Honduras and Nicaragua benefitted 11,629 families (5,416 and 6,213 families in Nicaragua and Honduras, respectively). A total of 247 sub-projects were completed, of which 131 promoted sustainable production and 116 focused on participatory management of natural resources. Sub-projects combined objectives of promoting a more sustainable management of protected areas within the Reserve, with the need to improve socio-economic conditions of people living in the area of influence of the Project.

Sub-projects provided positive experiences of financing in local communities, with over 50 good practices implemented in 7,205 hectares (3,090 ha. and 4,115 ha. in Nicaragua and Honduras, respectively). The methodology developed to implement sub-projects promoted ownership and strengthened capacity of executing parties, as beneficiaries received resources, technical assistance, as well as administrative and fiduciary training. Project funds amounted to a maximum of US\$20,000 per sub-project, matched by beneficiary counterpart financing of at least 20%.

The targets for this indicator were exceeded by 70% and 89% in Nicaragua and Honduras, respectively. The involvement of communities in the Reserve as executors and beneficiaries of Project funds represents one of the most dynamic and multi-ethnic experiences of participatory management of protected areas in Central America.

Table A 2.5e: Type and number of sub-projects implemented

Type of sub-projects	Honduras	Nicaragua	Total no. of sub- projects
Agro-forestry	10	54	64
Environmental education	8	13	21
Ecotourism	1	8	9
Rehabilitation of protected areas	11	4	15
Training of environmental stewards and community forest patrols	1	13	14

Type of sub-projects	Honduras	Nicaragua	Total no. of sub- projects
Silvo-pastoral	2	4	6
Productive infrastructure	0	9	13
Support to workshops for handy-crafts, metal works, wood works	4	9	34
Productive diversification with economic and nutritional objectives	25	4	29
Organizational strengthening for the management of natural resources	25	5	16
Support to sustainable production, cultivation and marketing of medicinal plants	11	3	15
Delineation of protected areas	12	3	11
Renewable energy	8	0	8
TOTAL	118	129	247

#### 2.2. Governance of Natural Resources Strengthened

## <u>Indicator # 1 – Achieved: Adoption of manuals for participative management of protected areas of the CTBR (7 in Nicaragua and 6 in Honduras)</u>

In Nicaragua, seven manuals were developed and instruments to promote participatory management in protected areas were updated/validated by communities in the Reserve. This strengthened not only both countries' SINAPs, but also the governance of local communities and indigenous peoples. Indeed, these instruments were developed while searching for a balance between new scientific knowledge and local traditions, which will guarantee ownership by the communities and sustainability of their use. Specifically, the instruments developed include: i) manual of land use changes in the RBB; ii) illustrated guide to birds of the RBB; iii) manual for implementation of sub-projects for participatory management and natural resources; iv) research program for the RBB; v) technical dossier to be presented at UNESCO in support of the nomination of Corazón as a Biosphere Reserve; vi) update of the RBB's technical dossier to be presented to UNESCO; and vii) manual for scholarship program and for vocational and technical training in natural resources and environmental issues related to sustainable rural development in the RBB.

In Honduras, six manuals aimed at promoting participatory management of protected areas were developed/updated: i) manual for implementation of sub-projects for participatory management and natural resources; ii) update of manual for monitoring management effectiveness of SINAP; iii) guidelines for the construction of infrastructure in protected areas of the SINAP; iv) strategy for the implementation of the National Environmental Information System of Honduras (SINIA); v) strategy for information monitoring and management in the protected areas; and vi) scholarship manual.

<u>Indicator # 2 – Achieved: 1,600 and 1,000 ha. within the Corazón Reserve under rehabilitation/protection and sustainable use of local communities, in Nicaragua and Honduras, respectively.</u>

The target values of this indicator were largely exceeded. Indeed, through the implementation of sub-projects, 7,205 ha. of land within the Corazón Reserve (in both countries) were placed under rehabilitation / protection and sustainable use of communities.

- In Nicaragua, a total area of 3,090 ha. was covered by sub-projects focusing on associations of cocoa and / or coffee crops with fruit and timber trees, as well as on sustainable agroforestry activities, environmental education and others.
- In Honduras, the implementation of sub-projects had positive impacts on 4,115 ha. within the Reserve. Sub-projects included the promotion of best practices related to cocoa crops, associations of coffee with timber trees and fruit trees, agroforestry activities, recuperation of degraded areas and others.

# <u>Indicator # 3 – Achieved:</u> At least 20 percent and 30 percent of sub-project beneficiaries in Nicaragua and Honduras, respectively, are women

The targets for this indicator were largely exceeded in both countries. On average, subprojects reached 45 percent of women beneficiaries.

- In Nicaragua, 54 percent of sub-project beneficiaries were women
- In Honduras, 35 percent of all beneficiaries were women

# <u>Indicator # 4 – Achieved:</u> Percentage of indigenous communities living in the Reserve benefitting from sub-projects in Nicaragua and Honduras reaches 85 percent and 50 percent respectively.

In Nicaragua, implementation of sub-projects benefited 89 percent of indigenous communities in the RBB (50 percent of the sub-projects were executed by indigenous beneficiaries), who actively participated in different activities including sustainable production, conservation and participatory management of protected areas associated with land development. Roughly half of the sub-projects involved major efforts to set up adequate administrative frameworks, including formalization of legal status, and to strengthen the capacity of beneficiaries to develop proposals and monitor their implementation.

In Honduras, 81 percent of the communities living in the three protected areas benefitted by sub-projects that were financed under the Corazón Project. In fact, 51 percent of the sub-projects were executed by indigenous beneficiaries.

In both countries, the Project also contributed to strengthening governance of indigenous communities through support of activities dealing with conflict resolution with third parties regarding ancestral land ownership, land regularization and titling, gender issues, and others.

It is important to note that indigenous leaders participated in training and capacity building activities related to preparation, implementation and monitoring of sub-projects. The sub-project and scholarship manuals were disclosed and discussed with indigenous leaders, as well as beneficiaries, in order to ensure effective participation of the

communities/territories. The direct participation of these communities or of their representative leaders assured incorporation of local socio-political considerations in the design of sub-projects, ensuring their long-term ownership and sustainability.

<u>Indicator # 5 – Achieved:</u> Promote capacity building through the preparation of workshops: 60 mestizo communities and 80 indigenous communities in Nicaragua; at least 70 workshops for ladino communities and 70 for indigenous communities in Honduras

The Project financed a total of 407 capacity building workshops. Of those, 170 were aimed at indigenous communities (80 in Nicaragua and 90 in Honduras) and 237 to mestizo communities (60 in Nicaragua and 177 in Honduras). Workshops covered a variety of themes including: (i) project preparation, along specific eligibility criteria and with targeted objectives; (ii) strengthening governance for natural resource management – e.g. training in good practices, conservation and monitoring of biodiversity and protected areas; (iii) business administration and management, financial and procurement management – e.g. obtaining legal status, opening of bank accounts, selecting providers; (iv) exchanges of good practices to address conditions – e.g. germination problems, unfavorable climate variability (drought and excessive rain), and lack access road infrastructure in remote areas; (v) commercialization techniques – e.g. adding blue to products, pricing, marketing, associating, etc.; and (vi) in indigenous communities, some workshops also included review of regulatory frameworks and basic administrative procedures.

<u>Indicator # 6 – Achieved:</u> At least 75 and 60 scholarships on topics related to conservation, environmental sciences, and protected area management awarded in Nicaragua and Honduras, respectively.

A total of 233 scholarships were awarded (158 in Honduras and 75 in Nicaragua) through the Project. Three different types of scholarships were financed: a) scholarships for university programs, where the main objective was is provide training (at a professional level, or at a technician level) in areas such as environmental sciences, natural resource management, and rural development. en universidades o centros de estudios técnicos del país; b) scholarships for short-term courses and technical training, aimed primarily at young leaders with interests in environment, who participated in capacity building events and exchanges to share experiences with other communities; and c) stipend for young indigenous students enrolled in natural resource management of environmental studies. These types of scholarships provided a small stipend for indigenous students living far away from their communities of origin. In many instances, the lack of resources to buy the most basic daily necessities contributed to these students abandoning their studies and returning to their communities.

#### **Component 3: Monitoring and Information Management**

At the beginning of the Project Honduras and Nicaragua had very different baselines in terms of the level of development of the National Environmental Information System (SINIA). Nicaragua had an established, fully operational system managed by MARENA,

while in Honduras, SERNA did not have the basic structure for the establishment of the system. Consequently, the support provided by the Project was different in both countries, and Honduras greatly benefitted from the experience that Nicaragua was able to provide.

In Nicaragua the Project became a platform to strengthen the monitoring of biodiversity in the RBB, specifically in relation to indicators for forestry, land use, hot spots, and flora and fauna. On a more regional context, four of the indicators developed for the RBB meet the agreed criteria for regional indicators under the Mesoamerican Biodiversity Program (PROMEBIO). The SINIA Honduras was at a much earlier stage of development than that in Nicaragua, and therefore objectives were significantly more modest. Through the Project, the SINIA was strengthened by the development of an overall strategy for the development of the system, including action plans for institutional coordination, equipment, and training of SERNA personnel. Support also included exchanges and internships with SINIA of Nicaragua, which demonstrated in very hands-on manner, the potential and usefulness of such an information system.

Moreover, this component strengthened the Mesoamerican Environmental Information System (SIAM), which involves all the SINIAs of Central America.

# 3.1. Capacity for monitoring and information management in Nicaragua strengthened and benefitting management needs of the Corazón Project through the National Environmental Information System (SINIA)

<u>Indicator # 1 – Achieved:</u> 95 percent of field data collected through biological and socio-economic monitoring program have been integrated into databases in Nicaragua.

The Project supported the generation and compilation of environmental and socioeconomic data that were incorporated in the SINIA-MARENA databases. Roughly 95% of the data correspond to the following:

- 1,097 reports of species for each protected area of the SINIA were incorporated into SINIA databases that were developed with support from the Project. The design of the databases was done in consistency with the Global Biodiversity Information Framework (GBIF).
- 419 control points for land use within the RBB were also developed and incorporated into the SINIA-MARENA database developed under the Project. These data are effectively being used by MARENA, in conjunction with satellite images, to monitor changes in land use (*e.g.* deforestation) within the Reserve.

## <u>Indicator # 2 – Achieved:</u> Web page of the SINIA Honduras established and including published information on biodiversity indicators

The SINIA Honduras webpage was developed under the Project, with the objective of compiling and systematizing available environmental and biodiversity information, and making it available to the general public, through a portal administered by SERNA. The new portal includes interactive platforms as well as a module containing environmental geographic information (MIGA). The MIGA displays GIS data environmental available GIS data available in SERNA, facilitating a rapid assessment of potential environmental impacts resulting from specific activities.

## <u>Indicator # 3 – Achieved:</u> Development of protected area indicators in Honduras, to be monitored in the future.

The monitoring of biodiversity indicators was done through monitoring studies of ecological integrity and multitemporal analysis of land uses. A set of indicators and methodologies was derived from this type of evaluation, which can be used in the future for monitoring protected areas. Multitemporal analysis was used to determine indicators such as deforestation rate and forest cover within protected areas.

# <u>Indicator # 4 – Achieved:</u> At least six research projects related to protected areas management in the Corazón Reserve carried out by CCAD in partnership with academic and/or research institutions

CCAD carried out research studies that supported the acquisition of knowledge on protected area management practices in the Reserve. Research topics ranged from identifying ancestral medicinal practices to assessing impacts generated by mining both for residents and for natural resources in the Reserve. Major research contributions generated by CCAD included the following:

- 1. Compilation of the Ditalyang knowledge on the use of medicinal plants This research focused on documenting ancestral knowledge of existing plants in the Corazón Reserve and their potential uses for medicinal purposes.
- 2. Identification of harmonic coexistence systems in the heart of the Corazón Reserve This study documents social threats to indigenous peoples living in the Reserve, derived from structural and historical causes of poverty and social exclusion. This study provides guidelines for the establishment of a "green system of production" that allows the incorporation of the economic activity of the local people in harmony with local natural resources.
- 3. Identification of flora and fauna in pasture ecosystems for biodiversity conservation in the BOSAWAS Biosphere Reserve This study research aimed at identifying species of the BOSAWAS Biosphere Reserve ecosystem aimed at guiding conservation efforts.
- 4. Environmental and socioeconomic diagnosis of the Parque Nacional Cerro Saslaya in the BOSAWAS Biosphere Reserve This research study identified strategies for sustainable management of resources within this protected area, and proposed an action plan to carry out conservation-related activities.
- 5. Environmental impacts of industrial mining activities in the buffer zone of the BOSAWAS Biosphere Reserve This study evaluates the impacts of mercury, a by-product of artisanal mining in the Community Los Cocos, Town of Bonanza, RAAN on human health and the environment, with a particular focus on the impact in the biodiversity of BOSAWAS.
- 6. *Monitoring populations of jaguars* CCAD coordinated efforts to update a study on jaguar populations in the Corazón Reserve. The study was ultimately not published within the timeframe of the Project, but efforts were made to compile available information and to network agencies and NGOs working in the area to monitor populatios of jaguars within the Corazón Reserve.

## <u>Indicator # 5 – Achieved:</u> Jaguar populations under monitoring in the Corazon Reserve in Honduras and Nicaragua and data used as indicators of ecological integrity

In the four protected areas of influence of the project monitoring studies were conducted with additional support of other specialized research centers. In Honduras, research studies confirmed the presence of jaguars in the three protected areas of the Project (estimated density of 4.2 jaguars per 100 km²) reflecting good ecological integrity of the reserves (WCS / GIBHBALAM, 2008). In Nicaragua, the presence of jaguars was also confirmed through accounts and monitoring reports, which were uploaded into SINIA databases.

The presence of jaguars is a good indicator of connectivity, good forest cover and adequate food sources across the Mesoamerican Corridor. Given the extension of the Corazón Reserve, and the limited scope (within that overall context) of the activities that were financed under the Project, no specific intervention supported by the Project can be linked directly to the presence of jaguars in the area. However, the implementation of good natural resource management practices, the support to sub-projects that aimed at recovering impacted/deforested areas, will contribute to maintaining jaguar habitats in the region. Moreover, the Project did promote a dialogue between MARENA, SERNA, CCAD and research institutions that have been monitoring jaguar populations in the area, on the need to continue monitoring this specie and incorporated specific indicators in the SINIA databases.

#### **Component 4: Project Administered Effectively**

#### 4.1. Project administered efficiently

## <u>Indicator # 1 – Achieved:</u> Project management system working efficiently, according to World Bank and CCAD standards

The Project successfully contributed to establishing a capacity within Project Implementation Units in SERNA, MARENA and CCAD to comply with fiduciary commitments, as defined in the Grant Agreement. Occasional issues occurred throughout implementation, involving delays in the presentaions of FMRs or audit reports, but overall no major issues occurred and the executing agencies complied with their committed actions (See section 2.4).

### **Results Framework**

Objective	Key Outcon	ne Indicator	Monitoring Frequency and Reports	
Global objective Improved national management of the proposed Corazón Transboundary Biosphere Reserve (CTBR) area, in Honduras and	more effectively man outcomes, with a rati	1. Targeted protected areas (4) within CTBR more effectively managed for conservation outcomes, with a rating of 2 (Regular) as measured by the PROARCA and GEF Tracking Tools.		
Nicaragua, respecting the rights of traditional populations.	2. Increased participation communities, in both Nide engaging in sustainable or related to management pressure in the target are	Measured through semester reports (August/ February) and Subproject Survey		
	3. Institutionalized pa processes and policy ins protected areas managen	Measured through semester reports (August/ February)		
Components	Component Activities	Results Indicators for Each Component	Monitoring Frequency and Reports	
1_Strengthening the National Protected Areas Systems (SINAPs)	1.1 Update of management plans and development of management instruments for the SINAPs	<ul> <li>Update of 1 and 3 management plans for Protected Areas within the CTBR in Nicaragua and Honduras, respectively</li> <li>22 and 10 protected area management policies/instruments developed, updated or strengthened in Nicaragua and Honduras</li> </ul>	Measured through semester reports (August/ February)  Measured through semester reports (August/ February)	
		Honduras, respectively  Overall effectiveness rating of the two	Measured through semester reports (August/ February)	

	National Protected Areas Systems (SINAPs) based on the annual country reports to CCAD's Central America's PROARCA system improves	Measured through semester reports (August/ February)
1.2 Strengthening mechanisms for sustainability financing	Technical proposal for the future recognition of CTBR by UNESCO elaborated, and endorsed by national governments and indigenous groups.	Measured through semester reports (August/ February)
	• Functioning of a Protected Areas Fund for Honduras, according to the guidelines set in the grant agreement, with a transfer of funds from GEF	
	Action Plan for the management of the future establishment of a Protected Areas Fund for Nicaragua developed and agreed with relevant authorities	

2 Implementation of CTBR protected areas	2.1 Subprojects for participatory	At least 1 and 3 PAs strengthened	Measured in December 2011; in
management plans	management and	management and	2012 a report will
and conservation measures	sustainable production	protection with a rating of 2 (Regular)	compile results for this indicator over
		as measured by the PROARCA and GEF	the life of the project
		Tracking Tools in	project
		Nicaragua and Honduras,	
		respectively	Measured through
		• Rate of deforestation in the Bosawas	semester reports (August/
		Reserve estimated on an annual basis and	February) and Subproject Survey
		results linked to	a aspecyces a acrey
		activities of Management Plan	
		• At least 4,500 and	Measured through semester reports
		1,500 targeted families prepare and	(August/
		successfully implement	February)
		subprojects with	
		conservation benefits in Nicaragua and	Measured through
		Honduras, respectively	semester reports (August/
		<ul><li>Regularization of 7</li></ul>	February) and Subproject Survey
		and 6 manuals for participatory	
		management	
		processes in protected areas in	Measured through semester reports
		Nicaragua and Honduras,	(August/
		respectively	February) and Subproject Survey
	2.2 Strengthening governance of	• 1,600 and 1,000 hectares, in	
	natural resources	Nicaragua and	Measured through
		Honduras, respectively in the	semester reports (August/
		CTBR zone under rehabilitation/protect	February) and Subproject Survey
		ion and sustainable	
		use by local	Measured through semester reports

communities  • At least 20% and 30% of women beneficiaries executing subprojects in Nicaragua and Honduras, respectively  (August/ February) and Subproject Survey
<ul> <li>At least 85% and 50% indigenous communities benefiting from subprojects in Nicaragua and Honduras, respectively</li> <li>Measured through semester reports (August/ February)</li> </ul>
Capacity building/institutional strengthening/consultation and consensus building measured through the 80 workshops for indigenous communities and 60 workshops in non-indigenous communities in Nicaragua, and 70 workshops for indigenous communities in and 70 workshops for indigenous communities in and 70 workshops for non-indigenous communities in Honduras on sustainable management and conservation of the CTBR
At least 75 and 60 grants given to local individuals for study of conservation, environmental science, and

		protected areas management in Nicaragua and Honduras, respectively	
3 Monitoring and Information Management	3.1 Strengthened capacity for monitoring and information management and supporting the management needs of the CTBR through the National Environmental Information System (SINIA) of Nicaragua	• In Nicaragua, % of field data from biological and socioeconomic monitoring programs that are integrated into coordinated and accessible database increases from 5% to 75% by EOP	Measured through semester reports (August/ February)
	3.2 Support to SINIA Honduras  3.3 Development of key studies to improve	<ul> <li>In Honduras, establishment of a website with biodiversity data accessible to the public</li> <li>In Honduras, establishment of socioeconomic and biodiversity indicators for</li> </ul>	Measured through semester reports (August/ February)  Measured through semester reports (August/
	3.3 Development of key studies to improve management of protected areas in	biodiversity	_

	Nicaragua and Honduras	<ul> <li>Populations of jaguars monitored in the CTBR in Nicaragua and Honduras as an indicator of ecological condition of the Reserve</li> <li>At least 6 research studies on priority management issues in the CTBR conducted by CCAD in conjunction with academic and research institutes</li> </ul>	Measured through semester reports (August/ February)  Measured through semester reports (August/ February)
4. Project administered efficiently	4.1 Project administered efficiently.	Project management system working efficiently, according to World Bank rules and national and CCAD requirements. To be measured by output indicators such as audits, disbursement reports, etc.	Measured through semester reports (August/ February)

## **Table 2 - Arrangements for Results Monitoring**

### PDO INDICATORS

Objective	Key performance indicators	Data collection instrument	Baseline 2006	Indicators 2010	Indicators 2012	References Documents	End of Project
Global objective	1. Targeted protected areas (4) within CTBR more effectively managed for conservation outcomes, with a rating of 2 (Regular) as measured by the PROARCA and	PROARCA Tracking Tool Monitoring Report	Honduras Average Poor (44.6%): Poor (49.6%) RBRP; Poor (37.5%) PNP; Poor (47.6) BTA.	Honduras Average Poor (49.5%): Poor (45.2%) RBRP; Poor (39.9%) PNP; Fair (63.5) BTA.	Honduras: Fair (51-70%)	Effectiveness management monitoring report	Honduras Average - Fair (62.0%): RBRP - Fair (64.3%); PNP - Fair (54.5%); BTA - Fair (67.3%).
Improved national management of the proposed Corazón Transboundary Biosphere Reserve (CTBR) area, in Honduras and Nicaragua, respecting the rights of	GEF Tracking Tools.		Nicaragua Average Fair (55.9%)	Nicaragua Average Fair: Fair (65%) PAs RBB and Fair (50%) Indigenous territories	Nicaragua: Fair (51 -75%)	Effectiveness management monitoring report	Nicaragua Average Good/ Fair: RBB - Fair (60.0%) and Indigenous territories - Good (61%)

traditional populations		GEF Tracking Tool Monitoring Report	GEF Tracking Tool: RBRP 51.1%, BTA 47.3%, PNP 45.0% GEF Tracking Tool: RBB 42.4%.	GEF Tracking Tool: RBRP 69.7%, BTA 59.6% y PNP 65.7% GEF Tracking Tool RBB: 69.7%.	GEF Tracking Tool Honduras: RBRP 64.3%, BTA 67.3% y PNP 54.6%  GEF Tracking Tool RBB: 70.7%	GEF Tracking tool Monitoring Reports 2006, 2010 y 2012	Improved management effectiveness in the 4 protected areas.
	2. Increased participation by 60% of local communities, in both Nicaragua and Honduras, engaging in sustainable conservation activities related to management plans in order to reduce pressure in the	Measured through semester reports and Subproject Survey	Nicaragua: 0  Honduras: 0	Nicaragua: 30%  Honduras: 20%	Nicaragua: 60%  Honduras: 60%	Sub-projects Report  Sub-projects Report	Nicaragua: 70%  Honduras: 89%
	3. Institutionalized participatory management processes and policy instruments consistent with protected areas management plans.	3 semester monitoring reports	Honduras: 0  Nicaragua: 0	Honduras: 4  Nicaragua: 4	Honduras: 8  Nicaragua: 8	Final Project Country Report  Final Project Country Report	Honduras: 17  Nicaragua: 8

### COMPONENT 1

Activities by Component	Key performance indicators	Data collection instrument	Baseline 2006	Indicators 2010	Expected targets 2012	References Documents	End of Project
Update of Management Plans and Development of Policy Instruments	Update of 1 and 3 management plans for Protected Areas within the CTBR in Nicaragua and Honduras, respectively	Semester Monitoring Reports	Nicaragua: 0	Nicaragua: in progress	Nicaragua: Final Management plan with the support of the communities and territorial authorities	RBB Management Plan Document	Nicaragua: 1
			Honduras: 0	Honduras: in progress	Honduras: 3 management plans elaborated	PNP Management Plan Document, RTA Management Plan Document and RBP Management Plan Document	Honduras: 3
	22 and 10 protected area management policies/instrument s developed, updated or	Semester Monitoring Reports	Nicaragua: 0	Nicaragua:	Nicaragua: 22	Instruments reported in the Country Report for ICR	Nicaragua: 22

strengthened in		Honduras: 0	Honduras:	Honduras: 10	Instruments	Honduras: 25
Nicaragua and Honduras,			5		reported in the Country	
respectively					Report for ICR	
Overall effectiveness rating of the two National Protected Areas Systems (SINAPs) based on the annual country reports to CCAD's Central America's	Semester Monitoring Reports	Nicaragua Average Fair (55.9%)	Nicaragua Average Fair: Fair (65%) PAs RBB and Fair (50%) Indigenous territories	Nicaragua: Fair (51 -75%)	Effectiveness Management Monitoring Report	Nicaragua Average - Good/ Fair: RBB - Fair (60.0%) and Indigenous territories - Good (61%)
PROARCA system improves.		Honduras Average Poor (44.6%): Poor (49.6%) RBRP; Poor (37.5%) PNP; Poor(47.6) BTA.	Honduras Average Poor (49.5%): Poor (45.2%) RBRP; Poor (39.9%) PNP; Regular (63.5) BTA.	Honduras: Fair (51-70%)	Effectiveness Management Monitoring Report	Honduras Average Fair (62.0%): RBRP - Fair (64.3%); PNP- Fair (54.5%); BTA - Fair (67.3).

	· Technical proposal for future recognition of CTBR by UNESCO elaborated, and endorsed by national governments and indigenous groups	Semester Monitoring Reports	Technical proposal not prepared or endorsed by governments or indigenous groups.	Technical documents prepared by country teams and discussed with indigenous groups.	Technical proposal for future recognition of CTBR by UNESCO elaborated, and endorsed by national governments and indigenous groups.	Binational Technical Document	Binational technical document elaborated. In Nicaragua the nomination form was signed by the 7 indigenous territories representatives. In Honduras the nomination was signed by Mayor of municipalities.
1.2 Strengthening of Financial Sustainability Mechanisms	· Functioning of a Protected Areas Fund for Honduras, according to the guidelines set in the grant agreement, with a transfer of funds from GEF	Semester Monitoring Reports	Honduras: established fund	Honduras: the Protected areas Fund is functioning and the grant agreement was elaborated.	Completion of requirements to strengthen the functioning of the Protected Areas Fund in Honduras, including transfer of funds from GEF	Protected area fund manual has been elaborated and the TORs of the financial asesor	Honduras: Transfer of GEF funds to Protected Areas Fund

· Action Plan for	Semester	Nicaragua:	Nicaragua:	Agreement and	Conceptual	Action Plan was
themanagement of	Monitoring	in progress	in progress	development of	Document,	elaborated for the
the future	Reports			next steps with	Operational	management of the
establishment of a				other key	Manual and	future establishment
Protected Areas				organizations and	Action Plan	of a Protected Areas
Fund for Nicaragua				ministries in order	Documento	Fund for
developed and				to prepare for the	to establish	Nicaraguadeveloped
agreed withrelevant				future establishment	in the future	and agreed
authorities				of the Protected	a Protected	withrelevant
				Areas Fund for	Areas Fund.	authorities
				Nicaragua		

# **COMPONENT 2**

Activities by Component	Key performance indicators	Data collection instrument	Baseline 2006	Indicators 2010	Expected targets 2012	References Documents	End of Project
2.1 Participative Management and Sustainable Production Sub-Projects to Promote Community, Indigenous and Civil	At least 1 and 3PAs strengthened management and protection with a rating of 2 (Regular) as measured by the PROARCA and GEF Tracking Tool in Nicaragua and Honduras, respectively	PROARCA Tracking Tool Monitoring Report	Honduras Average Poor (44.6%): RBRP - Poor (49.6%); PNP - Poor (37.5%); BTA - Poor (47.6).	Honduras Average Poor (49.5%): Poor (45.2%) RBRP; Poor (39.9%) PNP; Regular (63.5) BTA.	Honduras: Fair (51-70%)	Effectiveness management monitoring report	Honduras Average Fair (62.0%): RBRP - Fair (64.3%); PNP - Fair (54.5%); BTA - Fair (67.3).
Society Participation in the Implementati on of Management Plans in Protected Areas			Nicaragua Average Regular (55.9%)	Nicaragua Average Regular: Regular (65%) PAs RBB and Regular (50%) Indigenous territories	Nicaragua: Fair (51 -75%)	Effectiveness management monitoring report	Nicaragua Average Good/Regular: RBB - FAir (60.0%) and Indigenous territories - Good (61%)
		GEF Tracking Tool Monitoring Report	GEF Tracking Tool: RBRP 51.1%, BTA 47.3%, PNP 45.0% GEF Tracking Tool: RBB 42.4%.	GEF Tracking Tool: RBRP 69.7%, BTA 59.6% y PNP 65.7% GEF Tracking Tool RBB: 69.7%.	GEF Tracking Tool Honduras: RBRP 64.3%, BTA 67.3% y PNP 54.6% GEF Tracking Tool RBB: 70.7%	GEF Tracking tool Monitoring Reports 2006, 2010 y 2012	Improved management effectiveness in the 4 protected areas.

	Rate of deforestation in the Bosawas Reserve estimated on an annual basis and results linked to activities of Management Plan	Measured through semester reports and Subproject Survey	Nicaragua: 2.5%	Nicaragua: 0.6% annual rated for the monitoring period 1987- 2010	Deforestation rate in RBB estimated on an annual basis, analyzed relative to baseline, and data used as input for activities of Bosawas Management Plan	Monitoring Report Rate of Deforestation 2010 y 2012	Nicaragua: 0.3% anual rated for the monitoring period 1987-2012
	At least 1,500 targeted families in Honduras, and 4,500 in Nicaragua prepare and successfully implement subprojects with conservation benefits in Nicaragua and	Measured through semester reports and Subproject Survey	Nicaragua: 0	Nicaragua: 2185	Nicaragua: 4,500	http://www.sinia.net.ni/ wsinap/proyectos/rbt- ccbm/subsistema-de- proyectos	Nicaragua: 5,416
	Honduras, respectively		Honduras: 0	Honduras: 2,028	Honduras: 1,500	Sub-project Report	Honduras: 7,525
2.2 Strengthenin g Local Governance for Natural	Regularization of 7 and 6 manuals for participatory management processes inprotected areas in Nicaragua and	Semester monitoring reports	Nicaragua: 0	Nicaragua: 4	Nicaragua: 7	Final Project Country Report	Nicaragua:7

Resource Management	Honduras,respectively		Honduras: 0	Honduras: 3	Honduras: 6	Final Project Country Report	Honduras: 6
	· 1,600 and 1,000 hectares, in Nicaragua and Honduras, respectively in the CTBR zone under rehabilitation/prote ction and	Semester monitoring reports	Nicaragua: 0	Nicaragua: 865	Nicaragua: 1,600	http://www.sinia.net.ni/ wsinap/proyectos/rbt- ccbm/subsistema-de- proyectos	Nicaragua: 3,090
	sustainable use by local communities		Honduras: 0	Honduras: 854.3	Honduras: 1,000	Sub-project Report	Honduras: 4,115
	· At least 20% and 30% of women beneficiaries executing subprojects in Nicaragua and Honduras, respectively.	Measured through semester reports and Subproject Survey	Nicaragua: 0%	Nicaragua: 17%	Nicaragua: 20%	http://www.sinia.net.ni/ wsinap/proyectos/rbt- ccbm/subsistema-de- proyectos	Nicaragua: 54%
			Honduras: 0	Honduras: 25%	Honduras: 30%	Sub-project Report	Honduras: 35%
	· At least 85% and 50% indigenous communities benefiting from subprojects in Nicaragua and Honduras, respectively	Measured through semester reports and Subproject Survey	Nicaragua: 0	Nicaragua: 70%	Nicaragua: 85%	http://www.sinia.net.ni/ wsinap/proyectos/rbt- ccbm/subsistema-de- proyectos	Nicaragua: 89%
			Honduras: 0	Honduras: 25%	Honduras: 50%	Sub-project Report	Honduras: 81%

through the 80 for indigenous and 60 worksh non-indigenou	through semeste reports at Subproje Survey s communities tops in as communities	r r nd ct	Nicaragua: 70 (25 non- indigenous workshop and 45 indigenous workshops)	Nicaragua: 140 (60 non- indigenous workshop and 80 indigenous workshops)	Workshops Aid memories 2009,2010,2011 y 2012. Sub-projects monitoring Reports	Nicaragua: 140 (60 non- indigenous workshop and 80 indigenous workshops)
in Nicaragua, workshops for communities i workshops for indigenous con Honduras on s management a conservation of CTBR	indigenous n and 70 monitorin reports monitorin reports munities in sustainable	ng	Honduras: 60 (30 non indigenous workshop and 30 indigenous workshop)	Honduras: 140 (70 non- indigenous workshop and 70 indigenous workshops)	Summary reports of workshops	Honduras: 267 (177 non- indigenous workshop and 90 indigenous workshops)
At least 75 grants given to individuals for conservation.	o local monitoring study of reports	ng	Nicaragua: 33	Nicaragua:75	Grants beneficiaries database	Nicaragua: 75
science, and p management is and Honduras,	rotected areas n Nicaragua	Honduras: 0	Honduras: 28	Honduras: 60	Grants beneficiaries database	Honduras: 158

# **COMPONENT 3**

Activities by Component	Key performance indicators	Data collection instrument	Baseline 2006	Indicators 2010	Expected targets 2012	References Documents	End of Project
3.1 Strengthening of the National Information Management System with Socioeconomic and Biodiversity Monitoring at the CBTR through the National System of Environmental Information (SINIA) of Nicaragua	In Nicaragua, % of field data from biological and socioeconomic monitoring programs that are integrated into coordinated and accessible database increases from 5% to 75% by end of project.	Semester Monitoring Report	Nicaragua: 5%	Nicaragua: 50%	Nicaragua: 75%	http://www.sinia. net. ni/wbiodiv/	Nicaragua: 95%
3.2 Supporting SINIA of Honduras	In Honduras, establishment of a website with biodiversity data accessible to the public.	Semester Monitoring Report	Honduras: 0	Honduras: 0	Establishment of a website with biodiversity data accessible to the public in Honduras.	www.sinia. gob.hn	Honduras: website established with biodiversity database
	In Honduras, establishment of socioeconomic and biodiversity indicators for protected areas, to be monitored in the future	Semester Monitoring Report	Honduras: 0	Honduras: 0	Honduras: Establishment of indicators for protected areas, to be monitored in the future	SINIA strategy document	Honduras: socioeconomic and biodiversity indicators for protected areas and the monitoring program were established

3.3 Monitoreo de especies en vía de extinción por parte de la CCAD	At least 6 research studies on priority management issues in the CTBR conducted by CCAD in conjunction with academic and research institutes.	Semester Monitoring Report	CCAD: 1 (study on the "Knowledge of the Mayangna People, Man's Coexistence with Nature" completed in alliance with UNESCO).	research studies conducted: Compiling knowledge of the Ditalyang people about the use of medicinal plants. Environment al impacts of artisanal mining in Nicaragua and Honduras	At least 6 research studies on priority management issues in the CTBR conducted by CCAD in conjunction with academic and research institutes	Final research reports	CCAD:7 research studies conducted
	Populations of jaguars monitored in the CTBR in Nicaragua and Honduras as an indicator of ecological condition of the Reserve	Populations of jaguars monitored in the CTBR in Nicaragua and Honduras as an indicator of ecological condition of the Reserve	CCAD: 0	CCAD: 0	Measured through research and monitoring on jaguars in the CTBR led by CCAD in conjunction with the Jaguar Corridor Program		CCAD: 0 - National PIUs established contact with academic and research institutes working in the protected areas of the Project that were monitoring jaguar populations. These institutions provided 3 monitoring studies of jaguars.

# **COMPONENT 4**

Key performance indicators	Data collection instrument	Baseline 2006	Indicators 2010	Expected targets 2012	References Documents	End of Project
Project management system working efficiently, according to World Bank rules and national and	WB Supervision Mission Reports; Audits.  Annual Reports	Nicaragua: Honduras:	Nicaragua: 2009 Audit and 2 FMRs  Honduras: 2010 Audit and FMR	Nicaragua: 2012 audit and FMRs Honduras: 2012 audit and FMRs	Annual Report, FMRs, Audit Reports and SOEs. Annual Report, FMRs, Audit	Nicaragua: Satisfactory  Honduras: Satisfactory
CCAD requirements. To be measured by output indicators such as			Audit and TWIK	audit and PWKS	Reports and SOEs.	Satisfactory
audits, disbursement reports, etc	FMRs	CCAD:	CCAD: 2010 Audit and FMR	CCAD: 2012 audit and FMRs	Annual Report, FMRs, Audit Reports and SOEs.	CCAD: Satisfactory

#### **Annex 3. Economic and Financial Analysis**

(including assumptions in the analysis)

A cost-benefit analysis of the activities to be implemented under the Corazón Project was not carried out during the formulation and start phase. Activities were executed under the assumption that they would contribute to the Global Environmental Objective, i.e. contributing to the conservation of biodiversity within the Corazón Reserve. In that context, the present analysis is carried out ex post examining the impact of some of the activities financed by the Project after its implementation. Efficiency is evaluated by assessing the different use of available resources and their relative contribution to achieving the Project's Global Environmental Objective (GEO) objective.

#### Benefits of sub-projects implemented in protected areas

Sub-project proposals presented by communities typically involved activities previously executed by the community, or by neighbors, with which beneficiaries had some limited prior experience. This ex post evaluation focused on the portfolio of the agro-forestry sub-projects, specifically those in which cocoa crops were grown in association with timber woods and with other crops such as plantains. Roughly 17 percent of all sub-projects financed under the Project correspond to this type, with a total investment of 1.2 million dollars, and impacting an area of 1,198 ha. in both countries. Beneficiaries of these types of subprojects contributed with a counterparts higher that those requested in the sub-project manual (the median counterpart contributed was 30 percent, higher than the 20 percent requested).

The present economic analysis estimated the net present value (NPV) of these specific sub-projects, using as a reference the costs of similar projects implemented in another Biosphere Reserve in Nicaragua<sup>12</sup>. The NPV was estimated considering 20 years of the cocoa<sup>13</sup> crop, with net investments associated by harvests of cocoa after the fourth year, and of plantain after the second and third year. Estimates did not include potential benefits from the sale of wood, given the restrictions that apply to the sale of wood from protected areas. However, it would be possible to carry out controlled forest thinning activities as part of sustainable management of the areas. Two scenarios were considered:

- i) Local market scenario: The entire cocoa production is commercialized at local markets (price per unit:US\$58)
- ii) International market scenario: All production is commercialized at the international market (price per unit: US\$70). The main factors that would

<sup>&</sup>lt;sup>12</sup>Technical Guide: Cocoa Crop and Agroforestry Systems Rio San Juan, Nicaragua. IICA-ProDeSoc. 2006 <sup>13</sup> It is estimated that yield from a cocoa plantation can be obtained for up to 30 years as long as good handling of the crop is performed. The maximum yield is typically achieved during the 7th year with 12qq/mz (IICA-ProDeSoc, 2006).

influence the placement of products in the international market are: a) continuity and consistency of sustainable production; b) product certification; c) international price stability; and d) limited impacts of external factors (e.g. natural disasters, fire, crop disease). Another assumption of the analysis is that the subprojects considered are being implemented following improved techniques (compared to a baseline case where traditional methods are used), which will lead higher yield per hectare.

NPV estimated in the local market scenario is US\$ 1,445.2 and that for the international market scenario is US\$ 1,932.4 per hectare. Therefore, using the assumptions presented, sub-projects promoting cocoa production contributed to restoring degraded areas of the Reserve, added to forest cover, contributed to conservation of the Project area, and contributed to improving the economic situation of beneficiaries.

Beneficiaries of these types of sub-projects face considerable limitations to access sources of financing, for reasons that vary widely, and include for instance: (i) lack of financial institutions in remote areas of the Reserve that are available to provide credit; (ii) difficulties establishing credit histories; (iii) risk profile to access resources because of the high volatility of the agricultural income and the lack of economic assets that could serve as collateral. Therefore, in this context, the Corazón Project provided concessional financing conditions for activities that local communities would not have been able to carry out in the absence of Project support.

Table A.3.1: Net present value of sub-project of cocoa associated with timber wood and plantains, under two market scenarios: local and international

			Local Marke	t (LM)		International	Market (IM)	
			Average			Average		
			annual	Annual		annual	Annual	
	Investment		income for	average net		income for	average net	
	SAF Cocoa	Cocoa Yield	sales LM	income in	NPV for	sales IM	income in	NPV for IM
Years	(US\$/mz)	(qq/mz)	(US\$58/qq)	LM	ML price	(US\$70/qq)	IM	price
								_
1	345.4	0.0	0	-345.4	-314.030478	0	-345.4	-314.030478
2	185.8	0.0	285	99.2	81.9519419	285	99.2	81.9519419
	165.6	0.0	203	77.2	01./31/41/	203	77.2	01.7517417
3	174.3	0.0	143	-31.8	-23.8748735	142.5	-31.8	-23.8748735
4	174.3	1.0	58	-116.3	-79.4190674	70	-104.3	-71.222906
5	174.3	4.0	232	57.7	35.841158	280	105.7	65.6453815
6	170.8	8.0	464	293.2	165.498536	560	389.2	219.688033
7	170.8	12.0	696	525.2	269.505898	840	669.2	343.400667
8	170.8	12.0	696	525.2	245.005362	840	669.2	312.182424
9	170.8	12.0	696	525.2	222.732147	840	669.2	283.802204
10	170.8	12.0	696	525.2	202.48377	840	669.2	258.002004
11	170.8	12.0	696	525.2	184.076154	840	669.2	234.547276
12	170.8	12.0	696	525.2	167.341959	840	669.2	213.224796
13	170.8	12.0	696	525.2	152.129053	840	669.2	193.840724
14	170.8	12.0	696	525.2	138.299139	840	669.2	176.21884
15	170.8	12.0	696	525.2	125.72649	840	669.2	160.198945
16	170.8	12.0	696	525.2	114.296809	840	669.2	145.635405
17	170.8	12.0	696	525.2	103.90619	840	669.2	132.395823
18	170.8	12.0	696	525.2	94.460173	840	669.2	120.359839
19	170.8	12.0	696	525.2	85.8728846	840	669.2	109.418035
20	170.8	12.0	696	525.2	78.0662587	840	669.2	99.4709411
					2049.9			2740.9
		NPV	/ (US\$/Hecta	res)	1445.2			1932.4

Therefore, in addition to meeting its conservation purposes, the Corazon Project acted as a complement to the financial markets in these remote, rural zones. Investments in cocoa sub-projects will catalyze higher incomes for benefited families in the protected areas. The cost to the Project of each hectare cultivated under this type of subprojects was US\$991. The NPV obtained shows that for each dollar invested from US\$0.09 and up to US\$0.22 dollars are returned under the local and international market scenarios, respectively. Moreover, it was estimated that those crops that are cultivated under the highest standards (sustainable, organic, certified crops), which may access fine international cocoa markets crop may reach returns as high as US\$3 to US\$5 dollars for each dollar invested, using a price in the international market of US\$ 200 per ton 14.

<sup>&</sup>lt;sup>14</sup> Sub –projects document of Systematization for the Corazon Project, CCAD. 2011.

Monitoring and close follow-up was central to the successful completion of sub-projects financed under the Project. Given the remoteness of beneficiary communities and the difficulties in accessing sub-project sites, the Project explicitly accounted for monitoring costs in order to document the need to adequately plan for this type of support in future interventions in similar areas.

The aggregated costs of sub-project monitoring was estimated at roughly US\$ 1 million (13 and 16 percent of the total costs of sub-projects <sup>15</sup> in Nicaragua and Honduras, respectively). These costs covered expenditures that can be sub-divided into the following six categories: a) technicians honorariums (47%); b) training workshops (25%), c) stipends (17%); d) transportation costs (9%); e) Fuel (4%) and f) monitoring equipment (3%). Training workshops at each community were needed during the sub-projects formulation phase as well as for implementation, to ensure that communities were able to complete the development of proposals and that implementation proceeded smoothly. The costs of these workshops amounted (on average) US\$556-664 dollars per sub-project in Honduras and Nicaragua, respectively.

Lowest costs for monitoring relative to total sub-project costs were achieved in Nicaragua, where the strategy was to use local labor to monitor all 129 subprojects. In Honduras, the strategy adopted was to hire professionals to monitor 118 sub-projects across the area of impact, which ultimately resulted in higher overall costs, mainly due to transportation expenses <sup>16</sup>. The lack of road infrastructure and the communities' establishment in remote areas (mainly in the protected areas nuclei zones) made the monitoring process an arduous and risk task for the monitoring teams.

A main conclusion and lesson learned from the Corazón Project is that the successes and impacts achieved through sub-project implementation would have not occurred in the absence of close monitoring and support to beneficiary communities, which for the first time in the history of protected areas management operations in Nicaragua and Honduras, were given executing responsibilities. The costs of this support were significant in the overall context of the Project, but justifiable given the capacity needs of beneficiary communities, the remoteness and logistical difficulties associated with the Project area without the capacity of local governments to support this decentralized approach.

A number of factors have been identified, which should be taken into consideration in order to minimize the costs of sub-project monitoring in future interventions of similar characteristics: i) transportation and fuel expenses are minimized when hiring specialists from the Project area of influence, and when optimizing the geographical distribution of sub-projects beneficiaries; (ii) sub-project development and supervision activities can be

<sup>&</sup>lt;sup>15</sup> The subproject total cost includes: a) the financing amount given to the subproject (an average of 20 thousand dollars) b) The subproject monitoring cost (operative costs and trainings)

<sup>&</sup>lt;sup>16</sup> The transportation cost includes fuel, airfare and maritime tickets to carry out monitoring

minimized by establishing offices close to the Project's area of influence; (iii) the social evaluation conducted during the formulation phase of the Project could identify potential beneficiaries capacities upfront, in order to optimize capacity building activities that will need to be conducting.

Table A.3.2: Estimates of Monitoring and Follow up Costs for the Corazón Project in Honduras and Nicaragua

No	Concept	Hondu	ras	Nicaragua		CTBR	% Total CTBR
						TOTAL US\$	
		Amounts	%	Amounts	% MSC		
		US\$	CMS	US\$			
1	Wages	247,021.75	56	203,543.32	39	450,565.07	47
2	Transport	51,972.51	12	34,822.26	7	86,794.77	9
3	Diem	61,638.53	14	104,909.49	20	166,548.02	17
4	Equipment	12,439.00	3	12,439.00	2	24,878.00	3
5	Trainings	65,598.41	15	171,648.52	33	237,246.93	25
	TOTAL	438,670.20	100	527,362.59	100	966,032.79	100

# **Annex 4. Bank Lending and Implementation Support/Supervision Processes**

(a) Task Team members

Names	Title	Unit	Responsibility/ Specialty
Lending			
<u> </u>			
Supervision/ICR		'	
Etel Patricia Bereslawski Aberboj	Senior Procurement Specialist	LCSPT	
Diomedes Berroa	Senior Operations Officer	LCSPT	
Antonio Leonardo Blasco	Sr Financial Management Specia	LCSFM	
Nelvia Hayme Diaz	Program Assistant	SDNRM	
Christine Drew Dragisic	Consultant	LCSDE	
Irani G. Escolano	Consultant	LCSPT	
Carlos Eduardo Gallegos Kattan	Consultant	LCSAR	
Augusto Garcia	Operations Officer	LCSAR	
Armando Eduardo Guzman Escobar	Senior Disaster Risk Managemen	LCSUW	
Alvaro Larrea	Senior Procurement Specialist	LCSPT	
Catalina Marulanda	Lead Urban Specialist	LCSDU	
Juan Martinez	Sr Social Scientist	EASIS	
Marquez Martinez	Consultant	LCSAR	
Sarah Martiny	Junior Professional Associate	LCSEN	
Marta Elena Molares- Halberg	Lead Counsel	LEGES	
Lyle Morton	Junior Professional Associate	LCSEN	
Fabienne Mroczka	Financial Management Specialis	LCSFM	
Beate Gisela Mueller	Procurement Specialist	LCSPT	
Alexandre Borges de Oliveira	Senior Procurement Specialist	LCSPT	
Patricia E. Parera	Consultant	LCSSO	
Anemarie Guth Proite	Procurement Specialist	LCSPT	
Diana P. Rebolledo	Language Program Assistant	LCSAR	
Jose Simon Rezk	Financial Management Specialis	LCSFM	
Enrique Antonio Roman	Financial Management Specialis		
Teresa M. Roncal	Operations Analyst	LCSAR	
Gerardo Segura Warnholtz	Senior Rural Development Speci	LCSAR	
Rajeev Kumar Swami	Sr Financial Management Specia		

## (b) Staff Time and Cost

	<b>Staff Time and Cos</b>	t (Bank Budget Only)
Stage of Project Cycle	No. of staff weeks	USD Thousands (including travel and consultant costs)
Lending		
FY04	9.9	79.01
FY05	27.52	112.37
FY06	37.59	135.25
FY07	-	0.00
FY08	-	0.00
Total:	75.01	326.63
Supervision/ICR		
FY04	-	0.00
FY05	-	0.00
FY06	-	0.00
FY07	34.84	120.61
FY08	43.54	132.65
FY09	55.58	176.28
FY10	56.84	143.65
FY11	29.79	133.63
FY12	9.9	62.12
FY13	4.4	52.02
Total:	234.89	820.96

## **Annex 5. Beneficiary Survey Results**

(if any)

#### Summary

A diverse sample of beneficiaries of the Corazon Project in Honduras and Nicaragua participated in the Survey of Beneficiaries of the Project, with the aim of providing their opinions on the results and impacts of the Project. A specific questionnaire was formulated for the Project, which included four sections: a) Data on respondent; b) Assessment of the overall objectives of the Project; c) Assessment of sub-projects; and d) General Feedback and Recommendations. This questionnaire was applied to a sample of 6 categories of beneficiaries: a) Beneficiaries from governments/indigenous federations; b) Beneficiaries from central/regional/territorial governments; c) beneficiaries from technical - scientific organizations; d) Community-based beneficiaries, e) recipients of sub-projects; f) Recipients of scholarships.

A total of 57 surveys were carried out in both countries (24 in Honduras, 33 in Nicaragua). Among beneficiaries, 53 % had a high knowledge of the project and was mainly involved in activities such as: a) initial preparation of the project (23%); b) participation in project/sub – project committee (18%); c) Participation in workshops (37%); d) Participation in activities related to the UNESCO submission (8 %); e) activities related to the development and /or update of management plans (14%).

The sample included participation of representatives from indigenous groups (42%), from government and community associations, among which: 89% felt that all actions executed respected the rights of traditional peoples and 51% of respondents rated as high participation of indigenous people in sub-projects. Roughly 40% of the sample consisted of women, and 60% of the questionnaires were applied to beneficiaries of sub - projects (53 % of production and 43 % sustainable participatory management).

Table A.5.1: Summary of beneficiary surveys in Honduras and Nicaragua (October-November, 2012)

Type of beneficiary	Honduras	Nicaragua	Total	%
National government	5	3	8	14
Government/Indigenous				
federations	7	3	10	18
Sub-projects	11	23	34	60
Community-based	0	2	2	4
Scholarship	1	0	1	2
Technical-scientific	0	2	2	4
Total	24	33	57	100

Recipients in Honduras and Nicaragua agreed that the greatest contribution of the Corazon Project to their communities were: a) strengthening environmental governance

with community empowerment: "The Corazon Project was a platform for transforming a process of community governance"; b) strengthening their capacities through training; c) the remuneration of communities through sub-projects that focus on preservation of biodiversity; d) the institutionalization of project actions, which will contribute to the sustainability of actions: "The Corazon Project was not an island, but part of a public policy to begin a process of transformation in the area and to build a new approach to achieve biodiversity conservation, and incorporation of indigenous peoples "; e) Project results are linked with other national actions: " In Nicaragua results of the Corazon Project are being strengthened by establishing linkages with other projects such as the Human Security Program, which will strengthen cocoa production through a marketing program"; f) Modernization of farms with the aim to implement good environmental friendly practices; g) Strengthening management of economic resources that contribute to the future development of communities; h) Financing of infrastructure for improving revenue collection of communities; i) Supporting initiatives from Associations of indigenous and mestizo women; j) Development of knowledge tools to improve the management and administration of protected areas by communities; and k) Monitoring and technical support to communities in the implementation of their subprojects.

The evaluation of the contribution of the project to the conservation of biodiversity through improved and more sustainable use of natural resources had a high rating by 70 % of respondents; 28 % rated it as moderate. In Nicaragua this high rating is primarily awarded for the following assessments: a) new technologies were implemented to minimize environmental damage in productive activities; b) the Project promoted and improved the care for water sources in farms; c) reforestation activities were assessed as positive by respondents; d) the Project initiated the recovery of areas that had been destroyed by traditional agriculture; e) increased awareness of families in the area of influence of the importance of efforts for regeneration of degraded areas and conservation. Those who rated the Project's impact as moderate noted that Project actions were not sufficiently financed given the size of the area of influence, and that the country should regulate livestock and deforestation activities more strongly. In Honduras, the high impact of the Project was associated with the following activities: a) update/preparation of management plans that involved the assessment of appropriate use of resources and best practices in protected area management; b) recovery of degraded areas through the implementation of organic production methodologies and technologies; c ) training on management of natural resources; d) lack of use of chemicals and promotion of organic products; e) activities aimed at improving the standard of life of beneficiaries and the conservation of biodiversity in general.

Table A.5.2: Rating of Project's contribution to biodiversity conservation through improved and more sustainable use of natural resources (October-November, 2012)

Rating/1	Honduras	Nicaragua	Total	%
High	20	20	40	70
Moderate	4	12	16	28
Low	0	1	1	2

None	0	0	0	0
Total	24	33	57	100

1/: High (90-100% rating), Moderate (61-89%), Low (50-60%) and None (0%)

The evaluation of the Corazon Project's contribution to improving the management of protected areas was rated as high by 61 % of the beneficiaries. In Nicaragua this assessment was mainly attributed to the following perceptions: a) Environmental education actions contributed to the good management of protected areas, and subprojects contributed to improving and restoring areas that have been destroyed by traditionalist farmers; c) the updated management plan for the RBB included local participation, which will guarantee sustainability of the process and its impacts; d) activities to support the organization of environmental promoters was positive; e) the Project contributed to regenerate degraded areas through the establishment of agroforestry systems that are compatible with the environment; f) Project committees were community representatives who, for the first time, were in charge of implementation: "before the community was only perceived as objects and not as subjects of action".

Moderate ratings were primarily awarded by recipients that considered the need for further action in the areas of influence, including funding, monitoring and control of invasions by settlers. In Honduras the highest rating given by the beneficiary 's evaluations were attributed to: a) sub-projects that aimed at conserving the area's resources; b) updated management plans that were perceived as critical to continue to frame policies for the conservation of protected areas; c) provision of tools and knowledge for conservation; and d) areas degraded by livestock were reforested.

Table A.5.3: Rating of Project's contribution to the improvement of protected area management within area of influence in Honduras and Nicaragua (October-November, 2012)

Rating/1	Honduras	Nicaragua	Total	%
High	18	17	35	61
Moderate	6	15	21	37
Low	0	1	1	2
None	0	0	0	0
Total	24	33	57	100

 $1/\!\!:$  High (90-100% rating), Moderate (61-89%), Low (50-60%) and None (0% )

The evaluation of sub-projects by beneficiaries of both countries scored high marks with respect to the impact these had on conservation of protected areas (68%) and rehabilitation of degraded areas (54%). However 49% felt that sub-projects had a moderate impact on improving the income of beneficiary families. In both countries the assessment of the contribution of sub-projects was positive in the following aspects: a) recovery of water resources in farms; b) management of wastewater from coffee

plantations; c) reforestation of the farms; d) establishment of agroforestry systems; e) enriching knowledge and awareness of families living in the reserves; g) strengthening rangers and personnel working in the reserve.

Responses demonstrated the perception that sub-projects reduced the pressure on natural resources and biodiversity reserves. The impact of sub-projects on income level of beneficiary families was positive. However, respondents discussed other socioeconomic factors that are considered necessary to increase and maintain income generation of the type of beneficiaries in question, such as: a) prices of products in local markets; b) technologies to improve the quality of production (e.g. chocolate); c) greater automation to improve yields; and d) increased knowledge on product marketing and market access.

Table A.5.4: Rating of the impact of sub-projects in conservation within protected areas Honduras and Nicaragua (October -November, 2012)

Rating/1	Honduras	Nicaragua	Total	%
High	18	21	39	68
Moderate	6	11	17	30
Low	0	1	1	2
None	0	0	0	0
Total	24	33	57	100

 $1/\!\!:$  High (90-100% rating), Moderate (61-89%), Low (50-60%) and None (0% )

The actual questionnaire used to carry out the beneficiary survey and its instructions (in Spanish) are included below.

# ENCUESTA PARA BENEFICIARIOS DEL PROYECTO CORAZON INSTRUCTIVO PARA EL LLENADO DE LA ENCUESTA

El Proyecto CORAZÓN se encuentra en proceso de finalización de sus actividades, el objetivo de la aplicación de la Encuesta es obtener la opinión de diversos beneficiarios sobre los resultados e impactos del mismo en los países de Honduras, Nicaragua y CCAD. El cuestionario contiene 4 secciones: a) Datos del Encuestado b) Evaluación de los Objetivos del Proyecto CORAZÓN, c) Evaluación de Sub-Proyecto d) Opinión General sobre el Proyecto CORAZÓN y Recomendaciones

#### 1. Recomendaciones generales para la aplicación de esta encuesta

- Realizar introducción a la aplicación del cuestionario explicando a los encuestados el objetivo de la encuesta y los principales objetivos generales del Proyecto CORAZÓN (GEO, PDO)
- Preguntar a los encuestados si requieren una hoja de información del resumen del Proyecto CORAZÓN para poder completar la encuesta
- Expresar la disposición del encuestador para responder cualquier duda o aclaración sobre las preguntas del cuestionario
- El llenado de la encuesta consiste en marcar con X donde corresponde aunque puede haber situaciones donde el encuestado solicite marcar X en varias respuestas para lo cual se le informará que sí es posible

#### 2. Contenido de las Secciones de la Encuesta

Sección 1 Datos del Encuesta: esta sección tiene como objetivo captar la información general de los beneficiarios para conocer su relación con el Proyecto CORAZÓN así como su nivel de involucramiento en diversas actividades del mismo. Se descartarán todas aquellas encuestas donde el encuestado haya respondido que tiene "ninguno" conocimiento del Proyecto.

Sección 2 Evaluación de los Objetivos del Proyecto CORAZÓN: esta sección tiene la finalidad de captar la cuantificación que los beneficiarios le dan al logro de los objetivos del Proyecto CORAZÓN tanto en sus objetivos ambientales (GEO) como en los objetivos de desarrollo del Proyecto (PDO). También las preguntas captan Las preguntas de la sección de Evaluación de Objetivos Estas preguntas también captarán la percepción de los beneficiarios respecto al enfoque de género del Proyecto CORAZÓN y el respeto a los derechos de los pueblos tradicionales. La mayor parte de estas preguntas tienen la pregunta "por qué?" después que realizar una cuantificación que tiene por objetivo que los entrevistados escriban las razones de su calificación a la pregunta.

Sección 3 Evaluación de Sub-Proyectos: esta sección contiene preguntas para captar la cuantificación que los beneficiarios dan los resultados de la implementación de sub-Proyectos en la conservación y rehabilitación de áreas degradadas en áreas protegidas. También se solicita la opinión respecto a la participación indígena como beneficiarios de sub-Proyectos. Los sub-Proyectos se implementaron en 2 categorías: manejo participativo y producción sostenible.

Sección 4 Opinión General sobre el Proyecto CORAZÓN y Recomendaciones: comprende 2 preguntas para que los beneficiarios escriban ampliamente sobre lo que consideran la mayor contribución del Proyecto así como sus recomendaciones para la implementación de futuros Proyectos teniendo en cuenta las lecciones aprendidas del Proyecto CORAZÓN.

# 3. Selección y Tamaño de la Muestra

La encuesta de beneficiarios será aplicada a 72 beneficiarios de 6 categorías; así mismo se realizará una entrevista al representante de CCAD. Los perfiles de los beneficiarios y tamaño de la muestra se describen a continuación:

Categorías de Beneficiarios	Honduras	Nicaragua	Total Entre- vistas
1. Beneficiarios de Sub-Proyectos: corresponde a las personas que recibieron el beneficio financiero para el desarrollo de actividades de manejo participativo y producción sustentable en las áreas protegidas de influencia del Proyecto CORAZÓN.  El número de encuestados en esta categoría se dividirá así: 10 encuestados para beneficiarios de producción sostenible y 10 para manejo participativo. Del total de las 20 encuestas garantizar el 50% se realice a indígenas y el restante a mestizos. Del total de entrevistados garantizar un mínimo del 20% de mujeres entrevistadas	20	20	40
2. Beneficiarios de Gobiernos/Federaciones Indígenas: se entrevistará de forma directa a representantes asignados por los gobiernos/federaciones indígenas que participaron en diferentes actividades del Proyecto CORAZÓN	2	2	4
3. Beneficiarios de Gobierno Central y Regional/Territorial : Se entrevistará de forma directa a los representantes de gobierno de los siguientes cargos: a) Ministro(a) b) Secretarías de pueblos indígenas c) Director(a) de SINAP d) Secretaría Técnica de BOSAWAS/ICF e) Gobierno Regional Costa Caribe/Alcaldía Municipal f) Oficinas técnicas de recursos naturales territoriales (SERENA, Técnico de alcaldías)	6	6	12
4. Beneficiarios Comunitarios: corresponde a las personas habitantes de las áreas protegidas que participaron en diferentes actividades del Proyecto CORAZÓN tales como: capacitaciones, consulta de los planes de manejo, calificación de la efectividad de manejo, ficha UNESCO, campañas de reforestación, campañas de prevención de incendios, entre otras.	4	4	8
5. Beneficiarios técnicos-científicos: corresponde a técnicos-científicos que participaron en diferentes estudios e investigaciones implementados en las áreas protegidas, así como en la valoración de la efectividad de manejo y actualizaciones o elaboración de instrumentos del SINAP realizados por el Proyecto CORAZÓN.	2	2	4
6. Beneficiarios de Becas: comprende las personas que han sido	2	2	4

beneficiadas bajo las modalidades de beca escolar para educación básica y beca de estipendio para la educación universitaria. Los beneficiarios son de estudiantes indígenas.			
TOTAL	36	36	72

#### 4. Responsables y Lugares para la aplicación de la Encuesta

Encuestas a Beneficiarios de Sub-Proyectos/Comunitarios/Becarios: estas encuestas serán aplicadas con los técnicos de monitoreo que implementarán talleres de efectividad de manejo, de planes de manejo, socialización de ficha UNESCO, que ya están programados. De no completarse las metas de entrevistas en las diferentes categorías los técnicos tendrán que completar las entrevistas en campo.

Encuestas a Beneficiarios de Gobiernos Regional-Territorial, Gobiernos-Federaciones Indígenas, Técnicos-científicos: estas encuestas serán aplicadas con técnicos de las Unidades ejecutoras del Proyecto CORAZÓN en ambos países. Esta encuesta se puede aplicar en los talleres programados de efectividad de manejo o socialización de ficha UNESCO. En caso de que beneficiarios de esta categoría no asistan a los talleres entonces se deberá programar una cita en sus oficinas para realizar la entrevista.

Encuestas a Beneficiarios de Gobierno Central y CCAD: La consultora del BM para ICR realizará estas entrevistas a los tomadores de decisiones en sus despachos de trabajo.

#### 5. Puntajes y evaluación de la encuesta

El cuestionario comprende una serie de preguntas que los beneficiarios marcarán con una "X" su calificación en 4 categorías con los siguientes puntajes:

- **Alto**: cuando su respuesta representa un 90- 100% de calificación, esto representa el mayor puntaje otorgado.
- Moderado: cuando su calificación corresponde al 61-89%.
- **Bajo**: cuando su calificación corresponde al 50-60%
- **Ninguno**: cuando su calificación representa un 0%, lo cual representa el menor puntaje otorgado

Las explicaciones a los puntajes luego serán analizados para valorar los aportes de los beneficiarios

#### RESUMEN DE RESULTADOS PROYECTO CORAZÓN

El Proyecto CORAZÓN se formuló para lograr 2 objetivos

 Contribuir a la conservación de la biodiversidad de la propuesta Reserva de Biósfera Transfronteriza Corazón de importancia global, a través del uso mejorado y más sustentable de recursos naturales en el área del Proyecto (Objetivo Ambiental del Proyecto CORAZÓN -GEO) - La mejora en el manejo nacional de la Reserva de Biosfera Transfronteriza Corazón (CTBR) en el área propuesta, en Honduras y Nicaragua, que respete los derechos de los pueblos tradicionales (Objetivos de Desarrollo del Proyecto CORAZÓN-PDO)

Los principales resultados fueron los siguientes:

- 58% del total de comunidades que habitan las áreas protegidas de influencia del Proyecto CORAZÓN fueron beneficiadas como ejecutores directos y partícipes de diversas acciones del Proyecto CORAZÓN
- Participación del 188 comunidades indígenas y 299 mestizas en diferentes actividades del Proyecto CORAZÓN tales como ejecución de sub-Proyectos, elaboración de los planes de manejo de las cuatro áreas protegidas y medición de su efectividad de manejo por las comunidades; el intercambio de buenas prácticas entre comunitarios y la vigilancia y monitoreo de la biodiversidad combinando el conocimiento ancestral con la tecnología.
- 247 sub-Proyectos comunitarios fueron implementados de los cuales 135 fueron para la producción sostenible y 112 sub-Proyectos de manejo participativo de recursos naturales; donde se implementaron más de 50 buenas prácticas en 6,341 hectáreas. El mecanismo financiero incluyó fondos de aporte del Proyecto CORAZÓN (máximo US\$ 20,000 por sub-Proyectos).
- 13 categorías de sub-Proyectos fueron implementados: 1) Agroforestería 2)Educación Ambiental 3)Ecoturismo 4) Rehabilitación en Áreas degradadas 5) Formación de promotores ambientales y guardabosque Comunitarios 6) Silvopastoril 7)Infraestructura Productiva 8)Apoyo a Talleres de artesanía, orfebrería y ebanistería 9)Diversificación productiva con fines económicos y nutricionales 10) Fortalecimiento organizacional para el Manejo de los Recursos Naturales 11) Apoyo a la producción sostenible el cultivo y mercadeo de plantas medicinales 12) Energía Renovable 13)Delimitación de Amojonamiento de áreas protegidas
- Los sub-Proyectos de producción sostenible contaron con una contrapartida comunitaria del 27% de la inversión total que consistió de recursos de: mano de obra para acciones de limpieza de terrenos, siembre de cultivos y viveros así como recursos financieros como el valor de sus terrenos.
- 53% de sub-Proyectos fueron implementados por indígenas con acciones de fortalecimiento al patrimonio social de los habitantes de las áreas protegidas desarrollando sus capacidades administrativas para la formulación, ejecución y rendiciones de sus propios sub-Proyectos, en el marco de convenios de implementación.
- 48 instrumentos generados para el fortalecimiento del SINAP: tales como actualizaciones y/o
  elaboraciones de planes de manejo de áreas protegidas, manual de guardaparques, manual de
  monitoreo de efectividad de manejo, estudios científicos de monitoreo de biodiversidad y
  usos de la tierra, entre otros.
- Entre 30-40% de los sub-Proyectos en ambos países fueron implementados por mujeres. El manual operativo del Proyecto CORAZÓN establecía un mínimo de 20% de beneficiarias como requisitos para acceder a los fondos de sub-Proyectos.

- 182 becas se otorgaron a indígenas bajo las modalidades de beca escolar para educación básica y beca de estipendio para la educación universitaria.
- En Honduras: la medición de la efectividad de manejo en áreas protegidas tiene los siguientes resultados: en la Reserva del Hombre y Biosfera del Río Plátano su valoración de efectividad pasó de regular en el año 2000 a aceptable en el año 2011 debido al alto puntaje del ámbito económico-financiero; el Parque Nacional Patuca pasa de una valoración de poco aceptable en el año 2000 a regular en el 2011 y la Reserva de Biosfera Tawahka Asangni desde el año 2008 al 2011 se ha mantenido en el nivel efectividad regular con leves incrementos en los puntajes.
- En Nicaragua: la medición de la efectividad de manejo muestra para la Reserva de Biósfera de BOSAWAS en 2011 una valoración regular en áreas habitadas por mestizos y aceptable en territorios indígenas principalmente por la alta ponderación que se dio a la mejoría en la gobernanza territorial y comunal indígena;
- Se elaboró el documento borrador de la ficha para la propuesta de Reserva de Biósfera Transfronteriza ante la UNESCO
- Con el Proyecto CORAZÓN se establece un espacio de diálogo político que posibilitó que autoridades de ambiente y de áreas protegidas de los dos países junto con organismos de la integración intercambiaran puntos de vista y emitieran directrices para asegurar la gestión del Corazón del CBM, sumado a esto se tienen los intercambios binacionales de líderes indígenas a través de los representantes de los Gobiernos Territoriales Indígenas en Nicaragua y de las Federaciones Indígenas en Honduras así como las gestiones con la cooperación internacional para asegurar recursos para el manejo de estas áreas protegidas y con organismos de Naciones Unidas como UNESCO, para obtener la nominación como Reserva de Biosfera Transfronteriza (RBT).

#### FORMULARIO DE ENCUESTA

#### Información General

Nombre del Proyecto CORAZÓN: Reserva de Biósfera Transfronteriza "Corazón del

Corredor Biológico Mesoamericano"

Región: Centroamérica: Comisión Centroamericana de Ambiente

y Desarrollo (CCAD)

Países: Honduras y Nicaragua

Donante: Fondo Mundial del Ambiente (GEF)

Agencias de Implementación: Banco Mundial

Sector: Medioambiente: Áreas Protegidas y Biodiversidad

Área de Influencia: 1)Reserva de Biósfera de BOSAWAS (Nicaragua)

2)Reserva del Hombre y la Biosfera del Río Plátano (Honduras), 3) Reserva de Biosfera Tawahka Asangni (Honduras), 4)Parque Nacional Patuca (Honduras)

#### Calificación de respuestas

El presente cuestionario comprende una serie de preguntas que marcará con una "X" que requieren de su calificación en 4 categorías con los siguientes puntajes:

- **Alto**: cuando su respuesta representa un 90- 100% de calificación, esto representa el mayor puntaje otorgado.
- Moderado: cuando su calificación corresponde al 61-89%.
- **Bajo**: cuando su calificación corresponde al 50-60%
- **Ninguno**: cuando su calificación representa un 0%, lo cual representa el menor puntaje otorgado

Después de marcar con una X cualquiera de las calificaciones, se le solicita explicar las razones por las cuales otorga esta calificación este escrito se solicita en las líneas de la pregunta "por qué?"

Sección1: Datos del Encuestado

Marque con una X donde aplique su respuesta

1.	En cuál categoría de beneficiario del Proyecto CORAZON se ubica usted?
	Gobierno Nacional Gobiernos/Federaciones Indígenas Sub-Proyectos Gomunitario Becario Técnico-Científico
2.	Es usted comunitario indígena? SiNo
3.	En qué tipo de actividades del Proyecto CORAZÓN usted tuvo mayor participación?  Preparación Inicial del Proyecto Comité de Proyecto y/o Sub-Proyecto  Talleres de capacitación Ficha UNESCO  Elaboración y/o actualización de Planes de Manejo
4.	Si fue beneficiario de un Sub-Proyecto marque la categoría que corresponde:  Manejo Participativo Producción Sostenible  Describa brevemente el sub-Proyecto CORAZÓN que fue beneficiario
5.	Qué nivel de conocimiento usted considera que tiene sobre el Proyecto CORAZÓN?  Alto Moderado Bajo Ninguno
6.	Marque a qué género corresponde  Mujer Hombre
Secció	n 2: Evaluación de los Objetivos del Proyecto CORAZÓN
7.	Cómo calificaría la contribución del Proyecto CORAZÓN a la conservación de la biodiversidad a través del uso mejorado y más sustentable de recursos naturales en el área de influencia del proyecto en su país?  Alta Moderada Baja Ninguna
	Alta Woderada Baja Wiliguila
Por que	<u> </u>

8.	. Cómo calificaría la contribución del Proyecto CORAZÓN a mejorar el manejo de las áreas protegidas de influencia del Proyecto?				
				Ninguna	
Por qu					
9.	derechos	a que las acciones del de los pueblos tradici Algunas Nin	onales?	ZÓN se implementaron re	spetando el
Por qu					
10	). Considers comunida influencia	a que con el Proyect	o CORAZÓN se e conservación y	ha incrementado la parti uso sostenible de las área	cipación de las
•					
11. Co Co	ómo calific ORAZÓN? né	caría la inclusión de Alta Mode	e la mujer en rada E	las diferentes actividade BajaNinguna	s del Proyecto
	ón 3: Evalua 2. Cómo ca conservac	ación de Sub-Proyecto dificaría la incidencia ción de las áreas prote	os a que tuvieron l egidas?	os sub-Proyectos impleme	
Por qu	ıé				

13.	. Cómo calificaría la incidencia que tuvieron los sub-Proyectos implementados en la rehabilitación de áreas degradadas de las áreas protegidas?
	Alta Moderada Baja Ninguna
Por que	<u> </u>
14.	Cómo calificaría la incidencia de sub-Proyectos de producción sostenible en el mejoramiento de los ingresos de las familias beneficiadas de las áreas protegidas?  Alta Moderada Baja Ninguna
Por au	<u> </u>
or qui	
15.	Cómo calificaría la participación de los indígenas como beneficiarios de Sub-Proyectos (en ambos países más del 50% fueron beneficiarios indígenas)  Alta Moderada Baja Ninguna
Por que	ś
Sección	n 4: Opinión general sobre el Proyecto CORAZÓN y Recomendaciones
16.	Cuál fue en su opinión sobre la mayor contribución del Proyecto CORAZÓN?
17.	Explique qué otras actividades le hubiera gustado que el Proyecto CORAZÓN ejecutara en beneficio de las áreas protegidas y sus habitantes?

# Annex 6. Stakeholder Workshop Report and Results

(if any)

A closure workshop was held in Nicaragua (Managua, November 28, 2012) with the participation of technical teams from both countries and CCAD. The agenda of the workshop is included below.

Workshop objectives were to share the main results of Project implementation in both countries and the contributions of the technical staff in the evaluation. A presentation of the draft Project Closure Report (Results, Evaluation and Lessons Learned) of each country and the CCAD were performed. Technical coordinators from both countries presented the results of the evaluation of Project performance. Results of the Beneficiary Survey were also presented.

Participants of the workshop were divided into the four following working groups:

- Group 1- Sub-project monitoring: The exchange of experiences and lessons learned from monitoring and evaluation (M&E) during Project implementation is summarized as follows: a) M&E is an enriching process that provides valuable information on the actual needs and realities of communities; b) the remote location of sub-projects makes monitoring difficult and expensive; c) communication with beneficiaries was complex and the use of indigenous native languages was critical; d) weather was a factor in the planning of field trips; e) operating expenses provided for monitoring were not consistent with the geographical conditions of communities; f) lack of access to roads in protected areas created greater difficulties with regards to monitoring; g) women beneficiaries of sub-projects were more organized and tidy in resource management; h) increased investments for community training in administrative and project implementation is critical to successful implementation; and i) beneficiaries typically have high receptivity for training.
- Group 2- Financial Management: Financial management and reporting procedures across countries were discussed and compared (FMR, reporting tables, disbursements, co-financing). Best practices in financial management identified by the group included: a) the existence of a Project Operational Manual; b) a Manual of procedures for sub-projects, c) the use of an annual work plan as a management tool; d) Financial Monitoring Reports (FMR) updated every 6 months.
- Group 3: Evaluation of Project Objectives and implementation: Project technical coordinators from the three agencies conducted an exchange of lessons learned and shared results of performance evaluations that had been previously carried out in the different countries. In Nicaragua, a performance evaluation of the Project led to a highly satisfactory rating of the commitment of the Government in implementing the Project. Overall World Bank performance was rated as moderately satisfactory based on the performance in the initial phase and the

highly satisfactory quality of Project supervision after the restructuring. Meanwhile, the Honduras team evaluated the performance of the Central Government for Implementation of Project Corazon satisfactory (84.75%) assessing the following elements: a) existence of an environment to support macro, sectoral and institutional policies suitable for the development of Project activities that included visits to beneficiaries and/or actors; b) before restructuring a comprehensive plan for implementation, enforcement mechanisms, and the appointment of key personnel was lacking. The World Bank assistance is rated as Moderately Satisfactory, considering that in the initial phase of the project was evaluated "Not satisfactory" and after the restructuring it was assessed as "Satisfactory". During the preparation and implementation of the first phase of the Project, deficiencies in supervision and monitoring by the World Bank were noted. Performance after the restructuring significantly changed and there was close supervision of implementation.

• Group 4 – Environmental evaluation: The team conducted a review of the main results of monitoring tools used to evaluated project impact, namely the PROARCA and GEF tracking tools. The group evaluated performance in both countries, and the results scored "Regular". It was noted that although the Corazon Project had not been involved in all areas assessed through the mentioned methodologies, the best scores were attributed to the following topics: a) participation of indigenous territories and local communities in decision making; b) focus on research and training; c) improvement in the training of community structures, d) increased investment in sustainable production.

## AGENDA TALLER DE CIERRE DE PROYECTO Proyecto Corazón Reserva de Biosfera Transfronteriza 28 de noviembre de 2012

8:30-8: 45 am	Palabras de Bienvenida Ministra del MARENA – Juana Argeñal
8:45-9:00 am	Palabras de la Representante del BM para el Proyecto Corazón-
	Catalina Marulanda
9:00-10:00 am	Lecciones Aprendidas del Proyecto Corazón - Consultora BM-
	Gherda Barreto
10:00-10:30 am	Resultados de Encuestas a Beneficiarios por Países - Consultora
	BM Gherda Barreto
10:30-11:00 am	Informe de CCAD- Melvin Miranda
11:00- 11: 30 am	Evaluación y Avance en la elaboración del informe de cierre del
	país Nicaragua – Coordinación del Proyecto- Georgina Orozco
11:30- 12: 00 am	Evaluación y Avance en la elaboración del informe de cierre del
	país Honduras – Coordinación del Proyecto- Mauricio Irias
12:00-2:00 pm	ALMUERZO
2:00-4:00 pm	Trabajos de Grupo
4:00-5:00 pm	Presentación de Grupos de Trabajo
5:00- 5:15 pm	Palabras de Cierre de los Coordinadores de Proyecto de Honduras
	y Nicaragua

# Metodología del Taller Binacional ICR PROYECTO CORAZÓN

Luego de las presentaciones en plenaria los participantes conformarán 4 equipos de trabajo para desarrollar el siguiente contenido:

<u>Grupo 1: Monitoreo Sub-proyectos:</u> Este grupo realizará intercambio de experiencias de monitoreo de campo exponiendo las 13 categorías de sub-proyectos abordando los siguientes aspectos:

- Explicar los instrumentos utilizados para el monitoreo de sub-proyectos con sus ventajas y desventajas así como propuesta de mejoras (formatos, reportes, instrumentos de campo, equipos de cómputo, gps, mapas etc)
- Experiencias del inicio de la implementación de sub-proyectos: realización de consultas con las comunidades, conocimiento del territorio y actores.
- Experiencias del monitoreo técnico por categoría de sub-proyectos
- Experiencias en el monitoreo de sub-proyectos con beneficiarios indígenas
- Experiencias en el monitoreo de sub-proyectos de beneficiarias mujeres
- Experiencias en la rendición de sub-proyectos
- Experiencias en los talleres de capacitaciones con beneficiarios

<u>Grupo 2 Financiero</u>: este grupo trabajará en las matrices e informes financieros que se reportarán en el ICR

- Completar las tablas del informe ICR: Tabla consolidado GEF y tabla por componente del Proyecto
- Reporte de contrapartida con elaboración de explicación de los tipos de aporte comunitario
- Elaborar reporte de ejecución de gastos de acuerdo a convenio
- Reporte de desembolsos

<u>Grupo 3 Ejecución del Proyecto:</u> Este grupo analizará los principales resultados de acuerdo a los objetivos de desarrollo del proyecto evaluando la implementación del mismo y sus lecciones aprendidas.

- Incorporación de los resultados finales de los indicadores del proyecto en el informe elaborando los análisis según los resultados obtenidos
- Evaluación de la Unidad Ejecutora-Gobierno y Banco Mundial
- Análisis de los principales resultados del proyecto de acuerdo a los PDO elaborando además recomendaciones para futuros proyectos con las principales lecciones aprendidas.

<u>Grupo 4. Evaluación Ambiental</u>: este grupo analizará los resultados de las herramientas de monitoreo y estudios científico que aportan a la evaluación ambiental del Proyecto

- Incorporación de resultados finales de las herramientas tracking tool y PROARCA en el informe con su respectivo análisis de resultados
- Analizar estudios de monitoreo de jaguar para incorporar aspectos de estado de biodiversidad en la evaluación del GEO
- Analizar los resultados del estudio análisis multitemporal de usos con la tasa de deforestación para medir impactos ambientales del proyecto (situación antes y después)

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

#### **MARENA**

La evaluación del desempeño del Proyecto se califica como altamente satisfactoria (93), la Apropiación y compromiso del Gobierno con el logro de los objetivos de desarrollo, el entorno propicio de apoyo incluyendo macro, sectoriales y políticas institucionales (legislación ambiental, Plan Nacional de Desarrollo Humano, Estrategia nacional ambiental) y la adecuación del proyecto con consultas a beneficiarios y actores han sido condiciones altamente satisfactorias en las circunstancias que de desarrollo el Proyecto, la apuesta del Gobierno de Reconciliación y Unidad Nacional a través del Ministerio del Ambiente y los Recursos Naturales (MARENA) de fortalecer la capacidad de las comunidades en la gestión para la conservación y manejo sostenible de los recursos naturales de la RBB ha sido una respuesta a los derechos del uso sostenible de las tierras y los recursos naturales, así como al rescate de las prácticas ambientales ancestrales para la conservación y mejorar el bienestar de las comunidades asentadas en la RBB, logrando de esta manera la protección del medio ambiente en una relación armoniosa Naturaleza y Ser Humano.

La ejecución del proyecto en relación a la preparación para la implementación, mecanismos de ejecución, el nombramiento del personal clave, así como la solución oportuna de los problemas de ejecución, por ejemplo, tiempos prolongados para hacer efectivos las transferencias de los primeros desembolsos, la preparación del manual operativo para implementar el programa de Sub-proyectos también represento un tiempo necesario para dimensionarlo con la realidad de las condiciones territoriales para lograr la preparación y consenso del mismo. La necesidad de desarrollar y poner en marcha un plan de asistencia técnica en los temas fiduciarios y de adquisiciones dio lugar también a establecer en la ruta del proceso tiempos para estas tareas.

En cuanto a la adecuación de los mecanismos de seguimiento y evaluación para la toma de decisiones podemos valorar que institucionalmente la participación directa de las sedes de la Secretaria Técnica de BOSAWAS, así como el involucramiento directo de los Gobiernos Territoriales Indígenas provoco una atención efectiva para los avances y ajustes a las condiciones para una ejecución basada en resultados.

En relación a la calificación del desempeño general del Banco por parte de la Unidad Ejecutora esta se califica como moderadamente satisfactoria para la dimensión del desempeño del Banco en la fase inicial y altamente satisfactoria en la calidad de la supervisión del Proyecto.

El arranque del Proyecto presento una serie de condicionantes desde el tiempo transcurrido para declararlo efectivo, la transferencia del primer desembolso, la creación de la unidad ejecutora y los arreglos con los actores involucrados expresados en el manual operativo y reglamento de becas, siendo limitada la asistencia por parte del Banco para mejorar estas condicionantes. Desde la evaluación de medio término y las condiciones creadas para una reestructuración la cual fue efectiva en todos los ámbitos de atención del Proyecto, se tuvo de parte del Banco un acompañamiento, asistencia técnica,

supervisión de calidad y una comunicación efectiva para hacer las mejorar necesarias en la implementación del Proyecto.

#### **SERNA**

La unidad ejecutora ha realizado evaluación del Desempeño del Gobierno Central para la Ejecución del Proyecto Corazón con una ponderación de 84.75%; valorando los siguientes elementos: a) existió un entorno propicio de apoyo a nivel macro, sectorial y de políticas institucionales adecuadas para desarrollar las actividades del proyecto con consultas a beneficiarios y/o actores, b) Antes de la reestructuración no se hizo un exhaustivo plan o preparación para la implementación, mecanismos de ejecución, y el nombramiento del personal clave.

En cuanto a la adecuación de los mecanismos de seguimiento y evaluación para la toma de decisiones y la asignación de recursos; se considera que tomando como base la importancia de las áreas protegidas atendidas se debió haber asignado una cantidad de recursos acorde con la población y el área territorial de las áreas protegidas, y garantizar la sostenibilidad de los recursos, luego del cierre del Proyecto. Por otro lado se debió recibir respuesta positiva a la solicitud de nuevos fondos GEF en vista del éxito y de los logros obtenidos en la ejecución de esta fase del Proyecto.

La asistencia del Banco Mundial se ha evaluado como Moderadamente Satisfactoria, considerando que en la fase inicial del Proyecto fue evaluada "No satisfactoria" y posterior a la reestructuración se valora como Satisfactoria. Durante la preparación y ejecución de la primera fase del Proyecto se encontraron deficiencias en supervisión y acompañamiento por parte del Banco, que contribuyeron de manera importante a la situación de desempeño del Proyecto. Los problemas que se fueron identificando durante misiones de supervisión (de gestión financiera y de adquisiciones) no se resolvieron a su debido tiempo. Compromisos de todas las partes, enmarcados en planes de acción, no tuvieron un seguimiento adecuado por ninguna de las partes y por ende no se cumplieron. Por otra parte, oficiales de las Unidades Ejecutivas recibieron entrenamiento sistemático de parte del Banco para asegurar su desempeño adecuado. Durante la ejecución posterior a la Reestructuración esto cambio significativamente; hubo una simplificación en la ejecución una revisión en el Marco Lógico del Proyecto con la estructuración de un adecuado plan de Monitoreo y Supervisión. Además se realizaron capacitaciones para el personal técnico, administrativo y de Adquisiciones y en todo momento se tuvo el acompañamiento del Banco en la Ejecución del Proyecto.

#### **CCAD**

No comments were received from CCAD.