THE MESOAMERICAN BIOLOGICAL CORRIDOR





REGIONAL PROGRAM REVIEW
Volume 5 Issue 2



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Regional Program Review The Mesoamerican Biological Corridor

May 24, 2011 Corporate and Global Evaluations and Methods

http://www.globalevaluations.org

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How to cite this report:

IEG (Independent Evaluation Group). 2011. "The Mesoamerican Biological Corridor." *Regional Program Review* Vol. 5, Issue 2.

Cover image: The Valle family in La Fonseca, Kukra Hill, Nicaragua. The Valles are Sustainable Harvest International participant farmers; they stand in their diversified agroforestry system, which features coconut, peach-palm, citrus, mangos, avocados, soursop, and more. In a number of similar villages within the Mesoamerican Biological Corridor, Sustainable Harvest International built on the work of the World Bank's Mesoamerican Biological Corridor projects.

ISBN-13: 978-1-60244-180-4 ISBN-10: 1-60244-180-4

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Printed on Recycled Paper

IEG Mission: Improving Development Results Through Excellence in Evaluation

The Independent Evaluation Group (IEG) of the World Bank reviews global and regional partnership programs (GRPPs) in which the Bank is engaged as one partner among many for two main purposes: (a) to provide accountability in the achievement of the program's objectives by providing an independent opinion of the program's effectiveness, and (b) to identify and disseminate lessons learned from the experience of individual GRPPs. The preparation of a global or regional program review (GPR) is contingent on a recently completed evaluation of the program, typically commissioned by the governing body of the program.

The first purpose above includes validating the findings of the GRPP evaluation with respect to the effectiveness of the program, and assessing the Bank's performance as a partner in the program. The second purpose includes assessing the independence and quality of the GRPP evaluation itself and drawing implications for the Bank's continued involvement in the program. Assessing the quality of GRPP evaluations is an important aspect of GPRs/RPRs, since encouraging high quality evaluation methodology and practice more uniformly across Bank-supported GRPPs is one of the reasons why IEG embarked on this new product in 2005.

IEG annually reviews a number of GRPPs in which the Bank is a partner. In selecting programs for review, preference is given to those that are innovative, large, or complex; those that are relevant to upcoming sector studies; those for which the Executive Directors or Bank management have requested reviews; and those that are likely to generate important lessons. IEG also aims for a representative distribution of GPRs/RPRs across sectors in each fiscal year.

A GPR/RPR is a "review" and not a full-fledged "evaluation." It assesses the independence and quality of the relevant evaluation; provides a second opinion on the effectiveness of the program; assesses the performance of the Bank as a partner in the program; and draws lessons for the Bank's engagement in global and regional programs. The GPR/RPRs does not formally rate the various attributes of the program.

A GPR/RPR seeks to add value to the program and to the World Bank beyond what is contained in the external evaluation, while also drawing upon IEG's experience in reviewing a growing number of programs. It reports on key program developments since the evaluation was completed, including the progress in implementing the recommendations of the evaluation.

A GPR/RPR involves a desk review of key documents, consultations with key stakeholders, and a mission to the program management unit (secretariat) of the program if this is located outside the World Bank or Washington, DC. Key stakeholders include the Bank's representative on the governing body of the program, the Bank's task team leader (if separate from the Bank's representative), the program chair, the head of the secretariat, other program partners (at the governance and implementing levels), and other Bank operational staff involved with the program. The writer of a GPR/RPR may also consult with the person(s) who conducted the evaluation of the GRPP.

Each GPR/RPR is subject to internal IEG peer review, Panel review, and management approval. Once cleared internally, the GPR/RPR is reviewed by the responsible Bank department and the secretariat of the program. Comments received are taken into account in finalizing the document, and the formal management response from the program is attached as an annex to the final report. After the document has been distributed to the Bank's Board of Executive Directors, it is disclosed to the public on IEG's external Web site.

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Abbreviations and Acronyms

ALIDES	Central American Alliance for Sustainable Development	NGO	Nongovernmental organization
ANAM	National Environmental Authority (Autoridad Nacional del Ambiente)	PA	Protected area
BNPP	Bank-Netherlands Partnership Program	PARCA	Environmental Plan for the Central American Region
CAS	Country Assistant Strategy	PES	Payment of environmental services
CCAD	Central American Commission for Environment and Development	PPP	Plan Puebla-Panama
	•	PROARCA	Regional Environmental Program for Central America
COMIECO	Central American Council of Ministers for Economic Integration	PROBAP	Honduras Project for the Conservation of Biodiversity in Priority Areas
EIA	Environmental Impact Assessment	RAAN	Nicaragua's North Atlantic Autonomous Region
EU	European Union	RAAS	Nicaragua's South Atlantic Autonomous Region
GEF	Global Environmental Fund	RPR	Regional Program Review
GIS	Geographic information system	SEFIN	Honduras Secretary of Finance
GPR	Global Program Review	SERNA	Honduras Secretary of Natural Resources and Environment
GTZ	German Agency for Technical Cooperation	SICA	System for the Integration of Central America
ICR	Implementation Completion Report	SINAPH	National Protected Areas System of Honduras
IDB	Inter-American Development Bank	TLC	Free Trade Agreement
IEG	Independent Evaluation Group	TNC	The Nature Conservancy
INAFOR	Nicaraguan National. Forest Institute	TORs	Terms of reference
IUCN	International Union for Conservation of Nature	SERVIR	Mesoamerican Regional Visualization and Monitoring System
LAP I	Land Administration Project Phase I	SICAP	Central American Protected Areas System
LAP II	Land Administration Project Phase II	UNDP	United Nations Development Program
MARENA	Nicaraguan Ministry of Natural Resources and Environment	UNEP	United Nations Environment Program
MARN	El Salvador's Ministry of Environment and Natural Resources	URACCAN	University of the Autonomous Regions of the Caribbean Coast of Nicaragua
MBC	Mesoamerican Biological Corridor	USAID	U.S. Agency for International Development
NASA	National Aeronautics and Space Administration	WCS	Wildlife Conservation Society
NEF	National Environmental Fund	WWF	World Wildlife Fund

Fiscal Year of Partnership January 1 – December 31

All dollar amounts are U.S. dollars, unless otherwise noted.

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Preface

In San Salvador in July 2010, heads of state from the Central American Integration System (SICA) and the World Bank together adopted a comprehensive agenda for Central America that includes an action plan across five key pillars: economic; social inclusion; security; climate change and natural disasters; and support for institution building and the rule of law. As the World Bank moves forward to continue to help Central America expand its economic opportunities and enhance social inclusion through deeper integration, it can learn lessons from the work that has been underway for two decades to integrate the region's natural wealth into a well managed regional corridor system: the Mesoamerican Biological Corridor (MBC). After years of war, cooperation in the area of the environment — the shared management of the region's critical remaining natural habitats (including critical transboundary areas and several coastal/marine components) — preceded cooperation in all other areas, including economic development. The Central American Commission for the Environment (CCAD), for example, involving the Environment Ministers from all Central American countries, was established some years prior to SICA under which it now resides. The shared vision was encapsulated in a series of bilateral and regional environmental agreements.

This is a Regional Program Review of the World Bank's support for the MBC. The review is framed around an assessment of five Global Environment Facility (GEF)-financed World Bank-implemented projects in Costa Rica, Honduras, Mexico, Nicaragua and Panama that had the common objective of consolidating the MBC. It also reports on the achievements of trust fund activities, financed by the Bank Netherlands Partnership Program (BNPP), that were implemented parallel to the GEF/World Bank projects. The present review differs from other global and regional program reviews conducted by the Independent Evaluation Group (IEG) in that it assesses the contribution of a series of World Bank projects toward the achievement of a higher order goal, namely:

"[To establish] a territorial planning system consisting of natural protected areas under a special regime whereby core, buffer, multiple use and corridor zones are organized and consolidated in order to provide an array of environmental goods and products to the Central American and the global society, offering spaces for social harmonization to promote investments in the conservation and the sustainable use of natural resources, with the aim of contributing to the improvement of the quality of life of the inhabitants of the region." *Joint Declaration at the 19th Summit of the Central American Heads of State, Panama, 1997.*

The present review is organized around the current IEG evaluative framework for global and regional program reviews as outlined in Annex A. Chapter 1 recounts the history of the corridor and the actions taken by governments and donors to operationalize it. Chapter 2 summarizes the findings of the external evaluations of two regional programs (by USAID and UNDP) that laid the groundwork for the Bank's MBC projects. Chapter 3 provides an assessment of the World Bank projects. It utilizes IEG's desk reviews of the five World Bank projects, and reports on findings from field visits to the CCAD in San Salvador, as well as site visits in Costa Rica, Honduras, Nicaragua, and Panama. Chapter 4 considers the multiple roles that the World Bank has played in support of the MBC and assesses its performance.

The MBC is one of approximately 35 regional partnership programs in which the World Bank is currently involved as a partner. IEG has also undertaken the present review because it is representative of GEF financial support for the activities of regional environmental programs in which the World Bank is involved. Other examples to which lessons emerging from the present review may apply include the Africa Stockpiles Program, the Nile Basin Initiative, TerrAfrica, the Mekong River Commission, the Black Sea-Danube Partnership, and the Inter-American Biodiversity Information Network.

Copies of the draft GPR were sent to the Central American Commission on Environment and Development (*Comisión Centroamericana de Ambiente y Desarrollo*), to the Latin America and Caribbean Region of the World Bank, to the GEF Secretariat and Evaluation Office, and to other Bank units that have responsibility for the Bank's engagement with global and regional partnerships more generally. The draft was also reviewed by an internal and an external peer reviewer, Andres Liebenthal and Margaret Buck Holland, respectively. Comments received have been taken into account in finalizing the Regional Program Review.

World Bank-Implemented GEF Projects Designed to Consolidate the MBC

Country	Project	ect Development objective	
Nicaragua	Atlantic Biological Corridor Project (P041790)	To promote the integrity of a biological corridor along the Atlantic slope of Nicaragua by ensuring the conservation and sustainable use of biological resources in this region.	06/25/1997 – 09/30/2005
Honduras	Biodiversity in Priority Areas Project (P044343)	To contribute to the integrity of the Honduran section of the Mesoamerican Biological Corridor (MBC) through better conservation of biodiversity in core areas and more sustainable use of biodiversity in the corridor buffer zones.	10/07/1997 – 6/30/2005
Panama	Atlantic Mesoamerican Biological Corridor (P045937)	To contribute to the long-term conservation and sustainable use of biodiversity in the Panamanian portion of the Mesoamerican Biological Corridor.	06/23/1998 – 06/30/2005
Costa Rica	Ecomarkets (P061314)	To foster biodiversity conservation and preserve important forest ecosystems through conservation easements on privately owned lands outside of national parks and biological reserves in the Mesoamerican Biological Corridor (MBC) in Costa Rica.	10/20/2000 – 9/30/2006
Mexico	Mesoamerican Biological Corridor Project (P060908)	The conservation and sustainable use of globally significant biodiversity in five biological corridors in southeast Mexico, through mainstreaming of biodiversity criteria in public expenditure, and in selected local planning and development practices.	11/28/2000 – 12/31/2009

BNPP-Financed Activities in Support of the MBC

BNPP grant	Objective	Dates
Support to Regional Initiatives for Biodiversity Management in Central America: The MBC (TF028969)	the MBC; Implementation of Communication Strategy:	
Capacity Building/ Strengthening of Social Participation in the MBC in Panama, Guatemala and Southeast Mexico (TF052219)	Promote exchange between communities, small producers, and women's organizations to enhance their participation in decision-making in relation to the creation and management of the biological corridors.	4/30/2003 - 12/31/2005
Support to the MBC (TF053877)	Support activities of the MBC initiative within the adopted Business Plan Framework (adopted as an organizing principle for sustainable rural development).	7/13/2004 - 6/30/2008

Mesoamerican Biological Corridor: Program at a Glance

Start date	The MBC concept was developed around 1990. The Central American Alliance for Sustainable Development declared biological corridors as part of a set of environmental objectives in 1994, which was formally endorsed through a Joint Declaration at the 19 th Summit of the Central American Heads of State held in Panama in 1997, and has been supported through several regional and national projects, including by the World bank beginning in 1997.
Mission/goal	"A territorial planning system consisting of natural protected areas under a special regime whereby core, buffer, multiple use and corridor zones are organized and consolidated in order to provide an array of environmental goods and products to the Central American and the global society, offering spaces for social harmonization to promote investments in the conservation and the sustainable use of natural resources, with the aim of contributing to the improvement of the quality of life of the inhabitants of the region." <i>Joint Declaration at the 19th Summit of the Central American Heads of State held in Panama in 1997.</i>
Objectives	The overall objective of the World Bank-implemented GEF-financed projects in Belize, Costa Rica, Honduras, Mexico, Nicaragua, Honduras and Panama was to conserve the biological integrity of designated national biodiversity corridors to allow for ecological connectivity regionally through the MBC. The Mexico project had an additional mainstreaming objective and the Costa Rica project targeted easements on privately owned lands <i>outside</i> of national parks and biological reserves.
Principle activities	The principal activities of the full size GEF biodiversity MBC projects in Honduras, Nicaragua, and Panama included: (a) Institutional capacity development, mainly at the national level; (b) corridor planning, including support for globally important protected areas and the demarcation of core and buffer zones surrounding them; (c) public communication and awareness raising; and (d) investments (subprojects) in priority areas. The Costa Rica MBC project was designed to support the government's payments for environmental services scheme. The Mexico MBC project placed a high degree of emphasis on mainstreaming of biodiversity criteria in public expenditure initiatives relevant to the MBC.
World Bank/GEF contributions	The total actual costs of the six projects included in this regional program review were US\$159 million. The total GEF contribution was US\$46.12 million.
Location	The MBC spans eight countries: Guatemala, Belize, Honduras, El Salvador, Nicaragua, Costa Rica, and Panama and the five southern states of Mexico. The MBC was not originally defined as a geographically delimited area (although subsequent maps were developed by the first project to support the MBC, the <i>Paseo Pantera</i> , and MBC priority corridor areas and new protected areas were mapped by the countries in 2001). The Mesoamerican region covers 768,990 km². The MBC reportedly covers 30 percent of this total land mass concentrated mainly in areas abutting the Atlantic Coast.
Governance and management	The Central American Commission on Environment and Development (CCAD) is the coordination body responsible for overseeing the harmonization of environmentally related policy and legislation and as such is responsible for the coordination of all MBC activities in the region. It is governed by a Council of Environment Ministers representing all member nations and presided over by a rotating presidency. The Executive Secretariat of the CCAD, which assists the Council and the President, is located in San Salvador, El Salvador (a small administrative unit remains in its previous location of Guatemala City, Guatemala). The CCAD, created in 1989, sits within the framework of the Central American Integration System (SICA) developed in 1991.
Web sites	For CCAD: www.sica.int/ccad For Mesoamerican Biological Corridor: www.ccad.ws/PCCBM/pccbm.html

Latest program-level evaluations

PROARCA I (1995-2000)

Rivas, Carlos et al. *Evaluation: Central America Regional Environment Program (PROARCA)*. Associates in Rural Development Inc. January 15, 2000.

PROARCA II (2001-2006)

Post, Jan and Richard Worden. *Program Assessment of the Regional Environmental Program (PROARCA II)*. Final Report. Development Alternatives Inc. April 2004.

UNDP Regional MBC Program (2000-2006)

Putney, Allen D. and Clemencia Vela. Final Evaluation of "Establishment of a Programme for the Consolidation of the Mesoamerican Biological Corridor." 2007.

World Bank GEF Financed Project Level Evaluation

Honduras Biodiversity in Priority Areas Project (PROBAP).1997–2005

Implementation Completion Report, December 20, 2005.

IEG ICR Review, March 29, 2006.

Nicaragua Atlantic Biological Corridor Project, 1997-2005

Implementation Completion Report, March 31, 2006

IEG ICR Review, June 21, 2006

Panama Atlantic Mesoamerican Biological Corridor Project, 1998–2005

Implementation Completion Report, December 23, 2005

IEG ICR Review, March 21, 2006.

Costa Rica Ecomarkets Project, 2000-2006

Implementation Completion Report, February 9, 2007

IEG ICR Review, June 18, 2007

Mexico Mesoamerican Biological Corridor Project. 2001–2009.

Implementation Completion Report, June 25, 2010

IEG ICR Review, January 26, 2011

Belize Northern Belize Biological Corridors Medium Size Project.

Implementation Completion Report, June 2003.

GEF Evaluation Office, Terminal Evaluation, October 2004.^a

a. IEG does not conduct ICR Reviews of GEF medium-size projects.

Key Bank Staff Responsible during Period under Review

Project	Task Manager at Appraisal	Task Manager at ICR
Nicaragua (P041790)	Luis Constantino	Douglas Graham
Honduras (P044343)	Augusta Molnar	Douglas Graham
Panama (P045937)	Mark Cackler	Mark Austin
Costa Rica (P061314)	John Kellenberg	Gunars Platais
Mexico (P060908)	Raffaello Cervigni	Ricardo Hernandez
BNPP TF053877	John V. Kellenberg	
BNPP TF028969	Josefina Stubbs	
BNPP TF052219	James W. Smyle	

Project ID	Sector Manager at Appraisal	Sector Manager at ICR
Nicaragua (P041790)	Michael Baxter	Abel Mejia
Honduras (P044343)	Michael Baxter	John Redwood
Panama (P045937)	Michael Baxter	John Redwood
Costa Rica (P061314)	John Redwood	Abel Mejia
Mexico (P060908)	John Redwood	Karin Erika Kemper
BNPP TF053877	Tracy Hart	
BNPP TF028969	Abel Mejia	
BNPP TF052219	Kenneth King	

Position	Person	Period
Environmentally and Socially Sustainable Development Network	Ian Johnson, Vice President	1997–2006
Sustainable Development	Kathy Sierra, Vice President	2006–2010
Network	Inger Andersen, Vice President	2010 to present
Trust Fund Operations	Arif Zulfiqar, Director	1998–2008
Global Programs and Partnership	Margaret Thalwitz, Director	2004–2008
Global Partnership and Trust Fund Operations	Junhui Wu, Director	2009–present

Glossary

Biodiversity Conservation Corridor	A biologically and strategically defined subregional space selected as a unit for large scale conservation planning and implementation purposes (Sanderson and others 2006).		
Buffer and core zones	Protected area management zoning systems frequently include a highly protected core area surrounded by a buffer zone. The core area — such as a strict reserve or no-take area — protects critical habitats and species. The buffer zone may allow a broader range of uses but is intended to insulate the core from threats to its conservation status.		
Efficacy	The extent to which the program has achieved, or is expected to achieve, its objectives, taking into account their relative importance. The term is also used as a broader, aggregate measure — encompassing relevance and efficiency as well — of the overall outcome of a development intervention or an assessment.		
Efficiency	The extent to which the program has converted or is expected to convert its resources/inputs (such as funds, expertise, time, etc.) economically into results in order to achieve the maximum possible outputs, outcomes, and impacts with minimum possible inputs.		
Evaluation	The systematic and objective assessment of an ongoing to completed policy, program, or project, its design, implementation, and results. The aim is to determine the relevance and achievement of its objectives and its developmental effectiveness, efficiency, impact, and sustainability.		
Governance	The structures, functions, processes, and organizational traditions that have been put in place within the context of a program's authorizing environment to ensure that the program is run in such a way that it achieves its objectives in an effective and transparent manner. It is the framework of accountability and responsibility to users, stakeholders, and the wider community, within which organizations take decisions and lead and control their functions to achieve their objectives.		
Impacts	Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended.		
Independent evaluation	An evaluation that is carried out by entities and persons free from the control of those involved in policy making, management, or implementation of program activities. This entails organizational and behavioral independence, protection from interference, and avoidance of conflicts of interest.		
Indicator	A quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention or to help assess the performance of a development actor.		
Legitimacy	As a criterion for assessing governance and management, the way in which governmental and managerial authority is exercised in relation to those with a legitimate interest in the program — including shareholders, other stakeholders, implementers, beneficiaries, and the community at large.		
Management	The day-to-day operation of the program within the context of the strategies, policies, processes, and procedures that have been established by the governing body.		

Monitoring	The continuous assessment of progress achieved during program implementation in order to track compliance with a plan, to identify reasons for noncompliance, and to take necessary actions to improve performance. Monitoring is usually the responsibility of program management and operational staff.		
Outcomes	The achieved or likely short-term and medium-term effects of the outputs of a development intervention.		
Oversight	One of the core functions of the governing body of a program: the performance of the program management unit, appointing key personnel, approving annual budgets and business plans, and overseeing major capital expenditures.		
Public goods	Goods that produce benefits that are nonrival (many people can consume, use, or enjoy the good at the same time) and nonexcludable (it is difficult to prevent people who do not pay for the good from consuming it). If the benefits of a particular public good accrue across all or many countries, then the good is deemed a global or international public good.		
Relevance	The extent to which the objectives and design of the program are consistent with (a) the current global/regional challenges and concerns in a particular development sector and (b) the needs and priorities of beneficiary countries and groups.		
Stakeholders	The parties who are interested in or affected, either positively or negatively, by the program. Stakeholders are often referred to as "principal" and "other," or "direct" and "indirect." While other or indirect stakeholders — such as taxpayers in both donor and beneficiary countries, visitors to a beneficiary country, and other indirect beneficiaries — may have interests as well, these are not ordinarily considered in evaluations unless a principal stakeholder acts as their proxy.		
Sustainability	When the term is applied to the activities of a program, the extent to which the benefits arising from these activities are likely to continue after the activities have been completed. When the term is applied to organizations or programs themselves, the extent to which the organization or program is likely to continue its operational activities over time.		
Transboundary protected area	The International Union for Conservation of Nature defines a transboundary protected area as: "an area of land and/or sea that straddles one or more borders between states, subnational units such as provinces and regions, autonomous areas and/or areas beyond the limit of national sovereignty or jurisdiction, whose constituent parts are especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed cooperatively through legal or other effective means."		
Transparency	As a criterion for assessing governance and management, the extent to which a program's decision-making, reporting, and evaluation processes are open and freely available to the general public. This is a metaphorical extension of the meaning used in physical sciences — a "transparent" objective being one that can be seen through.		

Executive Summary

1. The Mesoamerican Biological Corridor (MBC) is a land-use planning system that spans Central America and Mexico. It is designed to promote the conservation and sustainable use of the region's natural resources. As formally agreed upon by Central American heads of state though a Joint Declaration signed in Panama in 1997, the MBC is defined as:

a territorial planning system consisting of natural protected areas under a special regime whereby core, buffer, multiple use and corridor zones are organized and consolidated to provide an array of environmental goods and products to the Central American and the global society, offering spaces for social harmonization to promote investments in the conservation and the sustainable use of natural resources, with the aim of contributing to the improvement of the quality of life of the inhabitants of the region.

- 2. As such, the MBC concept has served as a regional platform around which Central American countries and donors, including the World Bank, have convened to support the protection and sustainable development of Central America's critical habitats. This review focuses on the Bank's contribution to this effort in the form of Global Environment Facility (GEF)-financed World Bank-implemented projects in support of the consolidation of the MBC.
- 3. Donor support for investments in the corridor system started in the early 1990s with USAID's (U.S. Agency for International Development) Regional Central American Environment Program in cooperation with the Wildlife Conservation Society and the Caribbean Conservation Corporation. Additional early support was through the Program for the Consolidation of the MBC implemented by the United Nations Development Programme (UNDP). The latter program aimed to create a regional land-use planning system integrating conservation and sustainable uses of biodiversity within the framework of economic development priorities. It also aimed to establish a technical network that could help guide and coordinate investments to be compatible with conservation goals, including multilateral and bilateral assistance. These two programs supported a regional approach to conserving the corridor that set the stage for and worked in parallel with the World Bank's MBC interventions.
- 4. Both the USAID and UNDP programs have undergone external evaluations. The evaluations found that initial investments leveraged finances both for environmental management and other development priorities in the region. However, the MBC concept became a topic of intense debate during the latter part of the programs. Environmentalists favored an ecological corridor concept focused on the preservation of key species, while others saw the MBC as a tool to "green" investments in the corridor. Evaluations of the USAID programs pointed to the challenge of operationalizing a unified regional program across bilateral missions implemented by various subcontracting partners. That of the UNDP program pointed to the challenge of forging effective donor harmonization to help sustain the national institutional arrangements and MBC offices put in place by the project. The UNDP review also found that in a regional project the country-level interests might work against the regional interests, diverting support from the regional level towards the country level. There

was a strong pull at the country level to use regional funds to finance activities through subproject schemes. The diffusion of funds left regional corridor priorities largely unfulfilled.

- 5. The challenge of financing a regional public good through national level grants was a central issue faced by the World Bank's GEF-financed projects in support of the MBC. Beginning in the late 1990s, the Bank executed a series of full size GEF-financed national projects in support of the MBC. These projects were:
 - The Nicaragua Atlantic Biological Corridor Project (1997-2005)
 - The Honduras Biodiversity in Priority Areas Project (1997-2005)
 - The Panama Atlantic Mesoamerican Biological Corridor Project (1998-2005)
 - The Costa Rica Ecomarkets Project (2000-2006)
 - The Mexico Mesoamerican Biological Corridor Project (2000-2009).
- 6. The objective of these projects was to conserve the biological integrity of designated national biodiversity corridors to allow for ecological connectivity regionally. The Costa Rica project also targeted easements on privately owned lands *outside* of national parks and biological reserves, while the Mexico project had the additional objective of mainstreaming biodiversity criteria in public expenditure, and in selected local planning and development practices.

Relevance

- 7. The overall objective of the Bank's MBC projects of consolidating the MBC was highly relevant. Although the Central American land bridge is very small, it is estimated to be home to 12 percent of the world's known species. It harbors approximately 24,000 species of vascular plants and over 500 species of mammals, many of which are endemic. The countries of Central America and Mexico have demonstrated their commitment to preserving the region's biological integrity through the establishment of the Central American System of Protected Areas with over 550 protected areas. The viability of the region's protected area system is the aim of the MBC, and depends largely on the conservation of a few large areas of intact natural habitat connected by strips of sustainably managed habitat.
- 8. The MBC derives its legitimacy from the endorsement it received at the Central American Heads of State Summit in 1997. The World Bank/GEF MBC projects aimed to operationalize the joint declaration issued at this summit. The projects were also aligned with the countries' international and regional environment commitments and development priorities as set out in their country assistance strategies.
- 9. Efforts to map ecosystems and their functions and the sponsorship of regional workshops that promoted data exchange were highly relevant regional activities. But project activities were not always carried out at the most appropriate level to achieve regional conservation aims. The projects suffered from a lack of overall prioritization at the corridor level as to what was being conserved and why. Key ecosystem functions were not defined as part of project design, which lacked results frameworks with baseline data.

10. Interviews with MBC task managers indicated that while trust fund resources, like the Bank-Netherlands Partnership Fund, allowed for greater flexibility to conduct regional activities, it was difficult to get agreement on moving national GEF grant resources towards activities that would benefit the region. For the most part, the Bank's support for the MBC was delivered through projects administered at the national level. A regional project approach, on the other hand, could have included multiple country level investments while focusing on the ultimate goal of safeguarding the regional public good. This approach was pursued for the marine portion of the MBC, through the regional Mesoamerican Barrier Reef System project. The Bank opted not to pursue a regional project approach in the terrestrial portion of the MBC since the regional UNDP program was underway at the time. National MBC projects were also viewed as more feasible given the variation in individual countries' capacities — both institutional and financial — in addition to political considerations.

Effectiveness

- 11. The World Bank's MBC projects generally performed satisfactorily and had strong links with country operations on rural development and land administration. Where MBC projects have been community supported and/or officially enforced, evidence points to lower rates of habitat destruction and benefits to local communities. Bank project documentation lacks geo-referenced data to measure the direct contribution to habitat outcomes, but it allows for analysis of some specific achievements verified through field visits.
- 12. The MBC projects contributed to institutional capacity building, helping to strengthen central environment ministries and protected area departments. In Costa Rica, the project supported payment for environmental services schemes and in Mexico efforts to mainstream biodiversity into rural development strategies. In Honduras, the MBC project provided more than half of the national government's operating budget for the management of its entire protected area system during the project period. Panama's environment institutions were still under development when the Bank launched its support for the Panamanian portion of the MBC; Bank support helped the Department of Protected Areas develop monitoring and management tools. One drawback of Bank support was the concentration at the central agency level. An exception was in Nicaragua, where efforts were made to provide support to autonomous regions and thus closer to MBC beneficiaries; however, this move was made too late in the project cycle.
- 13. The Bank provided direct support to MBC beneficiaries through small grants within MBC projects that sought to provide incentives for conservation-friendly behavior in and around the corridor. Field visits revealed that the activities adopted provided additional revenue to MBC beneficiaries, but that the subprojects were too small and too dispersed to combat key threats to corridor connectivity. Moreover, the Bank was supporting a small-grants program with activities geared towards conservation in the region simultaneous with the implementation of the GEF-financed projects. The Critical Ecosystem Partnership Fund (CEPF), heavily supported by the World Bank and the GEF, was managing a US\$5.5 million small grant scheme in the MBC whose livelihood activities mirrored the livelihood activities of the Bank's projects. Yet the two programs worked for the most part separately. The Bank missed an opportunity to exploit comparative advantages: the Bank could have focused more of its attention and resources towards key intersectoral challenges that required policy

dialogue at the regional and national levels and/or enhanced economic incentives while allowing other programs it was supporting, like CEPF, to test and report on what worked in small pilot conservation projects.

- 14. Analysis of forest cover and forest cover change conducted by the US National Aeronautics and Space Administration (NASA) of a sample of MBC areas for the period 1990–2000 revealed that overall forest cover was higher and forest change was lower inside ecological corridor units than outside. While this analysis suggests that well managed corridors can prevent deforestation and contribute to habitat conservation, it was conducted too early to link it to the Bank's MBC project interventions. To further study the effects of the MBC project interventions as a whole, the analysis would need to be updated to include a second subsequent time period.
- 15. The NASA analysis suggested that intense deforestation continues in key agricultural frontier areas and threatens to disrupt corridor connectivity. The World Bank took risks working in these threatened areas. In Nicaragua, the Bank gave support to two of the most threatened forests, but annual deforestation (for closed broadleaf forests) increased. In Honduras, on the other hand, the Bank also targeted a highly threatened area to help establish the second and third-largest protected areas in the country. Deforestation in these areas stabilized below the national average rate by the close of the project.

Efficiency

- 16. Individual national projects generally performed satisfactorily against their stated objectives, but the projects as a whole fell short of achieving efficient and sustained strategic alignment at the regional level. The projects were pulled in different directions. While their aims were regional, they were implemented at the national level. Interviews with Bank MBC task managers indicated that it was easier to support regional activities with funds that were procured separately from national GEF project finance. National project finance was stretched between allocating funds towards strengthening the national administration and supporting subproject sustainable livelihood schemes at the local level. And the latter for the most part were not strategically designed to achieve regional corridor connectivity.
- 17. Counterpart support for local project implementation waxed and waned during the project cycles, in some cases causing delays. For example, a change in the administration in Mexico put the World Bank MBC project on hold for about half of the project implementation period. In Nicaragua, activities were delayed for two years due to an inability of the government to meet two important conditions of project effectiveness.

Monitoring and Evaluation

18. The World Bank implemented GEF-financed MBC projects were not designed with indicators that would have made it possible to monitor populations of indicator species and to record their welfare during project implementation. Proxies were used, usually in relation to the reduction of habitat (forest) loss or an increase in vegetative cover. However, none of the projects' results frameworks included proper baselines to measure the impact of the project in relation to these proxies.

Governance and Management

- 19. Central American countries established an intergovernmental forum of Ministers of the Environment, the *Comisión Centroamericana de Ambiente y Desarrollo* (CCAD) in 1989 with responsibility for promoting regional cooperation on the MBC, including transboundary protected area issues and the harmonization of environmental and environmentally related policy and legislation. However, the Commission played only a tangential role in relation to the World Bank projects reviewed in this report since the projects were implemented at the national level. One of the noteworthy achievements of the CCAD has been the regular inclusion of environmental and sustainable development issues in the agendas of the Summits of the Central American Presidents. The CCAD has also convened regular meetings of the national Protected Area and Forest Agency heads beginning in the 1990s that has fostered more collaboration among the MBC countries.
- 20. A regional body for environmental integration separate from the countries is an important instrument for coordination and strategic regional priority setting. However, interviews with technical experts in the Environment Ministries in MBC countries indicated that national level staff are not being given the mandate, nor the budget, to assist the CCAD, with the exception of Mexico. Nor can they incorporate regional work in their day-to-day national level planning activities. Several experts felt that CCAD's capacity to set strategic regional priorities is being diluted by the influence of the priorities of individual donor-financed projects. This was also the conclusion of an independent audit of the CCAD done in 2004. With its new focus on climate change, it is not clear, for example, how the MBC now fits within CCAD's program or project structure, its climate change work in the region, or the Central American Free Trade Agreement (DR-CAFTA).

Sustainability

- 21. The biodiversity content of the MBC system remains highly threatened in spite of strong institutional gains. Reinforced capacity of the environmental ministries and protected area departments of the MBC countries has enhanced ecosystem, fire, and disaster risk mapping and modeling. Regional institutions supported by the Bank and other donors, such as Cathalac and SERVIR, are providing strong data sharing services that hold great potential for future integration of climate change and disaster-risk management services. But these gains are tempered by a low level of intersectoral cooperation, a lack of strong influence by the CCAD to better integrate biodiversity into regional agreements, and the absence of a region-wide financing model for the MBC. Sustainable financing for the MBC was and remains a challenge for the conservation of the corridor system.
- 22. MBC countries vary in their level of commitment to the MBC. Mexico and Costa Rica are the furthest advanced and have made firm commitments to support and expand their corridor systems. Since 2008, the government of Mexico has funded core MBC project personnel in Mexico and the government of Costa Rica has established a national Biological Corridor Program, whose role is to be the focal point for (subnational) regional coordination, to develop networks of local corridors, and to leverage funding. Costa Rica has also piloted a series of payments for environmental service schemes that are helping to change attitudes about the valuation of ecosystem services. But current conservation incentives are not

keeping pace with the rising value of land in Costa Rica, Panama, and other coastal MBC areas of attraction. Innovations that have been tried and tested in Costa Rica and Mexico — in the form of payment of environmental services schemes, payments for carbon, and commercialization and marketing of sustainable natural goods — will require interventions that are creative and able to adapt to the varying country and local contexts within the corridor system as a whole.

23. As countries and donors look to further support the corridor system, they will need to continue to address the severe fragmentation and unevenness of the region's protected area system. MBC efforts have thus far been better at enhancing the management and protection of key revenue-generating protected areas and parks than connecting them. As Costa Rica has demonstrated, corridor development is local; the development of real alternative livelihoods, as opposed to the distribution of small grants during the lifetime of a project, must be supported for the MBC to be sustained over time.

Bank Performance

- 24. The World Bank has played multiple roles in its support for the consolidation of the MBC. It has directly supported the MBC by implementing a series of GEF-financed MBC projects, and used other trust funds to directly support MBC priorities. The Bank played a convening role in support of the MBC by facilitating key international donor meetings and regional workshops and by enabling relationships, for example, between NASA and Country Officials. It has also promoted a high level of intersectoral policy dialogue between key sectors in the MBC countries by blending corridor concerns with other parts of its IBRD/IDA lending portfolio in areas such as rural development and land administration.
- 25. The Bank's rural development projects in the MBC countries were designed to reduce rural poverty, thus mitigating the push factor that was leading to unsustainable movement towards and use of MBC resources, while the GEF-financed MBC projects were designed to reduce the pull factor by supporting the conservation and sustainable management of the corridor. But the push factors that continue to spur migration rural poverty, insufficient land, low returns to agricultural activities remain entrenched. The World Bank nevertheless used this integrated approach to launch a dialogue in support of greater intersectoral cooperation and more meaningful incorporation of biodiversity concerns in development planning.

Lessons

- 26. The experience with Bank-implemented projects in the MBC yields a number of lessons:
 - The desired function(s) of a corridor need to be determined and understood by key stakeholders prior to its design in order to align them with expected outcomes. All stakeholders involved in corridor design and management should have a clear unified understanding of the agreed-upon functions of the proposed corridor and the implications thereof for land administration and management, natural resource extraction, biological monitoring and reporting. The design of financing mechanisms for sustained corridor management should be an incipient part of corridor planning

requiring an upfront assessment of the ecological, biological, and societal values that the corridor is intended to support.

- Establishment of a coordinating body for regional environmental integration, separate from states' interests, is vital for implementing a biological corridor system. It is equally important to give national staff the mandate and budget resources to internalize the priorities set at the regional level. A lesson from IEG's Regional Programs Evaluation (2007) that resonates strongly with the MBC is that clear delineation and coordination of the roles of national and regional institutions has proved crucial to the implementation of program activities and the sustainability of outcomes. What has generally worked best is reliance on national institutions for execution and implementation of program interventions at the country level, and on regional institutions for supportive services that cannot be performed efficiently by national agencies, such as coordination, data gathering, technical assistance, dispute resolution, and monitoring and evaluation.
- Conservation, or corridor planning, requires intersectoral cooperation. The Bank promoted a high level of intersectoral policy dialogue between key sectors in the MBC countries by blending corridor concerns within other parts of its lending portfolio. This opened up space to talk about the key threats to sustaining the corridor system and the need to integrate policies across the rural and environment sectors to achieve results.

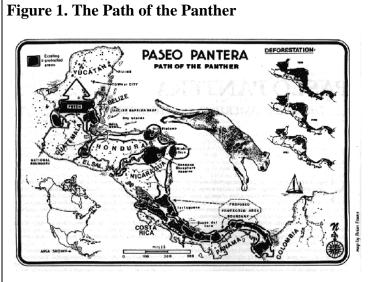
1. The Evolution of the MBC

1.1 The Mesoamerican Biological Corridor (MBC) is a vision originally conceived by conservation biologists to develop land use planning systems that would link critical habitats in Southern Mexico and Central America to ensure species survival. By the time the MBC concept was formally endorsed through a Joint Declaration at the 19th Summit of the Central American Heads of State held in Panama in 1997, it included the growing awareness that successful conservation would require respect and support for participatory decision-making, social equity, and sustainable livelihoods. The resolution issued at the conclusion of the presidential summit defined the MBC as:

a system of land use planning comprised of natural areas under special administrative regimes, nucleus zones, buffer zones of multiple uses and areas of interconnectivity, organized and consolidated, that offers various environmental goods and services to the Central American society and the rest of the world, providing social harmonization opportunities to promote investment in the conservation and sustainable use of the resources.¹

The MBC spans eight countries: Guatemala, Belize, Honduras, El Salvador, Nicaragua, Costa Rica, and Panama and the five southern states of Mexico.²

1.2 The MBC was not originally defined as a geographically delimited area. Rather, the original vision, which was developed in the late 1980s by Archie Car III, an estuarine ecologist with the Wildlife Conservation Society (WCS), sought to link the region's myriad small and fragmented patches of protected area through scores of conservation corridors that would provide passage for wildlife. Emphasis was placed on influencing land use change around protected areas, through



Source: Paseo Pantera Consortium and Brian Evans, January 2007.

the creation of buffer zones, and on private farm and ranchlands, through the creation of multiple use zones to allow for greater access and passage. Less emphasis was placed in the original plan on the creation of new strictly protected areas though it was stressed that the management and protection of existing parks needed to be greatly improved for them to serve

^{1.} Source: http://www.ccad.ws/pccbm/docs/platform.pdf.

^{2.} Mexico's five most southern states (Campeche, Chiapas, Quintana Roo, Tabasco, and Yucatan) were added to the MBC through the Tuxtla II Negotiations.

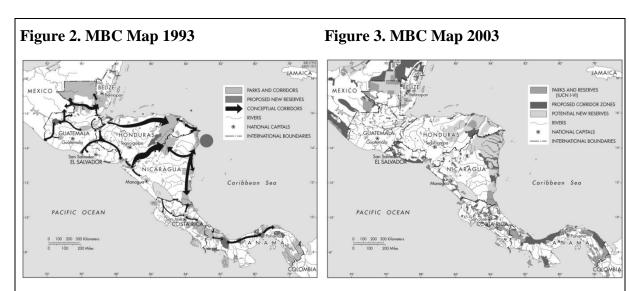
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as the "crown jewels" of the regional protected area system for the corridor scheme to be effective. The Mesoamerican region (Central America and the five southern states of Mexico) covers 768,990 km². The MBC reportedly covers 30 percent of this total land mass and includes many of the areas demarcated as part of the Central American System of Protected Areas (SICAP).³

- 1.3 Corridor connection was mapped through a route that runs mainly along the Atlantic Coast. Scientists dubbed the original route the Paseo Pantera, or Path of the Panther (Figure 1), for the tawny mountain lion that ranges from Canada to Argentina (Science, 2001). The original Paseo Pantera Conceptual Map, developed by the University of Florida and the Central American Commission on Environment and Development (CCAD) in the early 1990s, illustrates the original concept of creating seamless corridors to promote biological connectivity by linking the major parks and reserves throughout the region. With improved geographic information system (GIS) technology and resultantly better data sets, a second map was developed for the Regional Environment Program for Central America (PROARCA) funded by USAID (U.S. Agency for International Development) in collaboration with CCAD, the United Nations Development Programme (UNDP) and the Global Environment Facility (GEF). Whereas the conceptual map featured broad-swath arrows showing conceptual linkages, the project map reflects more closely the political reality of conservation planning. A review conducted in 2004 for the Royal Swedish Academy of Sciences that studied the aerial patterns and spatial dynamics of the MBC found that this change was due in part to the prominent role played by national governments and the competing agendas of the various land-user constituencies within and around the targeted areas (Zimmerer et. al, 2004). The latter map lacked precision, however — it painted all protected areas the same color — blurring the important distinction between core conservation areas of International Union for Conservation of Nature categories I to III from multiple use areas of categories IV to VI, which in Central America are often fully inhabited and rife with tenure and resource rights issues.
- 1.4 Initial investment in the MBC was provided by USAID between 1990–1995 through a pilot project named for the pathway coined by Dr. Carr: the *Paseo Pantera* project was a five year, \$4 million project implemented by the WCS and the Caribbean Conservation Corporation whose objective was to "unite protected areas throughout the length of the Central American isthmus so that necessary movement of wildlife will be achieved by means of ecological corridors."⁴
- 1.5 As *Paseo Pantera* was coming to an end, the then formally endorsed MBC concept became the basis of a regional project, developed by CCAD and supported by UNDP/GEF and German Agency for Technical Communication (GTZ). The Program for the Consolidation of the MBC was prepared in 1996 and approved in 1999 with the aim of

3. A statement made at the 2001 World Forestry Congress by the former Minister of the Environment of Guatemala reported that the MBC is estimated to cover some 321,103 km².

^{4.} Illueca (1997). See also figure on page 242. A \$1.6 million matching grant was provided by the WCS and the Caribbean Conservation Corporation to develop, in collaboration with governments and NGOs, pilot management plans for key existing and proposed protected areas.



Source: Maps produced by the Map Design Unit, GSDPG. Based on: **Figure 2** - Paseo Pantera Consortium, 1993. Map of the Corridor Network in Central America. University of Florida and CCAD, Gainesville. http://www.afn.org/~wcsfl/cormap.htm; **Figure 3** - World Resources Institute (WRI), United Nations Environment Programme (UNEP), United Nations Development Programme (UNDP), and World Bank 2003. World Resources 2002–2004: Decisions for the Earth: Balance, Voice, and Power. Washington, DC.

creating a regional land-use planning system integrating conservation and sustainable uses of biodiversity within the framework of economic development priorities. As part of a preparatory phase, each country prepared, with WCS support, national-level technical reports to guide the corridor planning effort. The national technical reports were produced, but they varied in terms of their mapping and planning methodologies, making it difficult to use the maps in an integrated way. The regional program supported the development and staffing of a regional office in Managua and National Technical Offices to promote regional coordination, and a regional biodiversity monitoring and environmental information system. The objective was to establish a technical network that could help guide and coordinate investments, including World Bank and other donor investments in the region, in a manner that was compatible with the conservation aims of the MBC.

1.6 Both projects, the *Paseo Pantera* and the Program for the Consolidation of the MBC, were designed as regional programs that placed an emphasis on regional coordination. The World Bank supported this regional coordination effort by participating in a steering committee under the aegis of the UNDP program. However, the Bank's direct role in the MBC in the mid-to-late 1990s, for the most part, differed from the aforementioned programs since the Bank implemented mainly national projects all of which were designed to support the consolidation of the regional corridor. The Bank also implemented a series of grants financed by the Bank-Netherlands Partnership Program (BNPP) that were regional in scope. BNPP financed activities implemented by the Bank included data collection and ecosystem mapping, regional workshops, GIS training and the facilitation of a harmonized platform for data sharing and policy-making that is still in operation today.

Putting the MBC in Context

1.7 Regional cooperation for enhanced environmental management in Latin American was only made possible by the end of the armed conflicts that plagued the region for decades

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prior. In 1989, the Presidents of Central America established the Central American Commission on Environment and Development (*Comisión Centroamericana de Ambiente y Desarrollo*, CCAD) and signed the Central American Convention for the Protection of the Environment. The environment was seen as a soft issue around which the nations of Central America could coalesce. The agreement would catalyze cooperation in other spheres: five years after the CCAD was created Central American countries formed the Central American Alliance for Sustainable Development. The Alliance would serve as a platform for economic cooperation and development, as well as for environmental protection and the conservation of natural resources.

Governance and Management

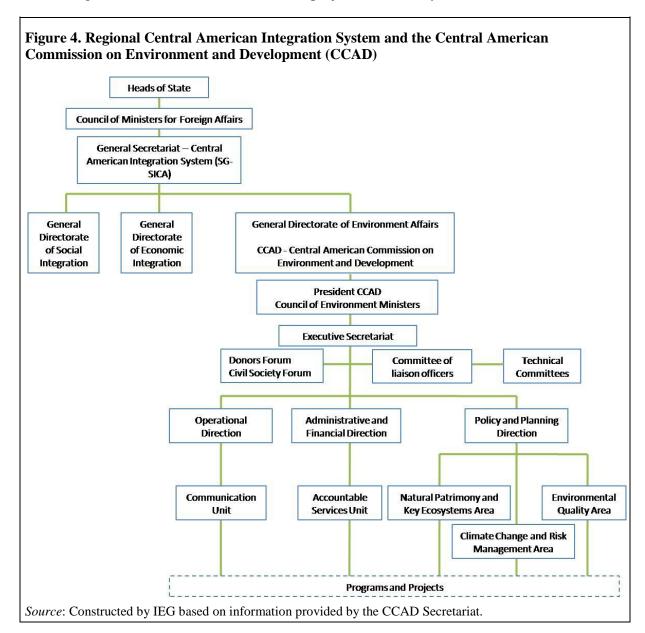
- 1.8 The CCAD was established in December 1989 at the President's Summit held in San Isidro de Coronado following the signing of the Esquipulas II Peace Accords. The Constitutional Convention signed by Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua established the CCAD as a regional inter-governmental mechanism to promote cooperation and coordination of environmental policies and actions, protect the environment, manage and conserve natural resources, and control pollution by member countries. Belize and Panama joined in 1991. Mexico holds observer status and the Dominican Republic was awarded associate status in 2005. The CCAD is a sub-body of the Regional Central American Integration System (SICA) that formally came into operation on February 1, 1993.
- 1.9 The CCAD is a coordination body responsible for overseeing the harmonization of environmentally related policy and legislation and as such is responsible for the coordination of all MBC activities in the region. It is governed by a Council of Environment Ministers representing all member nations and presided over by a rotating presidency. The Council and the President are assisted by an Executive Secretariat and ten technical committees such as the Biodiversity Technical Committee and the Central American Council of Protected Areas committee. CCAD's mandate and guidelines are elaborated in the Environmental Plan for the Central American Region, or PARCA III (2010–2014).
- 1.10 CCAD's Executive Secretary, currently composed of 28 staff, is responsible for implementing the decisions made by the Council of Ministers and for planning, administering and monitoring projects. It is also expected to negotiate for support from international donors.

Financial Resources of the CCAD

1.11 The CCAD is maintained through (1) annual contributions of US\$20,000 from each member country; (2) core institutional strengthening projects funded by the Danish International Development Agency and the government of Spain; and (3) in-kind contributions from the General Secretary of SICA that cover the overhead costs of rent and

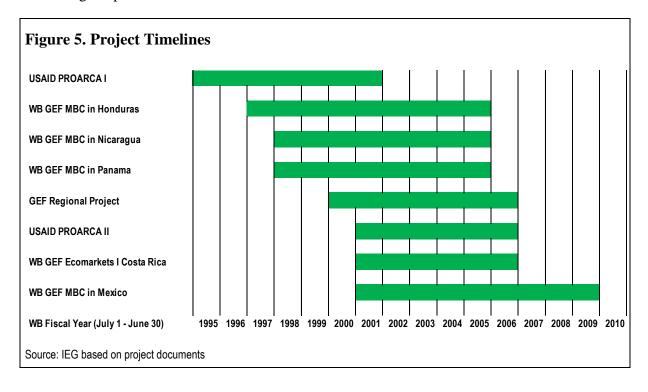
^{5.} CCAD has several technical committees including: Committee of Liaison Officers; Protected Areas; Biodiversity; Forests; Climatic Change; Dangerous Waste; Environmental Impact Evaluation; Gender; Environmental Management; Environmental Legislation; Desertification and Drought; Montreal Protocol; System of Environmental Information.

services for CCAD. The core operating budget, or the annual administrative expenses of the CCAD, is approximately US\$500,000.00 the bulk of which is used for salaries. CCAD is also currently managing twenty-three projects funded by 19 different donor agencies including the World Bank against which CCAD charges an administrative fee ranging from 5–15 percent, depending on their role. CCAD is the implementing agent for half of its project portfolio. It co-executes another third and is trustee for the remaining part of the portfolio. According to the CCAD, 8 of the 23 current projects are directly related to the MBC.



2. Evaluation of Regional MBC Programs

2.1 World Bank support for the consolidation of the MBC occurred alongside other regional investment and technical assistance programs that laid the foundation for the development of the concept and management of the regional corridor. Two programs — the USAID funded Regional Central American Environment Program or PROARCA I and II (1995–2006) and the UNDP/United Nations Environment Programme (UNEP) executed MBC Regional Program financed by GEF and GTZ (2000–2006) — have undergone independent external evaluations. This section summarizes the evaluation findings of the PROARCA and UN Programs. The World Bank projects financed by GEF (in Mexico, Honduras, Nicaragua, and Panama) have also been evaluated by the World Bank's Independent Evaluation Group (IEG); the performance of these projects is reviewed in the following chapter.



The Evaluation of the Central America Regional Environmental Program or PROARCA I and II (1995–2001; 2001–2006)

2.2 USAID's regional strategy for Central America in the 1990s promoted improved regional stewardship of key natural resources, with a focus on consolidating the Central American Protected Area System, especially the Mesoamerican Biological Corridor. The work was carried out through a series of regional programs: (1) the Regional Natural Resource Management Project, or RENARM, from 1990 to 1995; (2) the Regional Central

American Environment Program, or PROARCA I, from 1996 to 2000; and (3) the continuation of PROARCA, or PROARCA II, from 2001 to 2006.⁶

- 2.3 PROARCA's strategic objective was to achieve improved protection and management of the MBC through four intermediate strategies:
 - Promote the sustainable management of protected areas in key sites that are a part of the MBC
 - Promote regionally environmentally sound products and services
 - Enhance compliance with harmonized environmental standards and regulations
 - Foster the increased use of less-polluting technologies.
- 2.4 The evaluation of PROARCA I was conducted by the Associates in Rural Development, Inc., in January 2000. It was contracted by USAID's Regional Contracts Office in Guatemala. A Mid-term review was conducted of PROARCA II by Development Alternatives Inc. in April 2004.
- 2.5 One of the major achievements of the PROARCA programs was the strengthening of the CCAD. By the end of the first phase of PROARCA, CCAD was recognized by regional authorities as the unit responsible for organizing regional environmental protection and sustainable resource management. But the external evaluation found that CCAD could achieve greater legitimacy if it would "open its participatory mechanisms for civil society beyond its Council of Ministers and include them when preparing its strategic plan, consultations, coordination and implementation of activities." Regarding its sustainability, the evaluation recommended that both CCAD and its Executive Secretariat have access to long-term or core financing that would allow them to function as an independent institution. The evaluation suggested this could be achieved by setting up a trust fund with fixed or stepped annual contributions; a patrimony fund; or taxing transboundary and/or international commerce in the region. The evaluation advised that the CCAD *not* adopt a mechanism by which it would depend on a percentage or fees charged to projects.
- 2.6 A central theme in the evaluations of both phases of PROARCA was the role of a regional program, how to operationalize it to achieve regional impacts, and how to define regionalism. The evaluation of the first phase of PROACRA found that the project's activities were too thematically and geographically dispersed due in part to the lack of consensus on the definition of regionality and how to operationalize it between the regional program team, national offices, and subcontracting partners. The evaluation recommended that USAID's bilateral missions analyze opportunities to align their national objectives with the regional concept. Technical assistance could be prioritized around a rational number of strategically selected protected areas while searching for mechanisms that would allow for local capitalization. This recommendation was made in part to inform the design of the second phase

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^{6. &}quot;Following this formal declaration in 1997, and with the Central American-United States Joint Accord (CONCAUSA) agreement signed in 1994, the United States pledged that all of its environmental aid would be channeled to the development and consolidation of the MBC. This pledge formed the basis of USAID's PROARCA program, which was created as the counterpart support to CCAD/SICA, with an initial surge of \$10 million USD over the first phase (1997-2001)" (Holland 2010).

of PROARCA so that activities would be concentrated within four to six transboundary subregions, including the Gulf of Honduras, Gulf of Fonseca and Gandoca and Bocas del Toro.

- 2.7 Notwithstanding this recommendation, the second phase of PROARCA was designed with an expanded rather than contracted definition of regionalism broadening the project scope to include: geographic regionalism (when an ecosystem, protected area or a unit of management straddles national borders), ecological regionalism (when ecosystems, or components thereof, are contained within individual countries but provide ecological services of crucial regional importance), and thematic regionalism (when environmental management issues repeat themselves throughout the region). The external mid-term of PROARCA II found that the expanded definition perpetuated the problem observed in the earlier evaluation: activities that were too dispersed and lacked focus. Overall, there was an inability to achieve synergy between the priorities of the USAID bilateral missions particularly over time as priorities shifted and the regional program goals.
- 2.8 The evaluation of PROARCA's first phase, implemented from 1995 to 2001, had found that there was very little cooperation between the PROARCA program and the "scores of national and regional projects implementing activities under similar objectives and with the same governmental and non-governmental executors..." including the Bank's GEF financed MBC projects. However, the review of PROARCA II found that PROARCA's coordinators regularly met with representatives of the UNDP/GEF/GTZ Regional MBC Program with which the World Bank cooperated vis-à-vis its steering committee.
- 2.9 PROARCA evaluations do not report on the conservation impact of the program as a whole. This is mainly due to the fact that the projects lacked a results framework that included biophysical, social, or economic indicators. The midterm review of the second phase of PROARCA found that the indicators associated with measuring the effectiveness of protected area management in the MBC were limited to: (1) reporting on the legal status of the PAs, the drafting of co-management agreements and/or community and stakeholder participation; and (2) institutional strengthening and personnel training, the number of people who attended workshops, strategic and annual planning documents, etc.
- 2.10 Key issues that were pointed to by the evaluations going forward were land tenure disputes and the need for dispute mechanisms to resolve conflicts as these arose when protected areas were delimited. Financial sustainability was also flagged by the evaluations as a risk going forward, while the evaluations noted that environmental services could be further exploited to generate much needed revenues such as that which has occurred through the payments for environmental services programs in Costa Rica.

The Evaluation of the UNDP/UNEP/GTZ Regional Program for the Consolidation of the MBC (2000–2006)

2.11 The GEF financed UNDP/UNEP/GTZ Regional MBC Program was a technical assistance program that aimed to strengthen national and regional capacity and create an institutional framework and structure to guide future investments in the MBC.

- The program was evaluated in 2007 by a team of two external consultants one from Latin America and one from the United States — with sound technical expertise and experience in both biodiversity conservation and evaluation. The evaluation was commissioned by the Regional UNDP Office (then located in Nicaragua) in order to fulfill GEF evaluation requirements. The evaluation covered the entire implementation period (2000–2006), with emphasis on the second half of the program. The quality of the commissioning of the evaluation was sound. It was conducted through a competitive bidding process and the evaluators were chosen individually for their regional and thematic experience. The evaluation was funded at a level of US\$40,000–50,000, excluding costs for field visits that were funded separately and took approximately two months to complete. The terms of reference (TOR) for the external evaluation was drafted by the UNDP regional office, in line with GEF evaluation criteria. Interviews with the evaluators indicated that the TOR were considered fair and feasible, however, the evaluation team did not have discretion over the planning of the field mission. The agenda for the field visit was developed by the UNDP regional office. Field visits were limited to country member governments, Ministries of Environment, and MBC offices. Other critical Ministries, such as Agriculture, Transport, and Land were not included in the field mission. Subproject sites were also not visited despite the fact that such visits were included in the TOR. An interview with one of the evaluators indicated that a decision was taken by the evaluation team to forgo the site visits in lieu of meeting with more groups of persons responsible for the design and implementation of the program. The draft evaluation was presented by the evaluators to UNDP Nicaragua, the regional project implementation unit based in Nicaragua, and members of the CCAD present at the meeting. Comments were submitted by members present at the presentation, the draft was revised by the evaluators in the light of comments received and a final version was submitted to the UNDP regional office.
- 2.13 The evaluation found that the MBC was and remains a strong concept that has leveraged a high level of finance in the region. However, at program close, the MBC concept was a topic of intense debate between environmentalists who favored an ecological corridor concept focused on key species preservation and others that saw the MBC as a tool to green investments, such as roads, in the corridor. However, despite the fact that the program was designed to establish a platform for donor coordination so that national projects could be designed within a regional strategy, the program fell short of its aims to forge effective donor harmonization in the corridor. Timing was an issue. Many of the World Bank GEF financed projects, for example, designed directly to support the consolidation of the MBC were launched just prior to the UNDP program.
- 2.14 A main lesson that arose from the evaluation was that, in a regional project, country level interests may work against the regional good, pulling support away from regional interests towards the country level. In this case, resources were not only pulled away from the center by the participating countries, but were further devolved due to political pressures to the local level so that original strategic interests of the program were ultimately diffused. The original concept of using project funds to solely support a regional strategy and planning level tool was pulled apart mid-way through the project. The evaluation found that there was a strong will at the country level to use the regional funds to finance activities on the ground to show results. Although not planned, each country involved in implementing the project vied for funding and eventually were allocated US\$3 million each; these funds were then used to implement small grants on the ground. These activities were not strategic from the

point of view of establishing regional corridor priorities. While they were environmental in nature they did not necessarily promote corridor connection in the ecological or biological sense. Interviews with the evaluation team raised a relevant lesson in relation to the tension that existed between the regional and national interests that arose in this specific program: based on their experience in Latin America, the evaluators asserted that even national programs must contend with tension between national, municipal, and local level interests so that the regional program simply added another layer. While the regional program was successful in developing and promoting a concept with a regional dimension, more incentives were necessary to promote regional priorities, for example, by introducing a region wide payments for environmental services scheme that could have awarded conservation in high priority corridor areas.

2.15 The evaluation found that the institutional arrangement was highly efficient but ultimately unsustainable. The program was overseen by the regional office in Panama but managed by the National Office in Nicaragua that conducted the day-to-day contracting and coordination of the program. The project supported the establishment of MBC country offices and employed approximately three staff per country. The evaluation found that the establishment of country offices that were independent and located physically apart from the political entities was an effective institutional arrangement. (The consultants were chosen by the Ministries of Environment and although independent of the governments were expected to liaise with and influence government policy and operations in the region.) However, the arrangement did not allow for a sustainable platform through which other donors, including the World Bank, could continue to support institutionally after project end.

3. The Effectiveness of World Bank/GEF Projects Designed to Consolidate the MBC

3.1 This chapter provides an assessment of the relevance, efficacy, and efficiency of the World Bank's support for the consolidation of the Mesoamerican Biological Corridor and on the effectiveness of the governance and management of the CCAD. It specifically reports on the achievements of the World Bank-implemented GEF-financed projects in Nicaragua, Honduras, Panama, Costa Rica and Mexico whose objectives included a reference to a consolidation of the corridor system. It is based on findings from IEG reviews, both desk and field, that found that overall, the projects performed satisfactorily.

Relevance

INTERNATIONAL/REGIONAL CONSENSUS

3.2 The MBC was formally endorsed through a Joint Declaration at the 19th Summit of the Central American Heads of State held in Panama in 1997. It supports the implementation of the Convention on Biological Diversity to which all MBC countries are signatories. The Central American land bridge covers only 2 percent of the Earth's land surface but is estimated to be home to 12 percent of the world's known species (Programa Estado de la Nación 2008). It harbors approximately 24,000 species of vascular plants of which roughly 21 percent are endemic. And of its 521 species of mammals, 40 percent are endemic (CCAD-

UNDP/GEF, 2002). Mexico, for example, is classified as one of the world's top five megadiverse countries. The Atlantic slope of Nicaragua houses the largest remaining area of relatively pristine forest in all of Central America and protects such regionally endangered species as the tapir, the harpy eagle, and the jaguar.

- 3.3 The MBC also supports the implementation of key regional environmental agreements such as The Convention for the Conservation of Biodiversity and Protection of Priority Wildlife Areas in Central America signed on June 5, 1992, and the Regional Convention for the Management and Conservation of Natural Forest Ecosystems and the Development of Forest Plantations signed in 1993. The biodiversity convention established the Central American Council on Protected Areas, assigning priority to eleven border protected areas. The forest convention promoted the sustainable development of forest resources through participatory national and regional reforestation, plantation and agroforestry programs that help to alleviate poverty.
- 3.4 The corridor concept also supports the implementation of key bi-national environmental agreements such as the International System of Protected Areas for Peace signed between Costa Rica and Nicaragua in 1990 to safeguard the biological integrity of the reserves and wildlife refuges nestled in between them.

ALIGNMENT WITH BENEFICIARY NEEDS, PRIORITIES, AND STRATEGIES

- 3.5 A review of the Country Assistance Strategies of Belize, Costa Rica, Honduras, Mexico, Nicaragua, and Panama between the period 1996 and present reveals strong support for environmental protection overall, with specific reference to the conservation of the MBC in all cases. However, implementation approaches have differed.
 - Belize has placed a premium on tourism expansion by safeguarding its Indigenous Mayan culture.
 - Costa Rica has placed a great deal of emphasis on enhancing the financial sustainability and value added of the country's protected area system (both public and private). As such, the Bank supported the first national environmental service payment scheme in the world in Costa Rica, through the Ecomarkets Project. The Ecomarkets Project helped strengthen the capacity of Costa Rica's National Forestry Financing Fund to manage the Payment of Environmental Services (PES) Program. In a second phase, it has also helped improve the efficiency of the program by supporting the introduction of spatial targeting, thus ensuring that enrolled areas were located in priority areas within the MBC and other priority conservation areas.
 - Honduras has expressed consistent support for environmental protection across all of its Country Assistance Strategies (CASs) over the past decade and between 1996 and 2003 it placed a high priority on contributing to the conservation and livelihood aims of the MBC. After the Bank implemented MBC project closed, Honduras, alongside Nicaragua, has engaged in a transnational biodiversity conservation program called El Corazon that is situated within the Corridor. The El Corazon was under implementation at the time that the present review was written.

- Mexico has emphasized the necessity of seeking opportunities to achieve global
 environmental benefits through its poverty reduction and growth agenda, for example,
 by generating biodiversity co-benefits through its sustainable forest management
 programs. Mexico has placed greater emphasis on mainstreaming biodiversity in its
 investment portfolio than through strict conservation. "Unless the implicit short-term
 trade-offs between social and environmental protection are addressed, environmental
 programs are likely to fail" (Mexico CAS 2002a).
- Nicaragua has sought Bank support to help it reform its legal and regulatory
 framework for environmental protection with an emphasis on the clarification of
 property rights of indigenous persons living along the Atlantic Coastal portion of the
 MBC.
- Panama has placed a high level of emphasis on property rights. At the end of the last decade, it recognized that the lack of property rights, extreme concentration of land and rural poverty had fostered indiscriminate mining of soils, deforestation and watershed degradation, resulting in intensive migration from the Pacific to the relatively land-rich Atlantic and Darien regions where the Panamanian portion of the MBC resides. As such it sought Bank support, through both the MBC project and the Bank implemented land administration program, to institute a nationwide system of property rights (including demarcation of the indigenous comarcas).

SUBSIDIARITY

- 3.6 Subsidiarity is concerned with whether the activities of a program are being carried out at the most appropriate level global, regional, national, or local in terms of efficiency and responsiveness to the needs of beneficiaries. Just like the MBC programs supported by USAID and the UNDP, the World Bank projects were pulled in different directions. Their aim was regional and they were supported by a regional coordinating body, the CCAD. However, the World Bank projects were implemented at the national level and financed by GEF grants and national counterpart support to support the conservation of the national portions of the regional corridor. As such, the project activities were heavily focused on developing national institutional capacity and shoring up the protection of key protected areas, only some of which were transboundary.
- 3.7 The MBC tends to run along the Atlantic side of the Isthmus whereas Central American capital cities tend to be located either on the Pacific side or inland. Simply put, the finance tended to get stuck both in the capitals and their central agencies. To complicate matters, many of the MBC beneficiaries live in remote areas that are hard or costly to reach. Although projects like the Nicaragua MBC project moved support to its autonomously governed regions that abut the MBC later on its cycle, beneficiaries were still a layer removed from core support. It was for this reason to engage the beneficiaries in the sustainable conservation and use of the corridor that subprojects were built into the design of the projects.
- 3.8 But the subprojects moved funding further away from regional activities to the local level. While enhanced beneficiary participation is necessary to ensure the sustainability of

the conservation practices supported through the program, the subprojects acted more like livelihood programs than pilots which could facilitate demonstration effects in the targeted areas. Many of the subprojects lacked marketing schemes which ultimately contributed to some of the projects not being sustainable after project close. And evidence is lacking overall that the benefits derived from the subproject activities have contributed to a collective shift from unsustainable to sustainable conservation-oriented behaviors over time — where these behaviors did not exist before.

- 3.9 The World Bank was supporting a small-grants program with activities geared towards conservation in the region simultaneous with the implementation of the GEF-financed projects. The Critical Ecosystem Partnership Fund (CEPF), heavily supported by the World Bank and the GEF, was managing a US\$5.5 million small grant scheme in the MBC whose livelihood activities mirrored the livelihood activities of the Bank's projects. Yet the two programs worked for the most part separately. The Bank missed an opportunity to exploit comparative advantages: the Bank could have focused more of its attention and resources towards key intersectoral challenges that required policy dialogue at the regional and national levels and/or enhanced economic incentives while allowing other programs it was supporting, like CEPF, to test and report on what worked in small pilot conservation projects. The Bank was highly successful, for example, in working with the government of Nicaragua to expedite the passage of the Indigenous Law No. 445, but it was the CEPF program that worked with specific indigenous groups, like the Rama, to strengthen the demarcation and protection of key remaining forest zones.
- 3.10 The Bank used trust fund resources, specifically the Bank-Netherlands Partnership Fund (BNPPP) resources, to finance region-wide activities, such as trainings and workshops. Interviews with MBC task managers indicated that the trust funds allowed for greater flexibility to conduct regional activities, whereas it was difficult to get agreement on moving national GEF grant resources away from a single country towards activities that would benefit the region.
- 3.11 For the most part, the Bank's support for the MBC was delivered through projects administered at the national level. A regional project approach, on the other hand, could have included multiple country-level investments while focusing on the ultimate goal of safeguarding the regional public good. This approach was pursued for the marine portion of the MBC through the regional Mesoamerican Barrier Reef System project. The Bank opted not to pursue a regional project approach in the terrestrial portion of the MBC since the regional UNDP program was underway at the time. National MBC projects were also viewed as more feasible given the variation in individual countries' capacities both institutional and financial in addition to political considerations.

Efficacy of World Bank-Implemented Activities in the MBC

SPATIAL ANALYSIS AND CORRIDOR CONNECTIVITY

3.12 Between 1970 and 1990 Mesoamerica had some of the highest deforestation rates in the world, but since the late 1980s, regional deforestation rates have declined and the patterns of changes in forest cover have become more diverse. These trends are due in part to the fact

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that much of the remaining intact forest land in Central America has been placed under some form of protection or is located within indigenous territories (Kaimowitz 2008).⁷ Protected areas were placed where large tracts of intact forest remained. Between 1990 and 1996, 191 protected areas were declared in the region that today boasts 669 legally declared protected areas in total (*Programa Estado de la Nación* 2008).

- 3.13 Analysis of forest cover and forest cover change conducted by NASA of a sample of MBC areas (approximately 30 percent) for the period 1990–2000 revealed that overall forest cover was higher and forest change is lower inside ecological corridor units than outside (Steven A. Sader; Thomas Sever, and Susan Saatchi, June 2001). While this data provides evidence that well managed corridors can prevent deforestation and contribute to habitat conservation (although the effect of forest degradation a factor that highly contributes to habitat degradation- was not analyzed), it was conducted too early to link it to the Bank's MBC project interventions. To further study the effects of the MBC project interventions as a whole, the analysis would need to be updated to include a second subsequent time period. The change analysis conducted was also not a "wall-to-wall" mapping exercise: it was done via sampling and hence only captures 25 percent of the region and approximately 30 percent of MBC areas. ⁸ The first comprehensive regional map of land use change for the region is due to be released by Cathalac by the end of December 2010.
- 3.14 While NASA data suggests that overall forest cover is higher and forest change is lower inside the corridor units than outside, intense deforestation continues in key agricultural frontier areas that could potentially threaten to disrupt corridor connectivity. The Bank chose to work in two of the most threatened forest reserves (both located in the corridor) in Nicaragua. It is not surprising then that the key indicator of slowing deforestation rates in these two selected project areas, the Cerro Silva and the Wawashan Reserves, was not achieved. Data available showed that annual deforestation rates for closed broadleaf forests in the two periods 1989–1999 and 2000–2003 increased from 3.7 to 5.9 percent in Cerro Silva and from 1.7 to 3.9 percent in Wawashan. IEG visited the Cerro Sylva Reserve two years after project close (Box 1). The project was simply not equipped to provide an adequate level of incentives and/or payments to compensate for competing uses of the land there.

7. See Kaimowitz (2008). Kaimowitz cites several factors additional to the increasing percentage of protected areas that may have contributed to the decline, including that most remaining forest is in places less suitable for agriculture with steep slopes, poor soils, and/or high rainfall; governments reduced their support for agricultural colonization and cattle ranching; extensive low productivity cattle ranching has become less profitable in many places; rapid out migration from rural areas to cities and to the United States and the growth of off-farm rural employment; and that governments have increased their support for reforestation, conservation, and forest management on private and community-owned lands. Yet Kaimowitz notes that due to the paucity of accurate land use data and a drop-off in research about forest cover change and rural issues generally, little is known about the *relative* importance of these factors.

^{8.} The first and second year of the project focused on the development of regional satellite databases (JERS-IC, MODIS, and Landsat TM), training of Central American cooperators and forest cover and change analysis. Four regional remote sensing training courses were conducted in three countries including participants from all seven Central American countries and Mexico. In year 3, regional forest change assessment in reference to Mesoamerican Biological Corridor was completed and land cover maps (from Landsat TM) were developed for seven Landsat scenes and accuracy assessed.

Box 1. Field Trip to the Cerro Silva Reserve and Its Nuclear Zone, La Boca and the communities of San Miguelito, RAAS

In Nicaragua, the IEG team coordinated a site visit with the local program manager of Cosecha Sostenible (Sustainable Harvest) to meet with beneficiaries living in and around the Cerro Silva Reserve. IEG also visited Bluefields Indian and Caribbean University, a subproject entity that received assistance from the MBC project to provide technical assistance around the Reserve (distribution of seeds, introduction of cacao plantations and cacao drying material, and technical assistance for crop diversification programs). Two years after project close, IEG witnessed first-hand the severe degradation of the reserve. The incentives that had been given to the community members were simply not enough to change behavior, especially since many of the decisions regarding land use in the reserve were out of the hands of the community members that received support from the small grants program. IEG visited community members in San Miguelito that had received support to install sustainable cacao plantations. However, two years after project close, the community members were struggling to maintain the plantations that were infected with frosty pod (moniliasis) disease. Moreover, there did not appear to be a viable marketing strategy for the cacao that took into account the remoteness of the villages and the high cost of transport; beneficiaries indicated that they were selling it on the local market. Central America's cocoa output is estimated to have risen 40 percent between 2003 and 2006 (over the last three years of the Bank's projects) to between 4,000 and 5,000 tonnes in the 2006/2007 harvest (CATIE 2008).

- In Panama, the Bank also engaged in areas highly threatened by the advance of the agricultural frontier, mineral exploration, and spontaneous colonization, in the Darien, Colon, Chiriqui and Bocas del Toro provinces. The primary source of data for deforestation rates in the Panamanian portion of the MBC is derived from mapping and surveillance exercises supported by the project. The National Environmental Authority (Autoridad Nacional del Ambiente, or ANAM) produced Panama's first vegetation and ecosystem maps in 2000 (scale 1:250,000) using UNESCO categories and data from satellite imagery (1991, 1996–1999) and updated these maps to measure the project's impact in the MBC in 2004 on the basis of 2000–2003 data and compared with a historical map (1989–1992). It was found that over the ten-year period, a total of 192,700 hectares of natural forest were transformed into nonforest productive systems, with the most notable changes in the central region of the Ngobe-Bugle comarca. The results of a related analysis of forest cover using ITTO (International Tropical Timber Organization) categories found for 1998 a deforestation rate of 50,000 hectares per year for the entire country. A forest cover analysis published in 2004 (based on 2000) cartographic data) indicates a gross rate of deforestation of 47,158 hectares per year and a net rate of 41,321 hectares. Although this indicates an overall slight decrease in the deforestation rate for the entire country, the rate increased for Ngöbe-Buglé comarca over the project period.
- 3.16 In Honduras, the Bank also targeted the highly threatened area of eastern Olancho. With Bank support, the second and third-largest protected areas in the country were established in this area: the Patuca National Park and Tawakha Indigenous Reserve. Deforestation rates in the Patuca, Tawahka, and Rus-Rus Reserves have stabilized at 0.81 percent per annum, below the national average of 1.21 percent (World Bank 2005a). In other protected areas, the Bank supported the development of management plans covering 793,290 hectares of protected area, corresponding to 25 percent of the total protected area system;

however, the financing for many of the activities identified in plans has not materialized. Most physical investment, including the construction of visitor and knowledge centers, was concentrated in three priority areas along the Atlantic Coast (Pico Bonito, Cuero y Salado, and Jeanette Kawas); investments that were planned for the La Mosquitia, including the demarcation of protected areas, were removed from the project at the behest of indigenous groups that requested greater review and study of their tenure rights. Meanwhile, an IEG site visit to Pico Bonito revealed that the visitor center there had collapsed during a tropical storm due to a failure during the project to complete the physical works.

MAPPING

3.17 World Bank support helped to finance an Ecosystems Map of the MBC. Conducted under the auspices of the CCAD between 1999 and 2001, the Bank in collaboration with governmental and nongovernmental environmental institutions of the CCAD member countries completed a new ecosystems map of the region. The entire initiative was valued at roughly US\$2 million and was supported in part by BNPP and the World Bank implemented GEF financed projects in the MBC. The primary objective of the mapping project was to map, and describe the distribution of ecosystems in Central America, critical to establishing a modern baseline of the status, and location of the region's biodiversity. In each country, a national team of biologists and supporting specialists worked over a two-year period to map their ecosystems. A historical analysis was undertaken of vegetative cover changes and of the biophysical characteristics of the entire country. The lead biologists of the national teams participated in a process of synchronized production, and harmonization of production methodologies under the overall direction of the Bank.

MONITORING

3.18 In Honduras, the Bank supported the development of a Monitoring System that involved some 32 organizations that covered some 2.1 million hectares of the country's protected area system. A computerized database with approximately 10,000 entries on protected areas was built, but according to interviews with staff from the Department of Protected Areas and Wildlife, extra funding was required to analyze the data. The State Forestry Administration used some funds from the Bank's forest projects to analyze some of the data relevant for forest management. Roughly 100 resources wardens were trained in biological monitoring activities; however, with only a few exceptions, their contracts were not renewed at the end of the project, effectively reducing or eliminating field monitoring capacity. As described in project documentation and confirmed in visits to the field, the project was not able to consolidate the monitoring component.

COMMUNICATION STRATEGY

3.19 The communication strategy supported workshops, radio programs, brochures, postures and publications. There was a general consensus among persons interviewed living in and around the protected areas supported by the World Bank's MBC projects that the communication strategy was not very effective in reaching the persons living in the corridor (see also Annex D). The MBC branding overall was more effective in countries where tourism is relatively more important — such as in Costa Rica and Belize — and where the

association with the MBC could provide an economic incentive. In Mexico, for example, coffee producers in the Sierras are producing organic certified coffee, they are applying for AOC recognition, and they have used the MBC label in their marketing.

INSTITUTIONAL STRENGTHENING

- 3.20 The World Bank supported the strengthening of the central environment ministries and protected area agencies in the MBC countries and, where relevant, helped to strengthen subnational decentralized environmental capacity, for example, in the Autonomous Regional Governments in Nicaragua. In Nicaragua, the Bank supported the development of multistakeholder Regional Planning Committees in both Autonomous Regions. This assistance enabled the inclusion of biological corridors as planning tools in the regional policy discussions. It also increased the capacity of regional governments to discuss and negotiate directly with external donors on development and environmental matters relevant to the region and the different groups therein. In Honduras, the Bank's MBC project constituted more than half of the national government's operational budget for the management of the entire protected area system (SINAPH). This helped to restructure and consolidate SINAPH and supported strategic planning and national strategy formulation. The project provided support for the National Ecotourism Strategy and the 2005–2010 Institutional Plan of the Honduran Ecologist Network for Sustainable Development. The Bank also helped to put in place a co-management policy that allowed for the decentralization of protected area management under transparent operational guidelines. However, issues such as monitoring and capital for operating costs as well as their role in the community's organizational system have yet to be resolved.
- Panama's environment institutions were still under development when the Bank launched its support for the Panamanian portion of the MBC. Panama's General Environmental Law 41 that created the National Environmental Authority, or ANAM, was adopted in 1998 and its protected areas system was only legally created in 1994. The MBC project in Panama helped to develop the technical guidelines for preparing management plans for the National Protected Areas System (Sistema Nacional de Areas Protegidas, or SINAP). Thirty-eight staff members of the National Protected Areas and Wildlife Service received training in managing protected areas and conserving biological diversity. In addition, 175 park guards and volunteers were trained, including in areas such as fighting forest fires and handling conflicts. Key outputs of the project included the preparation of management plans for four priority protected areas (International Park La Amistad, Wetlands of International Importance San San Pond Sak, National Park Volcan Baru, and Protector Forest Palo Seco). However, some activities associated with the implementation of the management plans were either delayed or eliminated. And although a biodiversity monitoring system was designed, the equipment (hardware and software) was purchased, and ANAM staff were trained, this did not become operational during the project's lifetime.

MAINSTREAMING BIODIVERSITY CONCERNS ACROSS PUBLIC EXPENDITURES

3.22 Of the projects included in this review, only the Mexico MBC project placed a high level of emphasis on mainstreaming biodiversity criteria in public expenditures initiatives relevant to the Biological Corridor. The project was effective in integrating biodiversity

criteria in the operational rules of the Ministry of Agriculture, the single largest source of public spending in the five corridor states. The program also provided parallel finance through its subproject program for several Rural Development Programs. This cooperation enabled the incorporation of biodiversity criteria in the operational rules of programs such as Mexico's Regional Program to Combat Poverty, the Local Development Program Regional Microregions, the Special Program for Food Sovereignty, and the Proarbol Program. The project also supported the integration of biodiversity criteria and training of 2,238 officials in 14 federal, state, and municipal programs. Some progress was also made in influencing operations within several other ministries and agencies, such as the National Forestry Commission (CONAFOR), the Ministry of Social Development (SEDESOL), the National Institute for Women, and the National Commission for the Development of Indigenous Peoples. The Panama project also made an effort to introduce greater intersectoral coordination but was not able get other government ministries to incorporate the corridor concept into their policies and operations.

SUPPORT FOR INDIGENOUS PEOPLES LAND AND NATURAL RESOURCE RIGHTS

- The indigenous peoples of Panama constitute 10 percent of its total population (Barragán Alvarado 2008) but roughly 50 percent of the population of the Panamanian portion of the MBC is indigenous (World Bank 2005b). The cultural diversity of Southern Mexico is very high: Maya, Tzeltal, Tzoltzil, Lacandon, Tojolobal, Chol and Zoque represent the largest number of indigenous peoples in the five states included in the Mexican portion of the MBC. There are also significant numbers of indigenous people who have migrated from other states, among them the Zapotec of Oaxaca, Totonac of Veracuz, Purepecha of Michoacan as well as other Maya speaking indigenous peoples that have migrated from Guatemala including the Mam, Quiche and Kanjobal. The Bank estimated that roughly 432,128 indigenous persons inhabit the Mexican portion of the MBC and that about 39 percent of the total population of the Corridor is indigenous. Within the Corridors there are areas where the majority of the population is indigenous, as in the case of the Corridors of Northem Chiapas, in Campeche, and in Quintana Roo. In Nicaragua, the MBC project assisted roughly 139,158 project-affected persons across several priority protected areas of which 92,795, or 66 percent, were indigenous. And in Honduras the Bank estimated that the total indigenous population affected by the MBC project was approximately 78,000, including the Miskito, Pech, Tawahka, and Garifuna.
- 3.24 The MBC project in Nicaragua made a condition of disbursement the passage of the Law on the Communal Property Rights of Indigenous People and Ethnic Communities of the Atlantic Coast, Bocay, Coco, Indio and Maíz Rivers (Law 445). Although the condition was dropped following two years of delayed disbursements, interviews with Bank staff have indicated that the condition was important in moving the agenda forward. Interviews with Environment Ministry staff involved in implementation of the project agreed on the overall level of importance that was assigned to passage of the law, but contended that the process was too rushed. By project close no indigenous lands that had been demarcated by the project had been legalized. The project also supported the establishment of the National Commission for Demarcation and Land Titling (CONADETI) and the Intersectoral Commissions on Demarcation and Land Titling (CIDT). Ordinary and extraordinary sessions were held with CIDT in the RAAS and RAAN to analyze requests for demarcation presented by indigenous

communities. The project provided cartographic information and developed a GIS relating to indigenous communities within RAAN and RAAS. This information was updated as new demarcation information became available, and thematic maps of the indigenous communities were created.

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SUSTAINABLE FINANCING

Payments for Environmental Services

- 3.25 PES is a market-based approach to conservation based on the principle that those who benefit from environmental services should pay for them, and those who generate these services should be compensated. PES schemes have incorporated services such as watershed protection, biodiversity conservation and carbon sequestration and storage, and to a lesser extent, protection of scenic beauty, mainly for tourism purposes.
- 3.26 Costa Rica has led the way in the design and piloting of market-based instruments to enhance the provision of environmental services of both national and global significance. The World Bank has been a steady partner in this effort since the mid-to late 1990s. By the end of the second phase of Bank support for Costa Rica's PES program, the GoCR and the Bank will have helped to put in place some 288,000 hectares of land with environmental service contracts (equal to approximately 17 percent of Costa Rica's land area), half of which will be financed by funding from service users.
- 3.27 In Costa Rica, the bulk of funding for the PES program comes from an earmarked fuel tax subject to political decision-making and while a small portion comes directly from service users, most of the payments are in the form of time-limited grants. New financing mechanisms are needed to increase the sustainability of the program to assure the provision of environmental benefits in the long term. One such innovation developed in the second phase of Bank support for the PES program in Costa Rica has been a water tariff expected to generate US\$5 million a year in support of watershed conservation. Efforts are also being made to connect Costa Rica with global carbon markets, although implementation challenges have emerged due to the increased price of land and competing land use interests. Meanwhile, while payments for watershed protection are being instrumentalized, no such market exists for payments for biodiversity conservation benefits. The Bank is aiding in the capitalization of an endowment fund for sustainable biodiversity conservation in Costa Rica; however, this fund is nascent and the level of buy-in remains to be seen.

9. Costa Rica's strong support for ecosystem management and landscape planning has acted as an incubator for the development of concepts like PES. Fully owned by the GOCR, the PES concept was introduced through the 1996 Forestry Law (Law No. 7575) that created a National Forestry Financing Fund (FONAFIFO) and a national PES program. The World Bank supported the implementation of the Forestry Law by providing technical expertise to help design and implement revenue-capture mechanisms that would internalize the value of environmental services through explicit payment schemes. Specifically, through the Ecomarkets project (2000-2006), the Bank helped to bolster the program's national funding base for PES, which was mainly being derived from a tax on fuel (equivalent to 3.5 percent of revenues generated from sales) to help shore up remaining commitments on existing contracts. The Bank also supported the creation of a trust fund to capture and provide funds to pay for environmental services contracts targeting biodiversity conservation beyond the life of the project.

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- 3.28 While PES requires long-term sustainable financing to be effective, it also requires efficient targeting. One of the main lessons learned from implementing the EcoMarkets project in Costa Rica is that while significant forest conservation gains have been made, the program may have been paying for conservation where conservation might have happened anyway. Although it was necessary to catalyze support for the program among landowners in Costa Rica, the voluntary nature of the program—coupled with undifferentiated payment schemes—resulted in a less-than-efficient use of scarce conservation funds that could have been used for land-use change of other more valuable, primary or late secondary forests (Miranda et al. 2003).
- 3.29 This learning has resulted in efforts to improve the efficiency of the PES program in Costa Rica and the design of Bank-supported PES programs elsewhere by putting in place differentiated payment schemes. While there continues to be scope for more refined targeting, these schemes have been designed to better link buyers and sellers of environmental services. Eligibility rules and payments are being redesigned to reflect more closely the magnitude of the benefits to be achieved and the costs of conservation.
- PES schemes are not designed to target poverty, yet PES provides an opportunity to contribute to poverty reduction if mechanisms are created to include small landholders, women, and marginal groups in a meaningful way. One of the main lessons learned from over a decade of PES implementation in Costa Rica and elsewhere, is the high transaction costs of working with poor small landholders, who to date, have benefitted less from PES schemes than large landholders. Lack of training, technical assistance, and capacity-building activities have created barriers for rural poor participation of the rural poor in PES programs. The Bank is working to remove the barriers of including poor small landholders in Costa Rica's PES program by helping to develop collective contracts (contractos globales) that group many small plots of land and process them in one operation. The GoCR is also easing access to the program by amending its laws so that all landholders can participate, even landholders without formal landholding titles. However, minimum requirements, like the presence of a cadastral plan that maps the boundaries and size of the landholdings, necessarily remain in place and therefore continue to pose barriers to entry. The Bank is supporting Costa Rica's National Forestry Financing Fund to help to draw up support for cadastral plans in poor areas in priority areas.
- 3.31 Extending the benefits of PES schemes to indigenous communities residing within communal land-holding regimes has also proved challenging, for example in Panama, where the Bank has launched efforts to pilot watershed-scale PES mechanisms in two priority watersheds, including in the indigenous comarcas of Kuna Yala and Ngöbe Bugle. Progress has been constrained by institutional and legal constraints in negotiating and establishing comanagement agreements for the protected areas in which the watersheds are located. Similar efforts in El Salvador to pilot mechanisms that would have provided compensation for enhanced land management to hillside farmers were not able to get off the ground because of a lack of national ownership of the program, despite the Bank's efforts to take an incremental approach to developing a PES system by focusing on the building blocks of an institutional framework, and providing the necessary support and capacity building activities to the institutional actors.

National Environment Funds

In Nicaragua, the World Bank supported the development and approval of a National Environment Fund (NEF). The Nicaragua NEF was approved in October 15, 2001. However, although the NEF was created, this did not function as anticipated due to limited government support. In Honduras, initial efforts were taken by the Bank to put together a Protected Areas Fund, in collaboration with GTZ, the Inter-American Development Bank (IDB), and Fundacion Vita. Collaboration broke down during the project implementation stage despite the fact that these partners were working alongside the Bank on parallel projects within the MBC. However, the Bank ensured that the Fund, a condition of effectiveness of the PROBAP project, was endowed by redirecting US\$3 million towards its creation from Honduras's first US\$58 million Poverty Reduction Support Credit. The Fund exists today; however, for the most part its administration is nonfunctioning. The absence of a viable fund in Honduras to safeguard the Honduran section of the MBC has created a vulnerable situation for the nongovernmental and community-based organizations charged with the monitoring and management of the protected area system. The Bank's PROBAP project included agreement on a transition strategy that was hinged upon the implementation of the fund. The devolution of the management of key protected areas to community based organizations in the absence of adequate state supported finance has resulted in a heavy reliance on donor projects. The Foundation for the Pico Bonito Park, a nongovernmental organization (NGO) charged with the management of the Pico Bonito National Park relies almost exclusively on donor funds, deriving only 3–4 percent from its ecotourism activities.

National Corridor Finance

Since 2008 core MBC project personnel in Mexico have been funded by the government of Mexico with an annual budget of US\$2 million and corridor objectives have been incorporated into the National Commission for the Knowledge and Use of Biodiversity/Ministry of Environment and Natural Resources. There are dedicated corridor staff who are working on the diagnostics of new corridors; with the Ministry of Agriculture on integrating corridor concerns into rural development programs in Chiapas; establishing an MMBC eco-label and Payment for Environmental Services; and continuation of the ecological monitoring network. The government of Mexico is also continuing to finance subprojects to support the corridor schemes. The World Bank is supporting a second phase of its MBC work, again with GEF financing, through a follow-on project, Fostering Sustainable and Competitive Production Systems Consistent with the Conservation of Biodiversity. The project, slated for 2011–2016, will support green product and market development in biological corridors in such areas as cacao, coffee, forestry, honey, gum, etc. However, more cooperation is needed with other key ministries, for example in the areas of infrastructure development and extractive industries, to ensure that development interventions are environmentally sound in and around the corridor system.

NATURAL RESOURCE MANAGEMENT IN BUFFER ZONES: SUBPROJECTS

3.34 The Honduran MBC project directed some 23 percent of its finance, or US\$1.2 million towards 34 subprojects in 115 rural communities. Of the 34 subprojects, project documentation indicated that only 7 had achieved significant levels of sustainability.

IEG visited two of these subprojects, the Cabanas Aventura and the Juan Pablo II sewing cooperative to validate this finding (Box 2). A meaningful link was lacking between the livelihoods component of the subprojects, which was for the most part achieved, and their impact on the corridor. In Nicaragua, the Bank supported 22 subprojects that aimed to introduce biodiversity-friendly sustainable production practices. Implementation delays caused in part by a lack of agreement on meeting project conditionality caused a delay in the launch and implementation of the subproject program.

Box 2. IEG's Field Visits in Honduras: The Foundation for the Pico Bonito Park and Site Visits to PROBAP-Financed Subprojects

IEG met with the Director and staff of the Foundation — an NGO founded in 1993 with approximately 40 staff that received funds from the Bank's PROBAP project operating in and around the Pico Bonito National Park. The Foundation, part of an association of NGOs in Honduras called RHEDES, is also currently managing two carbon projects in San Marcos and Sa Libertad financed by the World Bank. IEG's mission was conducted 2.5 years after project close.

Pico Bonito is a National Park that was officially created in 1987. Approximately 216 communities live around the Park. The park is home to 66 rivers and stretches across 5 municipalities FUNPIB represents some 16 communities that reside across the five Municipalities. PROBAP sought to enhance the management of Pico Bonito's core and buffer zones. FUNAPIB expressed a concern that PROBAP's support for the demarcation of Pico Bonito's core and buffer zones was conducted without proper mapping and review of the land tenure situation in the area. While the core zone may have been uninhabited, there was and remains a very complex system of land titling in the buffer zone. IEG also engaged in a discussion with FUNAPIB about the status and implementation of several laws and decrees that may have an effect on the MBC. FUNAPIB was most concerned with the Energy Law, passed in 2008, that allows private sector investors to obtain concessions for water use in the catchments. According to FUNAPIB, there was no public consultation around the formulation of this law. This also conflicts with the Protected Areas Law and the Water Law, since the latter stipulates that if there are communities that are already living around and accessing water in a catchment area, the private sector investor should not have the right to obtain the concession.

IEG visited several micro-projects that were financed by PROBAP designed to support sustainable alternative livelihoods around the periphery of the park. IEG was pleased to learn that the **Cabanas Aventura**, one of the first community owned lodges in Honduras, continued to be operational almost three years after project close, since the project required a significant amount of co-finance. IEG counted the number of visitors logged in the Guestbook — 1,200 visitors between 2005 and June 2008 — so that at a rate of US\$36.00 a night for a room that can sleep up to five people, the lodge garnered a minimum of US\$8,640.00 over three years — other revenue is earned through activity fees. IEG also visited the newly constructed sewing cooperative, **Juan Pablo II**, in Pital. IEG interviewed the Head of the Juan Pablo II Group who explained that some 40 women work for the cooperative and that it possesses some 16 sewing machines. Although some of the machines are in disrepair, the association is reported to be fully active and selling its wares through an intermediary in the United States.

3.35 The Panama MBC project financed one hundred subprojects, 75 percent of which were awarded to indigenous communities accounting for 70 percent of the US\$2m subproject funding. One of the lessons that emerged from the implementation of the subproject program was that, similar to the other aforementioned MBC subproject programs, there is little

evidence of cumulative impact on conservation of globally important biodiversity. Lacking mechanisms to monitor impacts of a sample of the subprojects on biodiversity, the conceptual model for how the subproject was meant to contribute to biodiversity conservation was weak or missing.

3.36 In Mexico, subprojects were designed to incentivize producers to switch from high-impact production practices to biodiversity friendly ones. The Mexico MBC project financed 215 subprojects between 2005 and 2009 in support of biodiversity-friendly production — apiculture, shade coffee, reduced tillage, NTFPs (Non-Timber Forest Products), extractive reserves, silvopastoral practices, ecotourism — across an area of 22,580 hectares. Yet although some 47,042 producers were reached by the project, there is limited data on the impact of the adoption of these practices on the biological integrity of the corridor system.

MONITORING AND EVALUATION

None of the Bank implemented MBC projects were designed with indicators that 3.37 would have made it possible to monitor populations of indicator species and to record their evolution during project implementation. Proxies were used, usually in relation to the reduction of habitat (forest) loss or an increase in vegetative cover. However, none of the project results frameworks included proper baselines to specifically measure the impact of the project in relation to these proxies. In Mexico, for example, because the MBC project lacked a baseline at the time of design/approval, and neither was one produced during execution, the project relied on two sets of proxy data to gauge project impact. To assess whether the rate of native habitat loss had decreased, the project used proxy data provided by a corridor monitoring project that was being undertaken by graduate students in order to prepare their dissertation papers. The patches chosen by the students had similar conditions to the project areas but were located outside of the project area. The data suggests that positive outcomes were achieved — namely a reduction in the deforestation rate from 1.5– 1.0 between the periods 1993–2002 and 2002–2007 in the areas studied. Positive outcomes are inferred since a reduction in habitat loss could better support key indicator species in like areas of the corridor system.

Efficiency

- 3.38 Natural Disasters. The World Bank implemented GEF-financed MBC projects suffered delays due to Hurricane Mitch. It is estimated that Honduras incurred US\$3 billion in damages equivalent to nearly 60 percent of its 1999 gross domestic product. In Nicaragua, Hurricane Mitch struck within eight days of project effectiveness. The Bank undertook a rapid assessment of where it could contribute to the relief effort and, as a result, reallocated US\$1 million from its Rural Municipalities Project (PROTIERRA) for rapidly disbursing subprojects.
- 3.39 *Conditions of Effectiveness*. Another factor that led to project delay across (three of the four) World Bank implemented GEF projects was the inability to meet the projects' initial conditions of disbursement in a timely way. In addition to delays caused by Hurricane Mitch, in Nicaragua, activities were delayed for two years due to an inability of the government to meet two conditions of project effectiveness: the creation of the NEF and the

approval of the Indigenous Peoples Land Demarcation Law. The NEF was originally developed in October 2001 at the end of the outgoing Alemán administration. The incoming Bolaños administration did not provide the political support to advance the initiative. In July 2003, the World Bank agreed to an amendment in which the NEF conditionality for disbursing US\$1 million for subprojects was removed. This released the funds for the subprojects, albeit late, given that the then newly extended closing date for the project was only 15 months away. The project was extended and the subprojects were somewhat hurriedly implemented. The conditionality related to the adoption of an Indigenous Peoples Land Demarcation Law was a critical factor in moving this agenda forward. Interviews with government officials revealed that the central administration felt "rushed" by the condition to put the law in place. Nevertheless, by July 2003, a draft of the law was being debated in the National Assembly. Here again, however, the conditionality was dropped and the dialogue was transferred to the Bank's Land Administration Project. In Honduras, the project was delayed by 2.5 years as well due to a disbursement condition linked to the submission of draft legislation to Congress concerning the establishment of new national parks and reserves. The condition was eventually waived by the Bank.

Effectiveness of Governance and Management

- 3.40 The CCAD was established in December 1989 at the President's Summit held in San Isidro de Coronado following the signing of the Esquipulas II Peace Accords. The body is responsible for overseeing the harmonization of environmental and environmentally related policy and legislation and as such is responsible for the coordination of MBC activities in the region. It has an annual operating budget of US\$500,000.00. It is governed by a Council of Environment Ministers representing all member nations and presided over by a presidency that rotates every six months. The Council and the President are assisted by an Executive Secretariat and ten technical committees such as the Biodiversity Technical Committee and the Central American Council of Protected Areas committee.
- 3.41 One of the most noteworthy achievements of the CCAD is the regular inclusion of environmental and sustainable development issues in the agendas of the Summits of the Central American Presidents. The CCAD has convened regular meetings of the national Protected Area and Forest Agency heads beginning in the 1990s that has fostered more collaboration among the MBC countries.
- 3.42 One of the main concerns expressed in interviews about the CCAD is that the CCAD's capacity to set strategic regional priorities is being diluted by the influence of donors and priorities of individual donor financed projects. As of June 2010, CCAD was managing twenty-three projects funded by the World Bank, IDB, USAID, Spanish Cooperation, SDC (Swiss Agency for Development and Cooperation), Danish International Development Agency, Finnish Cooperation and Austria. Earlier evaluations (see chapter 2) expressed a concern about the future financial sustainability of the body with explicit recommendations to steer clear of an over-reliance on donor driven or project level finance. This view is supported by the independent Audit of CCAD conducted in 2004 by Ernst & Young (2003) that found that while "the organization had a clear political goal when it started, it

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became a largely donor driven organization."¹⁰ It is not clear, for example, how the MBC will be factored into the CCAD's new focus on climate change. While the MBC is referred to in the Regional Environment Strategy (PARCA III, 2010-2014), isn't immediately clear how MBC fits into climate change work in the region or the Central American Free Trade Agreement (DR-CAFTA).

- While the presence of a regional coordinating body for environmental integration, 3.43 separate from the states is important, interviews with technical experts in the Environment Ministries of MBC countries indicated that national level staff are not being given the mandate, nor the budget, to assist the CCAD, with the exception of Mexico. Nor can they incorporate regional work in their day-to-day national level planning activities. A lesson from IEG's Regional Programs Evaluation (2007b) that resonates strongly with the MBC is that clear delineation and coordination of the roles of national and regional institutions has proved crucial to the implementation of program activities and the sustainability of outcomes. What has generally worked best is reliance on national institutions for execution and implementation of program interventions at the country level, and on regional institutions for supportive services that cannot be performed efficiently by national agencies, such as coordination, data gathering, technical assistance, dispute resolution, and monitoring and evaluation. Building national capacity in support of regional environmental integration was a major objective of the GTZ-financed UNDP/UNEP project, however, with the end of project finance, support for staff at the national level with regional responsibilities were all but abandoned.
- 3.44 CCAD's Technical Committees are staffed with Ministerial staff from each country who report both to their respective minister and the entire Council of Ministers. The work for the CCAD is not budgeted for by the respective national ministries (except for in Mexico) so the technical committee staff must "volunteer" time for CCAD related activities. A regional environment supported with a national environment ministry unit could help to internalize regional environmental agreements and decisions reached by the Council of Ministers. Currently there is almost no incentive for national technical staff to work towards achieving regional environmental goals. CCAD is the only mechanism that serves this function, of maintaining a regional environmental vision and platform. Interviews also suggested that the short rotational cycle of the Chair of CCAD's Council of Ministers the chair rotates every six months may be too short of a term because it does not allow the respective minister time to internalize CCAD/MBC decisions into its own national structures and policies.

Sustainability

3.45 While there have been strong institutional gains, the biodiversity content of the MBC system remains highly threatened. Reinforced capacity of the environmental ministries and protected area departments of the MBC countries has provided for enhanced ecosystem, fire, and disaster-risk mapping and modeling. But these gains are tempered by a low level of intersectoral cooperation, a lack of strong influence by the regional coordinating body to

10. See *Review and Institutional Assessment of the Central American Commission for Environment and Development (CCAD)*. http://www.sica.int/busqueda/busqueda_basica.aspx?IdCat=52&IdMod=3&IdEnt=2.

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better integrate biodiversity into regional agreements, and the absence of a region-wide financing model for the MBC.

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- At the national level, while there are strong asymmetries between countries, commitments on behalf of the governments of Mexico and Costa Rica offer an opportunity for further leverage and diffusion of learning across the region. Since 2008, core MBC project personnel in Mexico have been funded by the government of Mexico with an annual budget of US\$2 million and corridor objectives have been incorporated into the National Commission for the Knowledge and Use of Biodiversity within the Ministry of Environment and Natural Resources. And the government of Costa Rica has established a national Biological Corridor Program, with support from the GEF financed UNDP implemented Proyeto Gruas II, whose role is to be the focal point for (subnational) regional coordination, to develop networks of local corridors, and to leverage funding. 11 Costa Rica has also piloted a series of payments for environmental service schemes that are helping to change attitudes about the valuation of ecosystem services. But current conservation incentives are not keeping pace with the rising value of land in Costa Rica, Panama, and other coastal MBC areas of attraction. New incentives in the form of more robust and attractive PES schemes, additional payments for carbon, and further support for the commercialization and marketing of sustainable natural goods will be important elements of a sustainable future platform for the corridor system.
- 3.47 At the regional level, the MBC is not well integrated into development planning. Financing for the MBC is miniscule compared to the finance being directed towards regional development initiatives such as the Plan Puebla Panama (PPP, launched by President Vicente Fox of Mexico and signed by the regional governments back in 2001). The latter has been financed at a level of approximately \$8 billion as of 2007, with over 90 percent of those funds dedicated to infrastructure development and improvement in the region (Portal Proyecto Mesoamérica on-line, 2007). A large portion of this support has been provided by the IDB. One of the issues that arose in interviews conducted for this current review was that, after the launch of the PPP, the MBC was too often conflated with that program. Mexico, for example, launched its MBC program as part of the PPP. This created confusion as to whether the MBC was still seen as an effort to support the ecological integrity of the identified corridor system or whether it had become merely a means to "green" investments.
- 3.48 As countries and donors look to further support the corridor system, they will need to continue to address the severe fragmentation and unevenness of the region's protected area system. MBC efforts thus far have been better at enhancing the management and protection of key revenue-generating protected areas and parks than connecting them. As Costa Rica has demonstrated, corridor development is local; the development of alternative livelihoods attached to viable marketing chains that can be sustained after project closed, as opposed to the distribution of small grants during the lifetime of a project, must be supported for the MBC to be maintained over time.

11. Proyeto Gruas II was part of another GEF-implemented project – financed by UNDP – called "Overcoming Barriers to Sustainability of Costa Rica's Protected Areas System." See: http://www.thegef.org/gef/sites/thegef.org/files/repository/Costa%20Rica_09-03-08_Overcoming_Barriers_Sustainability_PAS_GEFID2773.pdf.

- 3.49 The MBC projects recognized that sustainability of the ecological benefits of the corridor system was hinged on reducing the pressures and threats facing the system. These threats included and still include "push" and "pull" factors that influence unsustainable landuse decisions in and around the corridor. Some of the "push factors" include poor land use planning and inconsistently applied land reform programs, land use change to agriculture and cattle ranching coupled with soil fertility loss and degradation, population growth, and inadequate institutional and human resources to manage protected areas and implement conservation policies. The "pull" factor is represented by the failure to take full account of and properly value the corridor's ecosystems and its services, such as the provision of clean water, good-quality soil, timber and nontimber forest products, and carbon storage. Key sites in the Panamanian and Costa Rican corridors have also been threatened by the global real estate market.
- 3.50 Recognizing these threats, the World Bank's support for the MBC was woven through a series of land administration and rural development programs, in addition to the GEF-financed biodiversity projects reviewed in this report. While the Bank has been successful in helping MBC countries like Honduras, Nicaragua and Panama modernize their antiquated tenure systems, it has faced complexities in ensuring the rights of key MBC stakeholders, namely indigenous populations such as the Garífuna and Miskito communities in Honduras and the Naso people and the Ngöbe Buglè of Panama. As discussed in this report, a significant percentage of the corridor system is inhabited by indigenous or Afro-Latino communities. IEG analysis finds that protected areas in tropical forests are on average effective in reducing deforestation and thus reduce carbon emissions and biodiversity loss. Protected areas that allow sustainable use by locals are more effective than strictly protected areas. Indigenous areas are the most effective of all, reducing deforestation rates by 2 percentage points per year (Nelson and Chomitz 2009). These communities represent a vital link in efforts to conserve and more effectively manage the corridor system.
- 3.51 Yet while resolving property rights disputes and associated land conflicts is a key enabling factor in the local management of common pool natural resources, communities must be able to derive benefits from the conservation of the common pool resources at a level that justifies their conservation or the costs of their enhanced management. The World Bank partnered with the Inter-American Development Bank in a follow-on regional GEF-financed project entitled the *Integrated Ecosystem Management in Indigenous Communities* (2004–2009). The project helped Indigenous communities across the corridor system consolidate and market a regional supply of products and environmental services derived from traditional land use practices in indigenous communities.
- 3.52 The World Bank's rural development portfolio in the MBC countries, between the late-nineties and mid-2000s, were designed with a set of twin goals: (1) a reduction of rural poverty and (2) conservation and sustainable use of biodiversity resources in the corridor system. While the rural portfolio performed satisfactorily and generally succeeded in helping the MBC countries enhance agricultural productivity and link poor rural producers to credit and markets, migration to MBC areas due to loss of soil fertility and land degradation continues at a less than desirable pace.

- 3.53 The overarching objective of the Bank's Latin America and the Caribbean Vice Presidency is to reduce rural poverty and promote broad-based growth in the context of the sustainable management of natural resources (World Bank 2010). In Latin America, the strategic importance of agriculture and the rural sector remains for four major reasons: agriculture's high contribution to employment and gross domestic product; the impact of agriculture on the environment; the contribution of the rural sector to development of other sectors of the economy; and the higher incidence of poverty in rural areas. Going forward, the MBC countries will need to support agricultural practices that improve sustainability while increasing productivity. There is growing literature on the importance of promoting agro-biodiversity in Central America, for example. Alternatives to extensive livestock in Latin American need to continue to be explored
- 3.54 One way countries can promote more sustainable agricultural practices in and around the corridor is by supporting well designed and targeted payments for environmental services schemes. While the most advanced schemes have been rolled out in Costa Rica, the Bank and the GEF have also supported a regional PES pilot scheme in Colombia, Costa Rica, and Nicaragua, the *Silvopastoral Approaches to Ecosystem Management* project (2002–2008). The pilot scheme demonstrated and measured the effects of the introduction of payment incentives for environmental services to farmers on their adoption of integrated silvopastoral farming systems in degraded pasture lands and the resulting improvements in ecosystems functioning. This demonstrated that farming systems that promote the improvement of pastures, and the use of fodder banks and tree planting can offer greater socio-economic benefits, opportunities for biodiversity conservation, and local and global environmental benefits through enhanced carbon.
- 3.55 Meanwhile, Latin America's protected area system needs continued strengthening. The Bank's direct support for the MBC has been extended through projects like the *Corazon Transboundary Biosphere Reserve Project*, a US\$12 million GEF-financed project that is working with the CCAD and the Environment Ministries in Honduras and Nicaragua to strengthen the transboundary management and connectivity of four key protected areas across 3.4 million hectares of land.

4. World Bank Performance as a Partner in Support of the MBC

4.1 The World Bank has played multiple roles in its support for the consolidation of the MBC. The Bank has directly supported the MBC by implementing a series of GEF-financed MBC projects reviewed in this report. It has also utilized other trust funds, such as the Bank-Netherlands Partnership Program (BNPP), to directly support MBC priorities. The Bank played a convening role in support of the MBC by facilitating key international donor meetings and regional workshops and by enabling relationships, for example, between NASA and Country Officials. It has also promoted a high level of intersectoral policy dialogue between key sectors in the MBC countries by blending corridor concerns with other parts of its IBRD/IDA lending portfolio in areas such as rural development and land administration.

The World Bank's Financial Contributions for Biodiversity in the MBC

- 4.2 Just prior to implementing its MBC investments, the World Bank in partnership with USAID and the then Biodiversity Support program¹² distributed a survey to 118 donors to determine funding patterns, gaps, and encourage greater donor communication in the Latin American and the Caribbean Region in the area of biodiversity conservation. The survey found that only a relatively small number of organizations provided the majority of funding for biodiversity. While the survey discovered that some 489 biodiversity projects with total investments of US\$3.3 billion had been supported by 65 donors between 1990-1997 it also reported that the World Bank was responsible for providing roughly 20 percent of this total support (including IBRD/IDA/GEF implemented projects). The Inter-American Development Bank provided roughly 11 percent. Support for biodiversity conservation during this period was for the most part incorporated in national level natural resource management and protected area projects. Roughly 90 percent of total funding was invested at the country level.
- 4.3 The World Bank, to date, has also implemented, in volume terms, the largest proportion of biodiversity-related funding through the Global Environment Facility. Between 1990 to present, the World Bank has implemented roughly US\$832 million including a leveraged amount of US\$669 million in project cofinance in the biodiversity focal area in the MBC countries (Table 1). Investment has been uneven, however, with some 71 percent of the total directed towards investment in two countries: 50 and 21 percent, respectively, in Mexico and Costa Rica (Table 2).

Table 1. GEF Biodiversity Finance in MBC Countries (1990–2009) by Implementing Agency (US\$)

Implementing Agency	GEF Grants	Cofinancing	Total
IBRD	163,668,385	668,593,583	832,261,968
UNDP	69,742,746	156,195,130	225,937,876
IADB	13,560,000	42,053,000	55,613,000
UNEP	10,070,037	16,721,122	26,791,159
Total	257,041,168	883,562,835	1,140,604,003

Source: www.gefweb.org and IEG, 2010.

Note: GEF = Global Environment Facility; IADB – Inter-American Development Bank; IBRD = International Bank for Reconstruction and Development; UNDP = United Nations Development Programme; UNEP = United Nations Environment Programme.

12. The Biodiversity Support Program is a USAID-funded consortium of the World Wildlife Fund, the Nature Conservancy, and the World Resources Institute.

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Table 2. World Bank-Implemented GEF-Financed Projects in the Biodiversity Focal Area in MBC Countries (1990–2009) (US\$)

Country	GEF Grants	Cofinancing	Total
Mexico	130,044,574	435,513,337	565,557,911
Costa Rica	45,376,599	198,006,545	243,383,144
Panama	24,169,800	88,151,000	112,320,800
Honduras	11,953,300	61,006,000	72,959,300
Nicaragua	10,312,120	51,314,968	61,627,088
Guatemala	12,828,650	22,034,967	34,863,617
El Salvador	9,402,445	18,613,000	28,015,445
Belize	12,953,680	8,923,018	21,876,698
Total	257,041,168	883,562,835	1,140,604,003
Regional GEF Projects	94,667,492	224,807,290	319,474,782
Total	351,708,660	1,108,370,125	1,460,078,785

Sources: www.gefweb.org and IEG 2010.

The World Bank's Convening Role

- 4.4 The World Bank facilitated effective relationships to promote MBC aims. At the global level, the World Bank convened a donors' conference in Paris in 2002 to raise both awareness and finance for the MBC. Hosted by the then Director of Environment for the World Bank, the conference brought together seven Ministers of Environment from Central America and the CCAD, together with representatives from bilateral and multilateral development institutions. The conference led to additional commitments of US\$70 million support of the MBC.
- 4.5 At the corridor level the Bank participated as a steering committee member of the UNDP/UNEP Regional MBC project and partnered with UNDP to co-implement the Bank's MBC project in Honduras. This project in Honduras was the first GEF financed project to be jointly prepared and supervised with UNDP. During the first four years of implementation, there was a good level of cooperation between the Honduras MBC project and the UNDP/UNEP regional MBC program.
- 4.6 The World Bank was also instrumental in facilitating relationships between the Environmental Ministries in the MBC countries, CCAD and NASA. In 1998, a formal working agreement was signed between the CCAD and NASA. The Bank's facilitation helped NASA showcase its work at a Ministerial conference, highlighting the many ways that earth observations could be used for improved decision-making. This presentation resulted in a request from the MBC Environment Ministers to help develop an integrated platform where data on fires, land cover, deforestation and marine issues could be brought together. The effort was integrated through a service called *SERVIR MesoStore* a regional visualization and monitoring system established in the City of Knowledge in Panama hosted by Cathalac that integrates earth observations and forecast models together with in situ data

and knowledge to support better decision making. ¹³ The establishment of the system was in part supported by the Bank though BNPP funding in 2003–2006.

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4.7 SERVIR MesoStore functions as a data host or repository. It collects and processes satellite imagery and does real-time analysis of fire risk and disaster risk, and climate change modeling. It was the regional node for the national data collected as part of the Mesoamerican Biological Information System, or SIAM, coordinated by the CCAD. It pulls together the data created though different national level projects supported by NASA, such as work on fire assessment in El Salvador or archeological cultural mapping in Guatemala and Costa Rica. The Bank financed several meetings and workshops that helped to convene SIAM. It also supported training and capacity building in GIS. Partly with the Bank's support and other partners such as USAID, both Guatemala and El Salvador today have strong technical GIS capacity. As a result of its investment in applying geospatial analysis to fire forecasting, Guatemala has been able to significantly reduce its fire response time from three days to five hours. El Salvador's work on mapping post disaster debris flows (2009) has enabled the development of more accurate early warning systems. Nicaragua had a high level of capacity during the early to mid part of the past decade related to hazard assessment and tourism, but this has been somewhat eroded, while Panama requires much more support in this area. Panama, like Guatemala and Belize, has invested in land cover maps that if maintained and integrated can serve an important function in planning for Reduced Emissions from Deforestation and Degradation.

Linkages with the World Bank's Country Operations

- 4.8 The Bank promoted a high level of intersectoral policy dialogue between key sectors in the MBC countries by blending corridor concerns within other parts of its lending portfolio. As discussed in the sustainability section of this report, it opened up space to talk about the key threats to sustaining the corridor system and the need to integrate policies across the rural and environment sectors to achieve results.
- 4.9 In Honduras, the GEF financed World Bank implemented PROBAP project was tightly coordinated with the Bank's *Land Administration Project*. This project dealt with policies and issues concerning forest dwellers and led the dialogue with the government on the Forestry and Protected Areas Law, as well as on the Protected Areas Fund; PROBAP focused on forest conservation. Lessons learned from the implementation of PROBAP helped establish the guidelines for the Forests and Biodiversity Subprogram of the National Forestry Program.
- 4.10 The Nicaragua MBC project was associated with the IDA financed *Nicaragua Rural Municipalities Project* (PROTIERRA) that financed infrastructure improvements in the densely populated central and Pacific coast of the country. The Bank recognized that the population density along Nicaragua's Pacific Coast coupled with the high population growth rate (3.1 percent per annum) would lead to increased pressure along the Atlantic coastal MBC areas. The Bank's rural development project was designed to improve living conditions in the west thus mitigating the "push" factor, and the MBC project was designed to reduce

^{13.} SERVIR Mesoamerica is housed in CATHALAC – the Water Center for the Humid Tropics of Latin America and the Caribbean.

the "pull" factor by helping to legally enshrine and enforce the land and resource rights of indigenous groups in and around the protected Atlantic coastal areas.

- 4.11 Likewise, the concept of the Panama MBC project was to conserve and address threats to biodiversity in the ecosystems of the Atlantic Coast while the Bank-financed *Rural Poverty and Natural Resources Project* in Panama aimed to address the root causes of migration from the Pacific coast and the resulting expansion of the agricultural frontier.
- 4.12 In Panama, like in Nicaragua, the Bank found that the "push factors" producing migration from the Pacific Coast rural poverty, insufficient land, low returns to agricultural activities were too entrenched to be influenced by the GEF MBC projects.

5. Lessons Learned

- 5.1 The experience with Bank-implemented projects in the MBC has yielded a number of lessons.
 - The desired function(s) of a corridor need to be determined and understood by key stakeholders prior to its design in order to align them with expected outcomes. The roles that corridors play derive from six ecological functions: habitat, conduit, filter, barrier, source, and sink (Hess and Fischer 2001). All stakeholders involved in corridor design and management should have a clear unified understanding of the agreed-upon functions of the proposed corridor and the implications thereof for land administration and management, natural resource extraction, biological monitoring and reporting. The design of financing mechanisms for sustained corridor management should be an incipient part of corridor planning, requiring an upfront assessment of the ecological, biological, and societal values that the corridor is intended to support.
 - Establishment of a coordinating body for regional environmental integration, separate from states interests, is vital for implementing a biological corridor system. It is equally important to give national staff the mandate and the budget to internalize the priorities set at the regional level. A lesson derived from IEG's Regional Program Evaluation (2007b) that resonates strongly with the MBC is that clear delineation and coordination of the roles of national and regional institutions has proved crucial to the implementation of program activities and the sustainability of outcomes. What has generally worked best is reliance on national institutions for execution and implementation of program interventions at the country level, and on regional institutions for supportive services that cannot be performed efficiently by national agencies, such as coordination, data gathering, technical assistance, dispute resolution, and monitoring and evaluation.
 - Conservation, or corridor planning, requires intersectoral cooperation. The Bank
 promoted a high level of intersectoral policy dialogue between key sectors in the MBC
 countries by blending corridor concerns within other parts of its lending portfolio. This
 opened up space to talk about the key threats to sustaining the corridor system and the
 need to integrate polices across the rural and environment sectors to achieve results.

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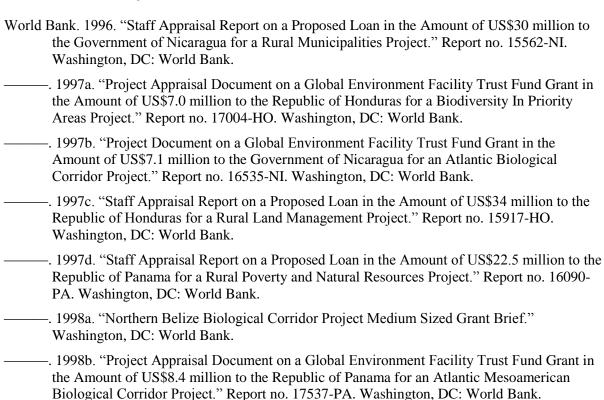
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Annex A. Evaluation Framework for Global Program Reviews

Note: This evaluation framework is a general framework that has been designed to cover the wide range of such programs in which the World Bank is involved, encompassing policy and knowledge networks, technical assistance programs, and investment programs. It is not expected that every global program review will cover every question in this table in detail.

Table A-1. Assessing the Independence and Quality of the Evaluation

Evaluation Questions

1. Evaluation process

To what extent was the GRPP evaluation independent of the management of the program, according to the following criteria:

- Organizational independence?
- Behavioral independence and protection from interference?
- Avoidance of conflicts of interest?

Factors to take into account in answering these questions include:

- Who commissioned and managed the evaluation?
- Who approved the terms of reference and selected the evaluation team?
- To whom the evaluation team reported, and how the evaluation was reviewed?
- Any other factors that hindered the independence of the evaluation such as an inadequate budget, or restrictions on access to information, travel, sampling, etc.?

2. Monitoring and evaluation framework of the program

To what extent was the evaluation based on an effective monitoring and evaluation framework of the program with:

- Clear and coherent objectives and strategies that give focus and direction to the program?
- An expected results chain or logical framework?
- Measurable indicators that meet the monitoring and reporting needs of the governing body and management of the program?
- Systematic and regular processes for collecting and managing data?

3. Evaluation approach and scope

To what extent was the evaluation objectives-based and evidence-based?

To what extent did the evaluation use a results-based framework — constructed either by the program or by the evaluators? To what extent did the evaluation address:

- Relevance
- Efficacy
- Efficiency or cost-effectiveness
- Governance and management
- Resource mobilization and financial management
- Sustainability, risk, and strategy for devolution or exit

4. Evaluation instruments

To what extent did the evaluation utilize the following instruments:

- Desk and document review
- Consultations/interviews and with whom

Literature review

- Structured surveys and of whom
- Site visits and for what purpose: for interviewing implementers/beneficiaries, or for observing activities being implemented or completed
- Case studies

Other

Evaluation Questions

5. Evaluation feedback

To what extent have the findings of the evaluation been reflected in:

- The objectives, strategies, design, or scale of the program?
- The governance, management, and financing of the program?
- The monitoring and evaluation framework of the program?

Table A-2. Providing an Independent Opinion on the Effectiveness of the Program

Every review is expected to cover the first four criteria in the following table: (a) relevance, (b) efficacy, (c) efficiency, and (d) governance and management. A review may also cover (e) resource mobilization and financial management and (f) sustainability, risk, and strategies for devolution or exit if the latter are important issues for the program at the time of GPR, and if there is sufficient information available on which to base an independent opinion.

Evaluation Criteria and Questions

Relevance: The extent to which the objectives and design of the program are consistent with (a) current global/regional challenges and concerns in a particular development sector and (b) the needs and priorities of beneficiary countries and groups.

 Supply-side relevance — the existence of an international consensus that global/regional collective action is required.

To what extent does the program reflect an international consensus on the need for action, on the definition of the problem being addressed, on priorities, and on strategies for action?

Is the original consensus that led to the creation of the program still present? Is the program still needed to address specific global/regional public concerns?

Take into account the origin of the program in answering these questions:

- Is the program formally responsible for implementing an international convention?
- Did the program arise out of an international conference?
- Is the program facilitating the implementation of formal standards and approaches?
- Is the program primarily donor-driven? Did donors establish the program with little consultation with developing countries?
- Is the program primarily Bank-driven? Did the World Bank found the program and then seek other partners?

2. Demand-side relevance — alignment with beneficiary needs, priorities, and strategies.

To what extent are the objectives consistent with the needs, priorities, and strategies of beneficiary countries as articulated in the countries' own Poverty Reduction Strategy Papers, and in donors' strategies such as the World Bank CASs, and the UN Development Assistance Frameworks?

To what extent has the voice of developing and transition countries been expressed in the international consensus underlying the program?

3. Vertical relevance — consistency with the subsidiarity principle.

To what extent are the activities of the program being carried out at the most appropriate level — global, regional, national, or local — in terms of efficiency and responsiveness to the needs of beneficiaries?

To what extent are the activities of the program competing with or substituting for activities that individual donors or countries could do more efficiently by themselves?

Pay particular attention to those programs that, on the face of it, are primarily supporting the provision of national or local public goods.

Evaluation Criteria and Questions

4. Horizontal relevance — the absence of alternative sources of supply.

What is the comparative advantage, value added, or core competency of the program relative to other GRPPs with similar or complementary objectives? To what extent is the program providing additional funding, advocacy, or technical capacity that is otherwise unavailable to meet the program's objectives?

To what extent are the good and services being provided by the program in the nature of public goods? Are there alternative ways of providing these goods and services, such as by the private sector under regular market conditions?

5. Relevance of the design of the program

To what extent are the strategies and priority activities of the program appropriate for achieving its objectives? What are the major activities of the program:

- Policy and knowledge networking?
- Financing country and local-level technical assistance?
- Financing investments to deliver national, regional, or global public goods? (See Table A- 4.)

Has the program articulated an expected results chain or logical framework, along with assumptions that relate the progress of activities with the achievement of the objectives? Does the results chain identify the extent to which the achievement of the objectives depends on the effective functioning of bureaucracies, markets, or collectivities? If so, to what extent are these assumptions valid?

For programs providing global or regional public goods, is the design of the program consistent with the way in which the individual efforts of the partners contribute to the collective outcome for the program as a whole — whether "best shot," "summation." or "weakest link?"

Efficacy: The extent to which the program has achieved, or is expected to achieve, its objectives, taking into account their relative importance.

6. Achievement of objectives

To what extent have the stated objectives of the program been achieved, or has satisfactory progress been made towards achieving these objectives?

To what extent are there implicit objectives that are well understood and agreed upon by the partners and to which the program should also be held accountable?

To what extent are there any positive, unintended outcomes of the program that have been convincingly document? To what extent have these assessments by the program or the evaluation been evidence-based?

7. Progress of activities, outputs, and outcomes.

To what extent has the program or the evaluation measured the progress of activities, outputs, and outcomes? How did the program or the evaluation aggregate its outputs and outcomes at all levels — global, regional, national, and local — to provide an overall summary of its results?

To what extent have factors such as changes in the location of the program, its legal structure, or governance processes affected the outputs and outcomes of the program?

To what extent have there been outcomes that can be uniquely attributed to the partnership itself — such as the scale of or joint activities made possible by its organizational setup as a GRPP, or its institutional linkages to a host organization?

8. Linkages to country or local-level activities.

To what extent has the program established effective operational linkages with country-level activities, taking into account that:

- The desired nature of these linkages will vary according to the objectives, design, and implementation of each program?
- Positive outcomes at the country or local level are generally a joint product of both global/regional and county-level activities?

Evaluation Criteria and Questions

Efficiency or cost-effectiveness:

Efficiency — the extent to which the program has converted or is expected to convert its resources/inputs (such as funds, expertise, time, etc.) economically into results.

Cost-effectiveness — the extent to which the program has achieved or is expected to achieve its results at a lower cost compared with alternatives.

9. Efficiency

To what extent is it possible to place a monetary value on the benefits arising from the activities of the program?

To what extent has the program or the evaluation conducted impact evaluations of representative program activities?

To what extent has the program or the evaluation analyzed the program's costs in broad categories (such as overhead vs. activity costs), and categorized the program's activities and associated benefits, even if these cannot be valued in monetary terms?

10. Cost-effectiveness

To what extent is the program measuring up against its own business plans:

- Has the program cost more or less than planned? How did it measure up against its own costing schedule?
- Have there been any obvious cases of inefficiency or wasted resources?

To what extent is the program delivering its activities cost-effectively in comparison with alternatives:

- How do actual costs compare with benchmarks from similar programs or activities?
- Are the overhead costs of governing and managing the program reasonable and appropriate in relation to the objectives and activities of the program?

How does the program compare with traditional development assistance programs:

- For beneficiary countries, has receiving the development assistance through the GRPP increased the transactions costs compared with traditional development assistance programs?
- For donors, has delivering the development assistance through the GRPP reduced donor costs by harmonizing
 efforts among donors or by reducing overlapping work (such as through joint supervision, monitoring and
 evaluation)?

Governance and management:

Governance — the structures, functions, processes, and organizational traditions that have been put in place within the context of a program's authorizing environment to ensure that the program is run in such a way that it achieves its objectives in an effective and transparent manner.

Management — the day-to-day operation of the program within the context of the strategies, policies, processes, and procedures that have been established by the governing body. Whereas governance is concerned with "doing the right thing," management is concerned with "doing things right."

11. Compliance with generally accepted principles of good governance.

To what extent are the governance and management structures and processes well articulated and working well to bring about legitimate and effective governance and management?

To what extent do governance and management practices comply with the following seven principles:

- Legitimacy the way in which governmental and managerial authority is exercised in relation to those with a legitimate interest in the program — including shareholders, other stakeholders, implementers, beneficiaries, and the community at large?
- Accountability the extent to which accountability is defined, accepted, and exercised along the chain of
 command and control within a program, starting with the annual general meeting of the members or parties at the
 top and going down to the executive board, the chief executive officer, task team leaders, implementers, and in
 some cases, to the beneficiaries of the program?
- Responsibility the extent to which the program accepts and exercises responsibility to stakeholders who are
 not directly involved in the governance of the program and who are not part of the direct chain of accountability in
 the implementation of the program?
- Fairness the extent to which partners and participants, similarly situated, have equal opportunity to influence

Evaluation Criteria and Questions

the program and to receive benefits from the program?

- Transparency the extent to which a program's decision making, reporting, and evaluation processes are open and freely available to the general public?
- Efficiency the extent to which the governance and management structures enhance efficiency or costeffectiveness in the allocation and use of the program's resources?
- Probity the adherence by all persons in leadership positions to high standards of ethics and professional conduct over and above compliance with the rules and regulations governing the operation of the program?

12. Partnerships and participation

To what extent has the program identified a complete list of stakeholders, or "stakeholder map," including the agreed-upon or perceived roles and responsibilities of the categories of stakeholders identified? To what extent is this a routine programmatic function, updated regularly, and transparently available?

Has the program adopted primarily a shareholder model of governance (in which membership on the governing body is limited to financial and other contributors), or a stakeholder model (in which membership also includes noncontributors)?

To what extent, if any, is the program's legitimacy being sacrificed in order to achieve greater efficiency, or vice-versa?

13. Programs located in host organizations

To what extent is the location of the program in the Bank or other partner organization adversely affecting the governance, management, or other aspects of the program, such as compliance with the principles of transparency and fairness? For which functions is the program manager accountable to the host organization and the governing body of the

For which functions is the program manager accountable to the host organization and the governing body of the program, respectively? Are conflicts of interest being managed appropriately?

To what extent does the host organization play such a dominant role in the program, thereby reducing the incentives of other partners to participate effectively, or reducing the ability of the host organization to look at the weaknesses of the program objectively?

Resource mobilization and financial management:

Resource mobilization — the processes by which resources are solicited by a program and provided by donors and partners.

Financial management — the processes that govern the recording and use of funds, including allocation processes, crediting and debiting of accounts, controls that restrict use, accounting, and periodic financial reporting systems. In cases where funds accumulate over time, this would also include the management of the cash and investment portfolio.

14. Resource mobilization

To what extent has the program succeeded in raising financial resources commensurate with its objectives? And from what sources — the Bank, bilateral donors, foundations, etc.?

To what extent has the program succeeded in diversifying its funding beyond a small number of donors?

To what extent are the sources of funding for the program (including donor restrictions on the use of resources) affecting, positively or negatively:

- The strategic focus of the program?
- The outputs and outcomes of the program?
- The governance and management of the program?
- The sustainability of the program?

15. Financial management

Are there any issues that have emerged during the course of the review in relation to:

- The quality of financial management and accounting?
- The methods, criteria, and processes for allocating funds among different activities of the program?
- Financial management during the early stages of the program?

Evaluation Criteria and Questions

Sustainability, risk, and strategy for devolution or exit:

Sustainability — When applied to the **activities of a program**, the extent to which the benefits arising from these activities are likely to continue after the activities have been completed. When applied to a **program** itself, the extent to which the organization or program is likely to continue its operational activities over time.

Devolution or exit strategy — a proactive strategy to change the design of a program, to devolve some of its implementation responsibilities, to reduce dependency on external funding, or to phase out the program on the grounds that it has achieved its objectives or that its current design is no longer the best way to sustain the results which the program has achieved.

16. Sustainability of the benefits of the program's activities

What is the risk, at the time of evaluation, that the development outcomes (or expected outcomes) of the program will not be maintained (or realized)? This depends on (a) the likelihood that some changes may occur that are detrimental to maintaining or realizing the expected outcomes, and (b) the affect on the expected outcomes if some or all of these changes actually materialize?

17. Sustainability of the program

This will depend on a number of factors, such as the continued legitimacy of the program, its financial stability, its continuity of effective management, and its ability to withstand changing market or other conditions.

To what extent is there still a sufficient convergence or accommodation of interests among the major partners to sustain the program financially? To what extent has the program developed institutional capacity such as performance-based management, personnel policies, learning programs, and knowledge management that help to sustain a program?

In what areas could the program improve in order to enhance its sustainability, such as better marketing of the program's achievements in order to sustain its reputation?

18. Prospects for continuation and strategies for devolution or exit

To what extent should the program be sustained?

Is the continuation of the program the best way of sustaining the results achieved?

Should the design of the program be modified as a result of changed circumstances, either positive or negative? What other alternatives should be considered to sustain the program's results more cost-effectively, in the light of the previous evaluation findings with respect to relevance, efficiency, and sustainability:

- Reinventing the program with the same governance?
- Phasing out the program?
- Continuing country or local-level activities with or without devolution of implementation?
- Seeking alternative financing arrangements, such as revenue-generation, or self-financing to reduce dependency on external sources?
- "Spinning off" from the host organization?

Table A-3. Assessing the Bank's Performance as a Partner in the Program

Evaluation Questions

1. Comparative advantage at the global/regional level.

To what extent is the Bank playing up to its comparative advantages at the global/regional level — its global mandate and reach and convening power?

To what extent is the Bank's presence as a partner in the program catalyzing other resources and partners for the program?

2. Comparative advantage at the country level.

To what extent is the Bank contributing multi-sector capacity, analytical expertise, and country-level knowledge to the program?

To what extent has the Bank's country operations established linkages to the GRPP, where appropriate, to enhance the effectiveness of both?

3. Oversight.

To what extent is the Bank exercising effective and independent oversight of its involvement in the program, as appropriate, whether the program is housed in the Bank or externally managed?

To what extent is the Bank's oversight independent of the management of the program?

To what extent does the Bank's representative on the governing body have a clear terms of reference?

4. Risks and risk management. To what extent have the risks associated with the program been identified and are being effectively managed?

For example, IEG identified the following risks in its global review:

- Bank bears a disproportionate share of responsibility for governing and managing in-house programs?
- Confusion at the country level between global program activities, Bank activities, and Borrower activities?
- Representation of NGOs and the commercial private sector on program governing bodies?
- Unclear role and application of Bank's safeguards?
- Trust-funded consultants and seconded staff representing the Bank on some program governing bodies?

5. Disengagement strategy.

To what extent is the Bank engaged at the appropriate level in relation to the Bank's new strategic framework:

- Watching brief?
- Research and knowledge exchange?
- Policy or advocacy network?
- Operational platform?

To what extent is the Bank facilitating an effective, flexible, and transparent disengagement strategy for the program, in relation to the Bank's objectives for its involvement in the program:

- The program declares "mission accomplished" and closes?
- The program continues and the Bank withdraws from all aspects of its participation?
- The program continues and the Bank remains engaged, but the degree of the Bank's engagement in some or all aspects (such as financing) declines over time?

Table A-4. Common GRPP Activities

rking
This includes providing a central point of contact and communication among practitioners who are working the sector or area of development to facilitate the sharing of analytical results. It might also include the financing of case studies and comparative studies.
This comprises two related activities. The first is gathering, analyzing and disseminating information, for example, on the evolving HIV/AIDS epidemic and responses to it, including epidemiological data collection and analysis, needs assessment, resource flows, and country readiness. The second is the systematic assembling and dissemination of knowledge (not merely information) with respect to best practices in a sector on a global/regional basis.
This should be an active process, not just the side effect of other program activities. This may involve resolving difficult interagency issues in order to improve alignment and efficiency in delivering development assistance.
This comprises proactive interaction with policymakers and decision makers concerning approaches to development in a sector, commonly in the context of global, regional, or country-level forums. This is intended to create reform conditions in developing countries, as distinct from physical and institutional investments in public goods, and is more proactive than generating and disseminating information and knowledge.
Rules are generally formal. Standards can be formal or informal, and binding or nonbinding, but implementing standards involves more than simply advocating an approach to development in a sector. In general, there should be some costs associated with noncompliance. Costs can come in many forms, including exposure to financial contagion, bad financial ratings by the IMF and other rating agencies, with consequent impacts on access to private finance; lack of access to OECD markets for failing to meet food safety standards, or even the consequences of failing to be seen as progressive in international circles.
се
This is more directed to specific tasks than advocacy. This represents concrete involvement in specific and ongoing policy, institutional, and technical reform processes in a sector, from deciding on a reform strategy to implementation of new policies and regulations in a sector. It is more than just conducting studies unless the studies are strategic in nature and specific to the reform issue in question.
This refers to strengthening the capacity of human resources through proactive training (in courses or on-the-job), as well as collaborative work with the active involvement of developing country partners.
This includes improving regulatory frameworks for private investment and implementing pilot investments projects.
This refers primarily to physical and institutional investments of the type found in Bank loans and credits (more than the financing of studies), the benefits of which accrue primarily at the national level.
This refers primarily to physical and institutional investments of the type found in Bank loans and credits (more than the financing of studies) to deliver public goods such as conserving biodiversity of global significance and reducing emissions of ozone-depleting substances and carbon dioxide, the benefits of which accrue globally.
This refers to financing research and development for new products and technologies. These are generally physical products or processes — the hardware as opposed to the software of development.

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Annex B. Timeline

1989

• The Central American Commission on Environment and Development (*Comisión Centroamericana de Ambiente y Desarrollo*, CCAD) is established as a regional inter-governmental mechanism to promote cooperation and coordination of environmental policies and actions, protect the environment, manage and conserve natural resources, and control pollution by member countries (Initially Guatemala, Salvador, Honduras, Nicaragua and Costa Rica)

1990-1991

- The Tropical Forestry Action Plan for Central America (TFAP-CA) is developed to address deforestation and provide guidelines for forestry concessions and policies.
- Belice and Panama joined as members of the CCAD.
- Wildlife Conservation Society (WCS) & Caribbean Conservation Corporation (CCC) developed the Path of the Panther (Paseo Pantera) Concept - concept and project name proposed by Archie Carr from WCS and David Carr - CCC..
- The United States Agency for International Development, USAID, granted funding for a 5 year pilot project.
- SICA created.

1992

- The Central American Agenda for Environment and Development is prepared and presented at the UN
 Conference on Environment and Development this represented the first consensus-based regional
 position statement that encourages sustainability.
- Governments sign the Central American Convention on Biodiversity and Protected Areas, thus
 creating under the CCAD, the Central American Council for the Protected Areas.
- Governments sign the Central American Convention for the Management and Conservation of Natural Forest Ecosystems and the Development of Forest Plantations.

1993

- The ratification of the Forest convention creates the Central American Council on Forests (CCAB) to bring together the region's national forest service directors and TFAP national coordinators.
- The Central American Integration System (SICA) begins operation as the new regional institutional structure and framework for decision-making and implementation of regional commitments for peace, democracy, socioeconomic development, and the environment.

1994

- The Central American Alliance for Sustainable Development (ALIDES) is established as the regional agenda for global economic cooperation and development, social equity, environmental protection, and conservation of natural resources to strengthen the Central American Protected Areas System (SICAP), through the establishment of the Central American Biological Corridor. Therefore, the CCAD is assigned to oversee and take the lead in implementing the Corridor Initiative.
- In October, Belize, Guatemala, Honduras, El Salvador, Nicaragua, and Panamá formed the Alliance for Sustainable Development, ALIDES.
- In December the United States supported ALIDES by means of the Joint Declaration of the Presidents of Central America and the United States, CONCAUSA. This agreement established that the United States would form a counterpart to support the Central American Commission on Environment and Development (CCAD), which is part of the Central American Integration System (SICA).

1995

- The Mexican government joins the CCAD, as an extraregional member, in a pledge to establish the Mesoamerican Biological Corridor.
- CCAD with support of GTZ and GEF conducts a planning phase for a regional project to implement the Mesoamerican Biological Corridor (MBC).

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Technical assessments are conducted at the National level.

1996

- USAID, through its Central American Program (CAP), began to finance the Regional Environmental Program for Central America, PROARCA (Programa Ambiental Regional para Centro América), in support of CCAD. PROARCA's purpose in this phase was to promote greater effectiveness in the management of the Central American environment and natural resources. In this phase it had 5 components, each one implemented by companies or PDOs. Initially it was a five year- USD25 million project.
- USAID put out grants bidding for the Paseo Pantera project. Bid was awarded to PROARCA, Nature Conservancy (NC), the World Wildlife Fund (WWF) and University of Rhode Island.
- Project name changed to Mesoamerican Biological Corridor.
- The World Bank approaches the MBC topic through GEF. GEF Council approves Bank's MBC project document for Nicaragua.

1997

- The heads-of-state of Central America endorse the establishment of the MBC through the strengthening of SICAP, as a regional priority for conservation and sustainable development.
- The governments of Mexico, Belize, Guatemala, and Honduras sign the Tulum Declaration, which establishes a commitment to conserve and manage the Mesoamerican Caribbean Reef System in a sustainable manner governments of Central America signed a treaty for the creation of the MBC at the XIX Cumbre de Presidentes de Centroamérica, Panamá.
- The World Bank approves the Nicaragua Atlantic Biological Corridor Project in June.
- The World Bank approves the Honduras Biodiversity in Priority Aras Project in September.

1998

- CCAD finalizes a proposal for a regional project entitled, "Program for the Consolidation of the Mesoamerican Biological Corridor," which is submitted to UNDP/GEF-GTZ
- CICAFOC (Coordinadora Indígena y Campesina de Agroforestería Comunitaria Centroamericana), a
 regional coordinating body for indigenous and farmers' associations formulates a unified position
 asserting their role and envisioning the MBC as an option for local sustainable development for
 indigenous peoples, blacks, and farmers.
- The World Bank approves the Panama Atlantic Mesoamerican Biological Corridor Project in May.
- The first Plan Ambiental para Centroamérica (PARCA) Environmental Plan for Central America was created. It got published in 1999.

1999

- The CCAD's regional Project for the MBC is approved and funded by the UNDP/GEF-GTZ; National Technical Liaisons are hired and offices are created.
- The World Bank approves the Northen Belize Biological Corridors Project.

2000

- A CCAD-UNDP/GEF-GTZ Regional Coordinating Office for the MBC Project is established in Nicaragua.
- UNDP approves the project: Establishment of a Programme for the Consolidation of the Mesoamerican Biological Corridor.
- The World Bank approves the Mexico Mesoamerican Biological Corridor Project.

2001

- President Fox announced the creation of the PPP Plan Puebla Panama.
- PROARCA, finish of first phase, beginning of second phase. In June, CONCAUSA was reviewed and expanded. PROARCA's purpose in this phase is to improve environmental management in the MBC.

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PROARCA has 4 components to fulfill its 4 objectives, also implemented by organizations independent of USAID. These components continue the work of the first phase components. PROARCA focuses its work on four multinational watersheds.

• The World Bank approves the Mesoamerican Barrier Reef System Project.

2003

- President Fox launches Mexico's portion of the MBC as part of the PPP.
- The Northen Belize Biological Corridors World Bank's Project closes.

2005

- The World Bank closes the Panama Atlantic Mesoamerican Biological Corridor and the Honduras Biodiversity in Priority Areas Projects.
- Dominican Republic joins the CCAD as an observer.
- USAID's PROARCA's offices moved from Guatemala to the USAID El Salvador mission.

2006

- The World Bank closes the Nicaragua Atlantic Biological Corridor Project.
- UNDP project, Establishment of a Programme for the Consolidation of the Mesoamerican Biological Corridor, closes.
- The World Bank approves the Corazon Transboundary Biosphere Reserve Project.

Between 2007 and 2009, with support from the U.S. State Department and the Panthera Foundation, WCS developed multiple projects within the region.

2007

The World Bank closes the Mesoamerican Barrier Reef System Project.

2009

The World Bank closes the Mexico Mesoamerican Biological Corridor Project.

2010

• The Conservation and Sustainable Use of the Mesoamerican Barrier Reef System II Project is in the World Bank/GEF's pipeline for 2010-2011.

Sources: WRI 1995; Page and Schwarz 1996; Earth Council et al. 1997; CCAD 1998a, 1998b, 1998c, 2000a, 2000b; http://participacionsocial.sre.gob.mx/ppp.php; http://www.wcs.org/saving-wildlife/big-cats/jaguar.aspx; http://www.usaid.gov/locations/latin_america_caribbean/environment/proarca.html; http://www.ccad.ws/proarca/English/background.html.

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Annex C. GEF Financed Biodiversity Projects Implemented by IBRD in the MBC

Country	Project Name	GEF Agency	Project Type	GEF Grant	Cofinancing Total	Approval Date	Closing Date
Belize	Northern Belize Biological Corridors	IBRD	Medium Size	723,500	3,165,000	11/11/1998	6/1/2002
Belize	Community-managed Sarstoon Temash Conservation	IBRD	Medium Size	806,680	261,500	9/13/2000	5/5/2006
Mexico	Protected Areas Program	IBRD	Full Size	25,000,000	17,200,000	5/1/1991	12/31/1997
Mexico	El Triunfo Biosphere Reserve: Habitat Enhancement in Productive Landscapes	IBRD	Medium Size	725,000	1,394,700	6/17/1999	9/30/2002
Mexico	Indigenous and Community Biodiversity Conservation (COINBIO)	IBRD	Full Size	7,200,000	11,200,000	5/1/2000	6/30/2008
Mexico	Mesoamerican Biological Corridor	IBRD	Full Size	14,840,000	78,110,000	5/1/2000	
Mexico	Consolidation of the Protected Areas Program (SINAP II)	IBRD	Full Size	16,100,000	60,300,000	11/1/2000	
Mexico	Private Land Mechanisms for Biodiversity Conservation in Mexico	IBRD	Medium Size	725,000	1,100,000	8/20/2001	6/30/2004
Mexico	Consolidation of the Protected Area System (SINAP II) - Second Tranche	IBRD	Full Size	2,210,000	15,230,000	5/2/2003	
Mexico	Environmental Services	IBRD	Full Size	15,000,000	166,792,000	11/10/2005	
Mexico	Consolidation of the Protected Area System (SINAP II) - Third Tranche	IBRD	Full Size	7,350,000	7,350,000	6/8/2007	
Mexico	Sacred Orchids of Chiapas: Cultural and Religious Values in Conservation	IBRD	Medium Size	837,392	1,173,746	11/7/2007	
Mexico	Consolidation of the Protected Area System (SINAP II) - Fourth Tranche	IBRD	Full Size	5,440,000	5,440,000	9/30/2008	
Mexico	Fostering Sustainable and Competitive Production Systems Consistent with the Conservation of Biodiversity	IBRD	Full Size	11,688,182	19,200,000	3/17/2010	

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Country	Project Name	GEF Agency	Project Type	GEF Grant	Cofinancing Total	Approval Date	Closing Date
El Salvador	Promotion of Biodiversity Conservation within Coffee Landscapes	IBRD	Medium Size	725,000	3,085,000	5/15/1998	12/31/2001
El Salvador	Protected Areas Consolidation and Administration	IBRD	Full Size	5,000,000	8,400,000	9/13/2005	
Guatemala	Management and Protection of Laguna del Tigre National Park	IBRD	Medium Size	722,631	940,137	7/13/1999	3/1/2002
Guatemala	Community Management of the Bio-Itza Reserve	IBRD	Medium Size	725,000	754,000	6/10/2002	
Nicaragua	Atlantic Biological Corridor	IBRD	Full Size	7,100,000	43,600,000	10/1/1996	9/30/2005
Panama	Atlantic Mesoamerican Biological Corridor	IBRD	Full Size	8,300,000	30,900,000	5/1/1997	6/30/2005
Panama	Effective Protection with Community Participation of the New Protected Area of San Lorenzo	IBRD	Medium Size	725,000	1,501,000	6/17/1999	12/31/2003
Panama	Second Rural Poverty, Natural Resources Management and Consolidation of the Mesoamerican Biological Corridor	IBRD	Full Size	6,000,000	44,000,000	6/8/2005	
Costa Rica	Biodiversity Resources Development	IBRD	Full Size	7,000,000	13,000,000	3/1/1997	12/31/2005
Costa Rica	Ecomarkets	IBRD	Full Size	8,000,000	51,900,000	12/1/1999	9/30/2006
Costa Rica	Biodiversity Conservation in Cacao Agro-forestry	IBRD	Medium Size	725,000	2,293,000	2/1/2001	2/28/2004
Costa Rica	Mainstreaming Market-based Instruments for Environmental Management	IBRD	Full Size	10,000,000	80,303,500	3/31/2006	

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Regional Projects

Country	Project Name	GEF Agency	Project Type	GEF Grant	Cofinancing Total	Approval Date	Closing Date
Regional	Conservation and Sustainable Use of the Mesoamerican Barrier Reef	IBRD	Full Size	10,100,000	7,160,000	7/1/2000	6/30/2006
Regional	Integrated Ecosystem Management in Indigenous Communities	IBRD	Full Size	9,000,000	39,885,000	5/21/2004	
Regional	EcoEnterprises Fund	IBRD	Medium Size	1,000,000	9,000,000	4/19/2002	
Regional	Corazon Transboundary Biosphere Reserve	IBRD	Full Size	12,000,000	21,000,000	6/8/2005	
Regional	Latin America: Multi-country Capacity-building for Compliance with the Cartagena Protocol on Biosafety	IBRD	Full Size	5,000,000	10,745,200	8/1/2006	4/24/2007

Annex D. Representative Views from In-Country Interviews on the MBC

The statements contained in the table were selected for presentation as they represented some of the more common opinions or offered important insights as regards the regional MBC initiative and/or the national MBC initiatives.

Perspective	Regional MBC	National MBC			
Regional-	Civil Society/Private Sector				
level	CCAD regional consolidation program has some important elements but not appropriated by civil society.				
Actors		connectivity, especially as Protected Areas (PAs) tend to be multiple use.			
	 MBC has had little on-the-ground impact in biodiversity conservation 	at the regional-scale, partially due to strong asymmetries between			
	countries of the region.				
	Has little relevance from commercial standpoint.				
	One often hears of, but only occasionally sees, business opportunities				
	 Commercial systems are now regionalized and increasingly the few, are dominant. 	large companies in the region (especially, (e.g., Guatemalan companies)			
	NGO NGO				
	• It was not until 2002-2003 that integration of the social sector in the N	MBC really began.			
	 Still weak on ground in participation and consultation, particularly are communities and where infringement of indigenous land rights is yet 	bund PA management where little consultation or involvement of local common. Most indigenous groups are transfrontier.			
	The MBC might be a good thing, but so far its manner of implementation				
	Community knowledge neither well-appreciated nor taken into account	nt in PAs.			
	Good impacts in terms of development of laws and concepts.				
		Central America is still losing biodiversity at an undesirable rate, but in some areas there are god gains. For example, Costa Rica has hit bottom and is on the way back up; shrimp farming is no longer expanding, the area is stable. The current hotspots for biodiversity loss are			
	 CBM began and continues with too much preoccupation for forest/no 	at forest and not enough for ecosystems			
	MBC is "conservation light". It is too focused on the biggest and easi				
	biodiversity is being lost.	cot arous (e.g., surior) mino micerny many exist aspects of non			
	 Ecosystem loss is unequal across region (e.g., Darien still there bit s 	easonally dry topical forest has 3x loss rate due to urbanization).			
	 The trend in Mexico is quite positive. The last 3 administrations have policies. 	been pushing in the right direction and provided stability and better			
	 Mexico has been increasing investments in PAs (e.g., Sian Kaan) an professionalism is outstanding. 	d improving national standards and policies. The degree of			
	• Mexico is the most improved of the Mesoamerican countries in respect of biodiversity conservation. It is impressive what the federal and NGO				
	institutional apparatus is doing. The states are weak and need to improve				
	The initiative requires a much more profound reflection on the economic sustainability dimension. There is a foolishness that "more than LIS\$ 1 billion of investment in corridor". First, this scares people and second, no one can show results.				
	• There is a foolishness that "more than US\$ 1 billion of investment in corridor". First, this scares people and second, no one can show results for such a large investment, raising the question of "where did the money go?".				
	The region is now generating informationit is availablebut who is				
	The regional initiative is relevant to the extent that it serves as an instransboundary effects (e.g., for water resources).				
	transportation (o.g., for water recourses).				

Perspective	Regional MBC	National MBC			
Regional-	Government				
level Actors	 The RAF has hurt Central America and the MBC as small countries have been disproportionately penalized, leaving less opportunity for investing in regional goods, especially transboundary goods such as biodiversity, that does not respect boundaries. The objective imagine of the MBC ultimately has to do with land use, but yet the MBC has had little incidence in land use or land use policy. Land use has a strong temporal dimension and the MBC seems to lack a coherent definition or vision of, concretely, what land use is aspired to over time. 				
	 Climate change as a theme is very important to the MBC. 				
		terms of what outcomes are expected in the short to medium terms. kity of the economic, social and political dimensions, it is still early days. C at the country levels.			
	There have been strong gains on the institutional side but very little gains.	gain on increasing or orienting public expenditure.			
	 Local appropriation of the MBC has a long way to go 				
	 Unless the MBC's biodiversity conservation message and approach climate change, it will disappear. 	is relevant in terms of today's priorities of competiveness, poverty, and			
	and competitiveness agendas.	the CCAD has to get beyond these limits and engage with the commerce			
	 At the regional-level there is a lack of representation on and discussion of environmental dimensions in the official forums for economic policy. For example, in the current regional discussions of harmonization of taxation and fiscal policies, there is all mention or discussion of environment. 				
	 A confounding factor at the regional-level for the MBC is that there is no real dialogue between the private and public sectors. Given the most of the large Central American companies are now regional, there is a good opportunity for engagement. 				
	 Unequal approaches and policies in the region has created an unhealthy competition between countries, in which, environ subsidize economic development. 				
	Academic/Technical Assistance				
	 Multisectoral, central themes for the MBC – environment and "neo-liberal" TLCs – are best served by regional discussions, yet there systematic nor profound discussion of these among the CCAD and the key regional, economic and policy actors (e.g., Central Ameri Council of Ministers for Economic Integration, banking sector, transport, energy, commerce). 				
	 The MBC has to be a instrument for overall environmental managemental policy and responses for broader application. 	nent. It cannot be "only" environment, but rather a space where develop			
	The MBC is only now entering its second phase. The first phase was				
	thus is an impediment given that the nature of the MBC is land use p				
	 Globalization is not paying off for the poor, with perhaps some excepthe MBC become increasingly important for the rural poor. 	tions in Panama and Costa Rica. As the poor lose ground, initiatives like			
	• The donor agenda is shifting. The support to date from the GEF and others was very positive to get started but it has not taken the region beyond the basic enabling activities. Today there is less supportprogressively less supportfor things like environment so the enabling activities have to serve as the basis for mainstreaming.				
	The regional framework is very weak for achieving goals of mainstreaming environment into economic development. Neither SICA are generally viewed as serious institutional actors in terms of capacity, influence or vision. Central American Council of Ministers fractional Economic Integration is perhaps the only regional body that has credibility and influence in economic integration where such a disc				
	 could have impact. The MBC Business Plan was never implemented, despite the massing 	ve efforts that went into developing, negotiating and constructing political			

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Perspective	Regional MBC	National MBC			
•	consensus and agreement around it among the region's government	is, Ministers and the international community. That is a proximate cause			
	for the MBC not having achieved what it might have.				
Panama	NGO NGO	Civil Society/Private Sector			
	 The MBC has been very important for providing leverage and opening [political and institutional] doors, in developing a regional vision and in providing a sense of unity, fomenting interchanges, etc. There seems to be little follow through and support for continuity coming from region The MBC "brand name" is still relevant and important, but it needs repackaging within the current context. The MBC initiative must expand beyond the environmental sector to embrace private sector and markets. Government We need to the regional initiative to generate political support and to engage with other sectors, the Executive branch and with the Congress. The emphasis should be on the largest remaining natural areas and on transboundary issues. The goal was to have been the mainstreaming of conservation into economic development, this seems to have gotten lost. Academic/Technical Assistance The Regional Consolidation Program is fine but process was too fast, done under pressure to finish and now unclear what impact or relevancy it will have. 	 The MBC is a macro policy initiative that never has gotten off the ground. It has a lot of potential but the wrong institutions were involved (e.g., Finance and Economy not included), it lacked the right skill mix(e.g., environmental economics, emerging green markets, climate change, urbanization, real estate markets, clean production., alternative energy) and failed to work from the political-side to the institutional-side (i.e., attempted to do it vice versa). MGO The MBC is stuck in the environmental sector. Environment and economic development are still very much in conflict. It is unclear what follow up is going as regards the MBC. Unfortunately the MBC has been more discourse than action. The MBC is still very much relevant; however, it needs to be recontextualized for the current situation in Panama. The MBC approach is valid; however, it has not been implemented or there has been backsliding. Protected Areas anchor the MBC and the financing for these has not been taken up as a serious issue. Local corridors should be the emphasis. It has had little or no relevance or impact on the indigenous communities that are among the most important actors. For the Kuna, in particular, the MBC has not been relevant. A valid initiative with an invalid implementation. It has not reached the ground, it did not work with the local people or have meaningful local planning or involvement of local governments or a decentralized focus. There has been almost no capacity building to work the MBC concept at the local-level. The approach has been mostly ad hoc with scattered investment whereas with people living in PAs a systematic approach is needed. This must include participatory planning, work with local governments, decentralized instruments, local capacity building, and intersectoral policy linkages, for example, with tourism There have been structural weakness in the implementation due, a			

Perspective	Regional MBC	National MBC
Perspective	Regional MBC	 sponsored to disseminate examples, all of which has been very positive. Government There is a new understanding that conservation efforts must bring a poverty focus. There have been policy gains, for example the new regulations for EIAs includes affects to the MBC. The basics of the MBC tend to get forgotten, i.e., ensuring adequate management of Protected Areas, avoiding habitat fragmentation, maintaining connectivity, and mainstreaming sustainable use and conservation of biodiversity. We need to generate political support and engage with other sectors, the Executive branch and with the Congress. More external support from region is needed to leverage internal, political support. The MBC has been a means of increasing environmental activism in communities, for example, the Volcan Baru and Petaquilla roads were opposed by local communities and civil society on the grounds that it affected the MBC. Academic/Technical Assistance The MBC initiative should be repackage in terms of priority areas (i.e, the crown jewels of the protected areas system), free trade agreements and the opportunities they provide and public health/tourism/security. The transport sector and GOP have major roads on the drawing board yet the issue of the MBC (fragmentation) and connectivity is absent in the planning. There is a good vision within the environmental sector institutions and an incipient, but increasing capacity for intersectoral
Casta Bias	Noo	engagement, and analytical work on environmental economics. The reach of this is limited as yet by the isolation of the environment sector from the rest of the sectors.
Costa Rica	 NGO Not having impacts on critical conservation problems, e.g., fire increasing in CA (except CR). Very positive initiative, well-positioned in the region as concept, helping at national-levels (e.g., CR, NIC & HN w/changes in PAs), ecosystems map, agro-environmental agenda and beginning to work biofuels & bio-security. Challenge of environmental sector is to align and organize itself. The MBC has been important to this process. The outreach to the agricultural sector — resulting in the Agro-Environmental Agenda — has been a regional first. It has been 	 NGO The emerging threats to biodiversity include the globalization of real estate markets and residential tourism. In Guanacaste the market is booming and the aggregate impacts are unknown. Water resources are a real concern there. The connectivity work should be seeing water as a flagship resource. Not only do river, streams, wetlands and riparian areas provide natural corridors but their conservation status is critical as provide such high habitat values. The successful corridors are local initiatives.

on joint, regional initiatives. This aspect has been very relevant for regional indigenous and campesino organizations. A syet there is little impact on the ground; the MBC ceated big expectations but has not yet delivered. It has had a large impact in information generation. The initial "overly conservation-oriented" focus was a weakness. There are now a new generation of projects which a more mature and better focused. However, it is not clear that this maturation has advanced learning in face of changing governments. For other than those actively involved, there has been too little information and too much misinformation available. Attention is needed on better communications and the weak environmental sector divorced from the economic sector. This is the first initiative of this size where public debate has been diverse, broad and, in some ways, allowed. There have been structural gains, e.g., community opposition to illegal logging Nicaragua and Honduras are in part from the MBC consciousness raising In general there is a polarization between sectors as each is not getting what it wants, yet there have been some successful cases of government & communities communities communication with each or organization between sectors are each is not getting what it wants, yet there have been some successful cases of government & communities communities communities communication with each organization between sectors are each is not getting what it wants, yet there have been some successful cases of government & communities communities communities conditions to establish do not make the proportice being generated in other sectors are not convincing, e.g., bono tecnologico in Honduras; there is an opportunity here for the environmental sector to provide some leadership and intellectual input. Government Need to re-direct MBC toward changing problems and get involvement of Finance, Commerce, Economy. MBC has had a good promotion and coordination program. The MBC has had a good promotion and coordination pr	Perspective	Regional MBC	National MBC
riogetherness*. This has brought progress in aligning and working on joint, regional initiatives. This aspect has been very relevant for regional indigenous and campesino organizations. As yet there is little impact on the ground; the MBC ceated big expectations but has not yet delivered. It has had a large impact in information generation. The initial "overly conservation-oriented" focus was a weakness. There are now a new generation of projects which a more mature and better focused. However, it is not clear that this maturation has advanced learning in face of changing governments. For other than those actively involved, there has been to little information and too much misinformation available. Attention is needed on better communications and the weak environmental sector divorced from the economic sector. This is the first initiative of this size where public debate has been diverse, broad and, in some ways, allowed. There have been structural gains, e.g., community opposition to illegal logging Nicaragua and Hondrusa are in part from the MBC consciousness raising. In general there is a polarization between sectors as each is not getting what it wants, yet there have been some successful cases of government & communities coming logether; and each moderating its expectations and getting better at talking and working together. The MBCs are not visible in the MBC agenda. The supposedly propor policies being generated in other sectors are not convincing, e.g., bono tecnologico in Hondruss; there is an opportunity here for the environmental sector to provide some leadership and intellectual input. Covernment Need to re-direct MBC toward changing problems and get involvement of Finance, Commerce, Economy. MBC has had a good promotion and coordination program. The mBC did not translate well from the national-levels to the regional-level, due in great part to the asymmetries in the region that make development of generalized policies. The absence of a regional financing mechanism has been a severe	-		Government
 The MBC did not translate well from the national-levels to the regional-level, due in great part to the asymmetries in the region that make development of generalized policies. The regional initiative has not been very relevant to the countries. The absence of a regional financing mechanism has been a severe Executive-level initiative to develop territorial consensus on development patterns and land use with all sectors (Paz con la naturaleza) There has been value added from the regional initiative. MBC ha provided a favorable political framework within which theme of the provided a favorable political framework within which theme of the provided and the provided	Perspective	 very difficult institutionally to achieve this advance. The MBC was a regional win. It brought a vision of "unity" and "togetherness". This has brought progress in aligning and working on joint, regional initiatives. This aspect has been very relevant for regional indigenous and campesino organizations. As yet there is little impact on the ground; the MBC ceated big expectations but has not yet delivered. It has had a large impact in information generation. The initial "overly conservation-oriented" focus was a weakness. There are now a new generation of projects which a more mature and better focused. However, it is not clear that this maturation has advanced learning in face of changing governments. For other than those actively involved, there has been too little information and too much misinformation available. Attention is needed on better communications and the weak environmental sector divorced from the economic sector. This is the first initiative of this size where public debate has been diverse, broad and, in some ways, allowed. There have been structural gains, e.g., community opposition to illegal logging Nicaragua and Honduras are in part from the MBC consciousness raising In general there is a polarization between sectors as each is not getting what it wants, yet there have been some successful cases of government & communities coming together, and each moderating its expectations and getting better at talking and working together. The MDGs are not visible in the MBC agenda. The supposedly propoor policies being generated in other sectors are not convincing, e.g., bono tecnológico in Honduras; there is an opportunity here for the environmental sector to provide some leadership and intellectual input. Government Need to re-direct MBC toward changing problems and get 	 Environment in current development context is seen as limiting growth. It is in competition with other sectors and is losing support in the debates over public budgets Land values rising, current conservation incentives inadequate; what new incentive approaches are needed in the face of such high land values? The MBC was important to Costa Rica's Ministry of Environment, Energy, and Telecommunications; it gave it a greater local projection. Government had gotten out of provision of extension services and MBC gave a means of re-engagement through setting up local commissions, re-engaging with indigenous peoples on PAs. Then the PES programs came along and consolidated the approach. The MBC has been important both nationally and locally. GOCR has recently established a national Biological Corridor Program, whose role is to be the focal point for (sub national) regional coordination, develop networks of local corridors, facilitate & assist to find financing. Each Conservation Area has a coordinator tasked to facilitate & establish communication with each local corridor initiative. Each local corridor has a Commission (as per Biodiversity Law) To make local corridors and conservation initiatives work, small grants programs are key. Have completed a new analysis (GRUAS II) for definition of conservation and corridor priorities. Used better approach and included socio-economic criteria, a gap analysis and stakeholder consultations to establish priority areas based on local dialogues & valid participation. First outcome was new marine/coastal corridor for Islas Del Coco. Political will to support environment and MBC exists. There is a discussion on more than double PES program (currently US\$30 million), Finance wants \$80 million). The error from start with the PAs was to not insert management
 The MBC did not translate well from the national-levels to the regional-level, due in great part to the asymmetries in the region that make development of generalized policies. The regional initiative has not been very relevant to the countries. The absence of a regional financing mechanism has been a severe Executive-level initiative to develop territorial consensus on development patterns and land use with all sectors (Paz con la naturaleza) There has been value added from the regional initiative. MBC ha provided a favorable political framework within which theme of the provided a favorable political framework within which theme of the provided and the provided		involvement of Finance, Commerce, Economy.	The error from start with the PAs was to not insert management
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Fund would provide for that need for small grants and loans, but it went to other sectors. Overall CR's contribution to the MBC includes 40 local corridors prepared, 10 under actual implementation, GRUAS I & II.		 The regional initiative has not been very relevant to the countries. The absence of a regional financing mechanism has been a severe limitation. It was expected that the Central American Environment Fund would provide for that need for small grants and loans, but it 	 provided a favorable political framework within which theme of biodiversity conservation and productive use became high profile. Overall CR's contribution to the MBC includes 40 local corridors

Perspective	Regional MBC	National MBC
	A principal weakness — and this is where the MBC should have been more proactive — has been the inability of countries to conceptualize the role that natural resources play in economic development. Sectors plan in silos, and lacking vision, see	The local corridors are doing well. They tend to be local farmers and land owners initiatives, focused on potable water supply, economic incentives in form of eco-tourism, and coffee. Academic/Technical Assistance
	 development as a zero sum game. The MBC cannot survive on biodiversity alone. It needs intersectoral linkages and focus (e.g., water, climate change, agriculture & biofuels, real estate markets, etc.) 	 Local corridors are one of the landscape management approaches showing promise, there are at least 34 in CR. The corridors are people-oriented and provide a forum and support local for political processes.
	Given the lack of continuity in government, there needs to be constant work on the political agenda and the political positioning of the MBC. This aspect has not been strong in the current MBC program. After Dis "austriable development" was an augment's grands.	Seeing the corridors functioning for social connectivity, i.e., they are facilitating social cohesion locally around what local farmers and land owners see as threats from urbanization trends and inmigration and loss of traditional community structures. Small funding sources are peopled to supply those processes.
	 After Rio, "sustainable development" was on everyone's agenda. This is not so today; themes are now of fiscal systems, how public expenditures are prioritized, and themes like environmental goods & services need to be looked at in function of commerce. 	 funding sources are needed to sustain these processes. The "ecological connectivity networks" that corridors promote function to get a critical mass of local people involved in the corridors.
	Academic/Technical Assistance It is not too clear how much advance the MBC has advanced from concept to impact, but one should not be too critical as the MBC has played an important role.	To date there has been some very solid, but still initial, work with local landowners to define functional corridors. There are some good successes, including with a bi-national, local CR/Nicaragua corridor; this developed through local initiative despite the political
	 The MBC's relevance has been through raising local, ad hoc actions to a level of priority that is on the agenda of Ministries of Environment, the international cooperation, and political decision makers. The MBC has contributed both greater coherence and a higher profile to biodiversity, environment, natural resources and 	 conflict that had heated up at that time over national boundaries. The Costa Rican Ministry of Environment, Energy, and Telecommunications/El Salvadoran Ministry of Agriculture and Livestock agreements on sustainable agriculture and land use are facilitating work at local level
	 conservation. If the MBC ultimately is the people who live on the land and the unity and sense of "together" that this inspires, than the regional 	The initial success of the local corridors is engendering interest in other types of local corridors around topics like food security and tourism). and self-financing. The MRC of the local corridors around topics like food security and tourism).
	 program is too far removed and it is not clear how it is relevant on the ground. The new program for the focuses too much on "what" and not enough on "how" and "how" must be through economic instruments. 	The MBC and the development of local corridors as a conservation tool has brought an improved focus to PES. Conversely, the PES is proving to be a strong incentive for local groups (farmers, landowners, communities) to plan and certify their local corridor. The conservation incentives are now targeted to local corridors.
	 The bet of the MBC was on moving environmental considerations into other sectors. Little concrete progress has been made here. The MBC resides in the gap between political dialogue and 	Local corridor initiatives are starting up everywhere. The PES funds have made the corridors relevant to rural communities. As well, this is better aligning the SINAC with local initiative.
	 institutional capacity to deliverthere is a lot of cloth to cut yet. A good plan for the MBC was developed — the MBC Business Plan — but it was not implemented. A lot of effort went into that Plan but advantage was not taken of it. A lot of opportunity was lost as a 	The implementation of the MBC in CR represents next generation approaches. There is an integration of GRUAS II, the SINAC and local institutions. This is making the MBC much more comprehensive.
	 result. The MBC lost its sense of priority it became all things to all people. 	During the last six years biological corridors have been a big deal, a priority. But yet, it is still only an environmental sector initiative. No other sectors participate or care much about the MBC or local

Perspective	Regional MBC	National MBC
	 The MBC is one of most widely known conservation initiatives in the world. The MBC of the future must be proactive on environmental governance; green production/markets/chains; climate change and raise again the political profile environment. 	 corridors. For example, MOPT is a key actor but knows nothing about corridors nor issues of connectivity and fragmentation. PES payments to landowners in corridors constitute a fairly blunt instrument for biodiversity conservation. From an ecological perspective, the scale of the conservation engendered and the efficacy of the targeting mechanism for scarce conservation dollars leave much to be desired. More focus is needed on the landscape scale vs the patch-scale. This requires a focus on broader natural resources governance and use of monitoring tools to understand the degree of appropriation, awareness and ownership at the local level. There may be more short-term potential to develop such approaches around key species such as the Lapa Verde (Green Macaw).
Honduras	NGO	NGO
	 CCAD pushed many different initiatives under the MBC that were perhaps relevant to the CCAD but not so much to the countries. Some of the positive contributions of the MBC included putting biodiversity conservation on the regional agenda and raising the issue of how biodiversity conservation can contribute to poverty reduction. This has lead the region more and more into the management of PAs with softer conservation vs harder protection approaches. More attention is needed on the issues of sustainable land management as a means to developing and conserving corridors. For the issue of PAs in the MBC, the focus should be on ensuring adequate representivity in the PA system and then consolidation of the management of the priority PAs. CCAD did not carry out one its its main role in the MBC: To develop consensus around the MBC and reconcile opposing views. This has severely limited the potential of the MBC. The big themes at the regional level are commerce, economic development and biodiversity conservation. However, the commerce and economic development discussions are separate from the and biodiversity conservation discussions and vice versa. A sharper set of territorial and conservation priorities is needed. The TNC Ecoregional Plan for CA could provide this. The range of environmental issues requiring attention go beyond the MBC as an instrument. The MBC should simply focus on consolidation of and effective management of the PAs and the maintain a stricter biodiversity conservation focus but with people and within the economy. 	 At one time the concepts were well-defined geographically, i.e., had priority sites and connectors. However, over time this was diluted by the overly broad conceptualization of the MBC. The MBC made sense geographically when it was a clear vision of PAs, then connectors, then regionally important areas and frontier areas. As the MBC lost its objectives of biodiversity conservation and focused more and more on much broader sustainable development and social objectives, it also began to lose operational relevance. Too much of the MBC resources were consumed by studies instead of on-the-ground investment. Too much focus was placed on conservation of existing forests, too the exclusion of important areas where the poverty/degradation nexus was the issue. PROBAP's work on prioritization of conservation areas was very important for the MBC in Honduras; it was well-done and is being taken up again in the development of the current conservation strategies There is a lack of social capital around PAs and this strongly limits their management possibilities. There is a need to create social networks around the PAs. The same doubts exist today as there were 10 years ago. If you cannot consolidate the PAs, what is the relevance of the MBC? The PAs are the anchors and what you are connecting. Indigenous land issues are critical to the MBC and government is not attending to this issue as it should. Actually, the government is too often directly behind the destruction of natural areas.
	The "MBC" as a phrase did not come from indigenous communities and it is not an indigenous initiative. It is unclear what the	The current land administration program is a good thing; we need the cadastre and the land use planning to be able to know the

Perspective	Regional MBC	National MBC
Perspective	 international interests are around the MBC and why it has so much support from these. The last five years the PPP has been very alarming to the indigenous people, mostly due to lack of information and fear of expropriations and further marginalization through development processes. Indigenous people hope to use the dialogue with the international cooperation to improve this situation. 	 "where" and "what." But, we are not taking the next steps of planning and investment. New challenges: biofuels, hydropower, competitiveness, niche markets Government MBC was not an initiative of the current administration, it was inherited. The MBC is a paper initiative. There has not been large scale
	 The MBC is very important in the lives of indigenous peoples and it has a future. But, much work is needed with governments at the national-level and indigenous people to improve impact. The MBC needs to build from the national to the regional; however, to date has been the other way around and it is not working. The MBC must have a focus on economics and commerce. Government The MBC is only one instrument, and its central use should be 	 investment in its central objectives of biodiversity conservation, there is no continuity between projects. The MBC seems more a fund-raising strategy than a biodiversity conservation iniative. The MBC concept is well-established and very well-know by indigenous groups; that alone is a transcendent achievement. The most recoverable part of MBC is its image; focusing on local and transnational corridors give it relevance in a regional sense. Environment is an important, high profile issue but is institutionally
	 consolidation of the PAs and pursuit of biodiversity conservation goals through social and poverty reduction goals and as a means of economic development. The MBC appears as a regional project that no longer responds to national realities. It pursues its own top down, regional agendas. We need a new form of working together at regional-level. 	 the weakest. SERNA has internal conflicts of interest as it is charged with biodiversity, mining, dams, hydropower, and biofuel plantations. Also, the lack of coordination, dialogue and policy coherence between SERNA and the other public sector, natural resources agencies (agriculture, forestry, PAs) makes things more difficult.
	 The environment sector is in no position to negotiate with regional, macro-programs like PPP. The Program for the Consolidation of the Mesoamerican Biological Corridor is not relevant. The MBC has lost its prestige. The new generation of conservation professionals do not see its overall value; some aspects of it, such as the Regional Strategic 	 Everyone talks about biodiversity, even the President, but it is no more than a green façade, there is a lack of action. It is not possible to confront the emerging threats from tourism in coastal zones, from African oil palm, from hydropower, etc. due to a lack of coherent development policies and intersectoral dialogue. The PPP could be a platform for mainstreaming environment into
	 Biodiversity Monitoring and Evaluation Program (PROMERBIO), yes, the rest, no. There is no feeling at this time that the G-16 is pushing "environment." The push is on the Poverty Reduction Strategy and commerce. If the external cooperation is not marketing environment, then little will happen. To promote foreign and local investment, government has 	 economic development. The environmental sector is in no position to negotiate with macroprograms like development of the Moskitia, biofuels plantations or even to moderate a dialogue around such. We can only hope large projects can help, but even these projects have weaknesses (e.g., if Corazon project get involved with the Patuca II hydropower issues, it will lose).
	historically exempted from taxation such principal sectors as commerce, tourism, the maquilas, etc. Now that the coastal corridor (Tela to Progreso) is rapidly developing and these same, exempted sectors are driving the development, there are no revenues generated for infrastructure, water and sanitation or other environmental protection. From a land use and environment perspective, it is primarily the sectors reliant on natural resources for raw materials (e.g., agriculture, forestry) that pay taxes.	GOH's social expenditure priorities are in education and environment; particularly PAs and forest fire in the latter. If there were a good environmental strategy with supporting plans, possibly as much as \$100 million could be mobilized through, among others, the EU's "results-based management" funding. The problem is always packaging up convincing programs for financiers. The EU, Swiss and other European countries are searching for good environmental investments.

Perspective	Regional MBC	National MBC
	At the regional-level [in the SIECA], environment is neither represented nor discussed in the [Central American integration] dialogue on economic and fiscal policy.	 The MBC is important and SEFIN is certainly aware of it. The most complex themes in negotiating CAFTA were environment and labor. We have very little public resources to meet the requirements to which we have agreed. The link between environment and commerce is vague to us yet, this is where attention is needed and we must somehow promote environment through competitiveness. Public expenditure on environment has been minimal. In the past we relied on grants and debt cancellation, now funding for environment must be financed with national funds as part of the government budgets.
Nicaragua	 Government MBC impact has mostly been institutional and political. Little impact on conservation per se and little appropriation among key actors in the region (i.e., national and local). MBC needs to be more intersectoral. SIECA continues as a narrow, sectoral institution. It is not a platform for dealing with cross-cutting issues of environment and economic development. Clearly there has been some quite good "download" from the regional MBC to the countries, for example, the MBC as a priority space for biodiversity conservation is formalized in the EIA laws/regulations in Panama and Nicaragua. There is a lack of development of operational poverty reduction and environmental linkages that would serve to develop opportunities for achieving MBC goals. Without concrete links between the MBC and production, competitiveness and commerce priorities, the MBC will continue to be "preaching to the choir". Biodiversity conservation has to be in function of people. There is still a conflict over the "B" in "MBC". Some want a biological corridor and some do not. The MBC transcends geographic space because outside forces effect what happens in the prioritized, geographic areas. Certainly, thematically the MBC transcends the narrow definition of its space. Looking back, the MBC initiative was not efficient. Looking forward, it must be. MBC has been an instrument to create the will for sustainable development and conservation of our natural patrimony. But, we also need to have greater impact, so we need more hard information, more analysis and quantification of the benefits from achieving MBC-type goals. 	 Fatal errors in the national MBC's launch: (i) concentrated on conservation, ignored multi-sectoral dimension; (ii) defined by perspective of biologists, failed to look at territorial priorities and so failed to be appropriated in the territories; (iii) no appreciable impacts in territory, and therefore no appropriation as no productive outcomes. Has been important for biodiversity, connectivity, habitat, etc. and for regional integration by opening dialogue and leading to regional agreements, policies and strategies. The MBC only preaches to the choir; it needs to be relevant in the contexts of CAFTA and the regional and national environmental and commerce agendas. There are new threats from biofuels (oil palm) as well as the old ones from deforestation, influential political and economic actors, livestock, pesticides around Lake Nicaragua, etc The main impact was to establish a framework and provide new instruments for conservation and sustainable development within the regional integration framework. PARCA is a product of the MBC and MBC is now a component of PARCA. Nationally local corridors are becoming an important tool and strategy for conservation. In parallel to the Atlantic GEF project, developed the Rio San Juan, Esteli, Golfo Fonseca, and others corridors. The future (relevance) of the MBC lies in economic valuation of environmental services. The Central Bank is working to get environmental agenda (with its strategic lines of organic production and silvopasture). There should be more attention to local corridors based on reforestation as in Paraguay.

Perspective	Regional MBC	National MBC
	 The MBC image is still valid, but it needs a re-contextualization within current realities (such as PPP) Initially, there was a good understanding of how the MBC and the PPP should relate. However, as time went by this understanding was lost and the whole idea lost vision, credibility and respect. PARCA and CAFTA are the two over-arching regional themes in which the MBC must prove its relevance. CCAD needs to be more a facilitator than a technical agency The value-added of the regional-level has is in areas such as the harmonization of norms and regulations for PA management and tourism, in land use planning; in finding responses to the advance of the agricultural frontier and management of transfrontier ecosystems and harmonization of EIA processes. For promoting sustainable or green or certified production, one technical obstacle is that such markets are niche. In the system of generalized trade, the World Customs Organization does not differentiate between green or organic or sustainable and conventional products. As a result, they are not really recognized in trade negotiations or macro-policy and as such are marginalized. There is a great need for a regional system of tourism integration. Academic/Technical Assistance A lot of learning in national projects (working with indigenous communities, development models, how to implement local conservation schemes, etc.) All of this needs to be systematized and disseminated regionally as a "how to do" Regionalization not working well due to asymmetries and differing priorities between countries. The MBC concept and brand mark are still good but now must develop the multi-sectoral links to be relevant in terms of CAFTA, ALBA, biofuels, climate change, transfrontier illegal logging, environmental services markets, fiscal policy, etc. The PPP entered in parallel to the MBC and became counterbalance to it. Politica	 As the Nicaraguan Ministry of Promotion, Industry, and Commerce, we see the MBC in the context of the PPP. It is an instrument for conservation of PAs, for connecting PAs and for dealing with hardcore poverty as the MBC is covers an area where the extreme poor live. The "green" commercial agenda is around certification (especially coffee) thru the ICO. We are in trade negotiations with the EU which are potentially worth quite a lot of money, and their markets are more demanding on green and social issues. To promote investment, especially real estate and hotels, we are providing a large environmental subsidy (e.g., allowing clearing of mangroves and forested lands) as well as exempting them from taxes. Environment is not seen as a strategic area for commerce as in Costa Rica. The MBC has revealed the links between conservation, social needs and economic development, it has raised the level of debate on sustainable use and biodiversity and also raised the profile of indigenous issues. Tourism has failed to capitalize on the MBC Ecotourism and sustainable tourism has little political support at the regional-level nor nationally are we prepared yet to work on this. 100% of MARENA's financing, including of staff, comes from projects. The current government wants to move it 100% on-budget The available GEF funds for Nicaragua (\$3.8 million) will be divided half to the PAs (of \$3.8 million) and the rest to "download" from the MBC regional consolidation program those things that are compatible with national priorities. Academic/Technical Assistance MARENA has not really promoted the MBC as a national policy, it is seen as wholly a donor initiative. The environmental sector is perceived as an obstacle to development. Win-win alternatives and opportunities are not seen (vs example of Costa Rica). The lack of political visibility is the fault of the envir

Perspective	Regional MBC	National MBC
Perspective	Civil Society/Private Sector Governments have been the principal promoters of environmental degradation (e.g., cattle incentives). In this context, agricultural and energy policy are key areas that should be looked at regionally. International cooperation needs to look to its own house in terms of realignment and consistency of policies as regards economic growth and social/environmental issues. It is important that the MBC be positioned, with respect to the PPP, as an external reference rather than within the PPP itself. Within the PPP the MBC is denatured. In general there is a need to raise the level of interest and efficacy of both polices and the institutionality of environment and natural resources. At present	 project offices closed and the computer equipment distributed Environment and gender are seen as cross-cutting themes rather than sectors to be prioritized. Priority sectors are health, housing, water, transport, and energy. NGO Nationally the MBC has not really put its feet on the ground, there are few local corridors. There are now more than 80 private reserves in countrythat is a contribution to the MBC Themes of environment and natural resources are of major interest not because of work by the environment sector to promote interest but rather due to the growing conflicts around water, energy, and natural resources; especially in indigenous areas. The value-added of the MBC for Guatemala is an unknown When government thinks that any investment is good investment,
	 actions are too disperse and offimes incongruent between sectors. It is important to clean up the entire process of the MBC and refocus on creating political will, a strategic vision, participation of of local population and governments, and civil consciousness; raising these once again to the level of the macro-political dialogue. The process needs to be open, transparent and well-conducted by a mixed Central American and international cooperation consortium. The MBC needs to be looked at in the context of climate change, biodiversity, desertification, persistent drought, etc.; this from a perspective of local and national needs and priorities. One does not see any coherent vision or approach for the MBC. The major actors should try and develop such. This includes the international cooperation for the MBC (GEF, Holland, GTZ, WB, CI, TNC, WWF, UICN, ASDI, USAID, Danish International Development Agency, OEA, etc); the regional organizations of the SICA (CCAD, CCAB, Central American Council for the Protected Areas, Central American Agricultural Council, CRRH, etc.); and other regional organizations such as CATIE, INBIO, UICN, Pan-American Agricultural School of ZAMORANO, EARTH University, Coordinating Association of Indigenous and Community Agroforestry in Central America ACICAFOC; Central American Indigenous Council; Federation of Municipalities of the Central American Isthmus FEMICA, etc. Each group needs to get together and agree on their own proposals first. 	 environment suffers. To overcome policy and institutional instability within and between administrations requires the development of national-level financing mechanisms to provide stability (e.g., PINFOR, new debt-for-nature fund of \$24 million to pay incentives). More PINFORs and National Forest Investment Funds are needed. We are working with 50 municipalities to develop a conservation strategy that includes indigenous PAs and municipal/regional PAs and local corridors. The MBC projects did not align with the regional MBC initiative. There has been a lack of promotion and communication. No one understood what the national MBC was and there was never a vision developed or a focus in the country that allowed integration of environment and development or coordination with or through the MBC. It has been only a paper initiative. There is a need to promote an institutionality and policy context for the MBC. To do would require restructuring. Look at the Millennium Challenge Corporation with its 3 pillars of governance, civil society, cooperation. We need to look at the physical description of the corridor in light of social and cultural aspects, as well. The biophysical side is extremely important too, but elements like the World Banksponsored Indigenous Profiles have not been well factored in to add economic and social dimensions to the environmental dimensions.
	 NGO The MBC is still an important regional concept, including as a 	The Ministry of Public Finance has little knowledge of the MBC and
	platform for sustainable development and for developing a	it is not clear what it is pursuing. Commerce and poverty reduction

Perspective			National MBC		
	transfrontier/regional integration agenda.		are the priority themes and there is little budget for environment.		
	• The main clients of the MBC — because they are the de facto land	•	MARN only source of funding are GOG funds. With the limited		
	managers — are the rural poor and indigenous. Unfortunately one		funds available MARN prirtotizes and water and watershed		
	sees little concern for them.		management.		
	 The MBC is worth the effort as an instrument for biodiversity 	•	MARN is not good at presenting, justifying, and defending its		
	conservation.		budget in the budgeting process.		
	 There is a need needs to look at strategic economic lines and 	•	CAFTA has brought MINECO and MARN together, really for the		
	policies, not just in high biodiversity areas but among the major,		first time, to implement its environmental conditions.		
	land-using, production systems (cattle, plantation crops).	•	The trade accords with the EU have political, commerce (TLC) and		
	Vulnerability and climate change are two other important topics.		cooperation (TA) aspects but so far nothing on environment.		
	 TLCs, CAFTA and expanding markets (EU, China, Chile) will 	•	The Chambers of Commerce can bring in actors — coffee and		
	demand more area, more energy, and will push into more natural		sugar are the two most powerful - as a means of seeking common		
	areas. In the long term, probably only PAs will remain as natural		ground on environment and commerce		
	areas. For example: biofuels demand has doubled corn prices and	•	The Small and Medium Enterprises represent a major green		
	we are seeing invasion of PAs to plant maize for the first time in 12-		commerce opportunity (e.g., for medicinal plants, herbs and teas)		
	15 years.	•	CONAP's main areas of work are corridors and PAs, making them		
	A minimum goal should be to preserve at least 10% of all		the logical counterpart for the MBC. CONAP is supporting several		
	ecosystems.		local corridors, example are in the northeastern part of the Mayan		
	The MBC as an environmental management initiative of the		Reserve through community forestry concessions; the Scarlet		
	Ministries of Environment is not sensible. The real MBC issues		Macaw corridor to Laguna del Tigre; and the south coast corridor		
	revolve around water, agriculture, and land use policy and planning		from Monterrico to El Salvador.		
	institutions. The MBC was captured and short-circuited in the	•	Local corridors are important to stabilize PAs and for providing		
	Ministries of Environment. It makes more sense that it be part of the		tenure and resource access security.		
	Agro-Environmental Agenda. Agriculture, water and tourism are where the MBC can and should focus. Water and energy are of	•	We have a binational corridor with El Salvador in the context of		
	interest to all and these are the issues that will eventually hurt us		Trifinio and with Honduras from Cosuco to Punto		
	the worst if not well handled. Water, energy, tourism and		Manabique/Merendon and this we can link with Sierra de las Minas.		
	biodiversity go together.	•	By using the MBC map we have strengthened the definition of our		
	We need a Regional Tourism/Environment strategy.		priorities to include corridors within the PAs themselves, not just between them. In the Biosphere Reserve we have about 15 PAs		
	It is important to continue with the MBC and to use it to pressure to		that we wish to connect internally and externally, the latter through		
	coordinate policies.		project Jaguar to connect with Mexico and Belize.		
	So far the MBC has not been very effective in achieving	•	The central strategy for biological corridors is one of co-		
	biophysical, policy or appropriation goals.		management with local authorities and communities. The		
	The CCAD Technical Secretariat needs to be more proactive on the		challenges in co-management are the PA management and		
	policy side.		providing local benefits.		
	We need to look at the physical description of the corridor in light of	•	Communities are rejecting further national PA declarations but		
	social and cultural aspects, as well. The biophysical side is		there are opportunities for local ones, such as in Todos Santos		
	extremely important too, but elements like the World Bank-		where municipal land use planning process resulted in the		
	sponsored Indigenous Profiles have not been well factored in to		deciration of a municipal park with community management. World		
	add economic and social dimensions to the environmental		Bank should help strengthen the community end.		
	dimensions.	•	There is a complete divorce between the MBC and INAB whereas		
	At the regional-level it is less polarizing when you deal with what		PINFOR and other INAB programs offer instruments for the MBC.		
	are conflictive issues at the national levels.		INAB has a program that working on concepts of connectivity with		

Perspective	Regional MBC	National MBC
	Secretariat for Environmental Matters under the SIECA. Among others there is a need to identify where the high value/high return environmental opportunities lie with CAFTA. Need to inject the MBC into the private sector. Green markets are a topic of concern for private sector as the growing market demand is seen as implying increased costs. A regional opportunity exists for	
	developing green certification but this lacks a legal framework. At the same time, developing a legal framework for commerce and environment would be difficult as frankly, environment is seen as a nontariff barrier to commerce and trade.	
	 The concept of corridors should be as cross-cutting spaces for environmental services, using that to leverage cooperation with other sectors, using the PAs as anchors and salvaging the (lost) wildlife focus. 	
	 The MBC is important as we can do more as a group than as individual countries. Yes, there are asymmetries but there are also a lot of cultural similarities (e.g., Atlantic zone very similar throughout the Isthmus). It is important to work on agriculture and PES. Presently, however, there are almost no resources for regional "glue" activities to make this happen. 	
	The MBC's gains have been modest but one takes pride in the initiative and its global uniqueness.	
	 Academic/Technical Assistance It was a very big mistake to associate the MBC with the PPP. There is a need to delink if the MBC is to be successful. 	
	The Regional Integration Agenda has left environment behind; it real terms, it is focused only on economics and commerce. The Regional Integration Agenda has left environment behind; it real terms, it is focused only on economics and commerce.	
	 ALIDES remains the political context for the MBC even if the CCAD has strayed from this. ALIDES has the force of a treaty. EU demand may actually push for better regional alignment with it. 	
	 The big themes of the day — besides commerce and poverty — are vulnerability, water, and climate change. There is a need to work to change public policies in function of these as the national economies are vulnerable to these and they are key environmental issues. 	

Perspective	Regional MBC	National MBC		
Belize	The Mesoamerican Barrier Reef System is a separate initiative from the MBC.	 The MBC in Belize has been disappointing, with only lip service being paid to it by government. The original work on developing the national MBC was very valuable. The studies and the resulting initiative are still being used by NGOs as a basis for their strategies, i.e., the idea of corridors between PAs. There was a lawsuit to justify private protected areas as corridors. Belize still has a functional corridor. The Maya Mountains to Petén corridor is now broken. It has been deforested and the jaguars gone since 10 years back. Harpy eagles follow the corridor. They are being released in Belize. 		

Annex E. Country Assistance Strategies Review

Country	CAS date	MBC Mentions	Location
Belize	2000	Safeguarding the Environment and Indigenous Culture to facilitate Tourism Expansion. The support of the Bank and other donors to the 1996 Environmental Report and the 1996 NEAP have been complemented by the GEF-supported Meso-American Biological Corridor (MBC) project and the Northern Belize Biological Corridors (NBBC) project which are currently under implementation. The aim of these projects is to secure long term conservation of bio-diversity of global importance in the Mayan lowlands by maintaining ecological linkages between protected areas across northern Belize.	Page 18 - number V
		To address these challenges, the government has identified four main areas of emphasis for the coming years maintaining macroeconomic stability, strengthening trade and competitiveness, sustaining social progress with particular attention to reaching indigenous and Afro-Costa Ricans, and continuing Costa Rica's leadership on environmental issues.	Executive Summary par. iii
		In the environmental sector, the forestry sector review was one of the first attempts worldwide to value the individual components of the forest, including the biodiversity, carbon captured, wood and other values, and it greatly influenced the government's intervention in the sector. The work led to one of the first environmental service payment schemes in the world, which is now being emulated around the globe. This program is being supported by the Bank in the innovative Ecomarkets project, and a second project has now been requested by the government to make the sector financially self-sufficient. In addition, in agriculture, although a planned agricultural sector reform project never became effective, the preparatory analysis and policy dialogue also influenced the sector considerably - for example, the government retired from grain marketing, and implemented market based reforms in technology and other reforms. Finally, in the areas of indigenous peoples and gender, the Bank supported government efforts through IDFs, which (although they weren't implemented in full) helped define policy for indigenous peoples, including the development of a national indigenous profile and a development plan, and helped mainstream gender analysis into most of the ministries.	Page 5 - Par. 15
Costa Rica	2004	Ecomarkets Project Costa Rica's progressive environmental policies have fostered the development of an important ecotourism industry and the Bank has been helping Costa Rica to address some cutting edge environmental problems through the Ecomarkets project. This project is financed by a combination of an IBRD loan, and grants from the GEF and the Prototype Carbon Fund and aims to foster biodiversity conservation and preserve important forest ecosystems on privately owned lands outside of government protected areas in the Mesoamerican Biological Corridor. The Bank, through the Prototype Carbon Fund (PCF) and related carbon finance vehicles, has taken a leading role in the early implementation of the Kyoto Protocol and can be help to further develop Costa Rica's growing carbon trading market by new project development, capacity building and replication of best practices. Special efforts are undertaken to link carbon finance benefits to community development and poverty reduction. Current efforts are centered on the Renewable Energy Umbrella Project, which replaces fossilfired electricity generation with a package of mini-hydro and wind subprojects. Further potential has been identified for projects that aim to use landfill gas for power generation and thereby further improve sustainable waste management practices, for new renewable electricity projects, and for activities in the forestry/land management and transport sectors.	Page 24 – Par. 68
		Environment/Ecomarkets II Project (FY06 US\$30 million) This loan will be focused on enhancing the financial sustainability and value added of the country's protected area system (public and private). Having made a major decision on the use of such a large part of its land, the country could generate much greater returns from its protected areas by improving access and making parts accessible to tourists with minimum facilities such as small museums, paths, and other amenities which in turn could generate substantial returns from higher entrance fees. It is anticipated that the park system would become	Page 31 - Par. 81

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Country	CAS date	MBC Mentions	Location
		financially sustainable, rather than a burden on public finances. The same is true for the payments for environmental services, where a more concerted effort to extend the (small) fees to more users could also make this close to self sustaining, while protecting the environment and reducing poverty. In addition to the Ecomarkets Loan 11, the proposed GEF grant for the Central-America Indigenous Integrated Ecosystem Management Project would also support the conservation and use of the rich natural resources by indigenous communities in Costa Rica.	
		Positive trends in environmental protection and leadership continued through the CPS period. Once known as having one of the world's highest deforestation rates, Costa Rica achieved negative net deforestation in the early 2000s. This is due in part to Costa Rica's innovative payments for environmental services (Pago por Servicios Ambientales (PSA)) program, which over the past decade has supported forest conservation on privately-owned lands in priority watersheds, and in key areas within Costa Rica's portion of the Mesoamerican Biological Corridor. The PSA program will have approximately 230,000 hectares under contract at the end of 2006.	Page 8 – Par. 25
	2006	The blended Bank/GEF Ecomarkets project was a successful part of governmental conservation efforts, and a follow-on project has been approved to improve the PSA Program. The Ecomarkets Project helped strengthen the capacity of Costa Rica's National Forest Investment Fund to manage the PSA Program. It also helped improve the efficiency of the program by supporting the introduction of spatial targeting, thus ensuring that enrolled areas were located in priority areas within the Mesoamerican Biological Corridor and other priority conservation areas. Ecomarkets also engaged women and indigenous landowners in environmental contracts. The number of participating female landholders grew from 22 in 2000 to 474 in 2006, much higher than the 30% gain originally targeted, while indigenous-owned land under contract increased from 2,850 to 25333,125 hectares. In light of its achievements and country support, the Bank supported preparation of and recently approved a follow-on project that will expand the PSA through improved financing and user fees, help improve its efficiency by better matching contract modalities and payment levels to local needs and circumstances, and support the participation of poorer households.	Page 8 - Par. 27
	1999	Compared to other countries in the Meso-American Biological Corridor, Honduras has the greatest block of continuous, intact tropical forest habitat, with considerable potential to tap global environmental resources and develop sustainable tourism.	Page 18 - Par. 63
Honduras	1999	The Bank will continue to support the ongoing GEF Meso-American Biological Corridor, and is also considering a GEF project to protect the Mesoamerican Barrier Reef System. The GEF project would be complemented by a Sustainable Coastal Tourism LIL, aimed to assist the government and stakeholders ensure the environmentally sustainable development of the country's rich tourism potential in coastal areas.	Page 19 - Par. 66
	2003	Biodiversity conservation is also a major priority for the Bank given the links between conservation and environmental services offered by forested areas (hydrological services, carbon storage, nontimber forest products and tourism) and the Bank's leadership on the Mesoamerican Biological Corridor in Central America as well as on its marine extension, the Mesoamerican Barrier Reef System. With several conservation projects in the Central America Region and Honduras now nearing completion, two new GEF financed activities are planned for the CAS period. These include: the Consolidation of the Transfrontier <i>Corazon Biosphere Reserve Project</i> (FY04), a bi-national (Honduras and Nicaragua) project focusing on the core of the Mesoamerican Biological Project in Honduras; and a Central- America-wide project on <i>Indigenous Management of Natural Areas</i> (FY04).	Page 35 - Par. 94

Country	CAS date	MBC Mentions	Location
	2006	The third priority of President Zelaya's administration is to strengthen environmental protection and risk management as a cross-cutting theme under the PRS. The President signaled his concern at the pace of environmental degradation by assigning the military to guard protected areas and then carrying out a widely publicized visit to the Rio Patuca Reserve in the second month of the administration. Progress has been made in defining the scope and institutional arrangements for a Protected Areas Fund, which would provide for civil society oversight and channel funds to local organizations managing protected areas. The government will also strengthen PRS programs aimed at river basin management as part of a broader strategy to mitigate the impact of natural hazards.	Page 14 - Par. 32
	2006	Ensuring the viability of protected areas. The Forests and Rural Productivity Project (closing January 20 10) and the recently approved GEF-financed Coraz6n Transboundary Biosphere Reserve Project (launched FY2007) both support improvements in the management of protected areas. The Coraz6n Project, implemented by CCAD in coordination with the governments of Nicaragua and Honduras, targets the largest remaining contiguous area of humid tropical forest north of the Amazon. Alongside these projects, the Bio Carbon Fund-financed Pic0 Bonito Sustainable Forests Project (scheduled FY2007), i s designed to provide long-term support to reforestation initiatives on the border of the Pic0 Bonito National Park. Further opportunities for carbon finance will be explored during the CAS period. A Country Environmental Assessment (scheduled FY2008) will provide baseline information and policy guidance on key environmental issues, including deforestation.	Page 24 - Par. 61
Mexico	1999	The WBG's support in this area will follow four main strategic thrusts: (i) pursue an effective dialogue on the strategic priorities for the sector and assist in the design of policies (better pricing of resources, energy-environment assessments, regulatory framework, enhanced public awareness); (ii) institutional development and decentralization of environmental management, including the development of mechanisms to improve the financing base of the environment through more effective decentralized cost-recovery of environmental services and pollution charges; (iii) better management of natural resources, especially water, forests, air, and biodiversity (through an array of lending and nonlending services); and (iv) support for a more systematic effort in the design and implementation of effective disaster prevention policies, to be underpinned by suitable lending operations. In accessing the possibilities offered under the GEF, priority will be given to identifying "win-win" investment opportunities, where global environmental benefits and national economic benefits can be generated through an integrated and mainstreamed approach to development priorities (for example, methane gas capture within solid waste management programs, renewable energy technologies within agricultural productivity programs, biodiversity conservation within sustainable forestry management programs, greenhouse gas control within air quality programs, and so on). In pursuing the above objectives, the WBG will need to be particularly selective, because overall fiscal tightness is likely to limit government's capacity to undertake new programs (or expand existing ones). The WBG will assist the government in setting priorities for the environmental sector beyond the year 2000, through the production of a policy note collection.	Page 31 - Par. 78
	2002	The WBG has supported, in collaboration with a number of Mexican governmental and academic institutions, the preparation of a series of state-level profiles of indigenous peoples, and a major investigation of the situation of indigenous peoples living in urban areas. This analytical work provides a framework for "development with identity," especially in projects located in indigenous regions that mean to protect the local environment (the ongoing Indigenous Community Biodiversity Conservation and Mesoamerican Biological Corridor GEF projects, the Regional Southeast Development LIL, and the forthcoming Community Forestry II in fiscal 2004).	Page 31 - Par. 90
	2004	Mexico is the only Latin America and the Caribbean country to rank environmentally sustainable development as the second area where the WB should spend more resources and as one of the top three World Bank objectives."	Page 28 - Par. 70

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Country	CAS date	MBC Mentions	
	2008	Environmental sustainability. The main initiative in this pillar is to turn the concept of environmental sustainability into a transversal element of public policies and assure that all public and private investments are compatible with environmental protection. Objectives and strategies are structured in areas such as water, forests, climate change, biodiversity, solid waste and cross-cutting environmental sustainability policy instruments. As part of the development plan, Mexico published a comprehensive National Strategy on Climate Change which includes greenhouse gas emissions reduction estimates as well as measures to adapt to the impact of climate change. As a larger, natural resource rich emerging market economy, Mexico sees itself well placed to take a prominent role in the international agreements and cooperation on global environment issues.	Page 13
	2008	There has been significant progress on the Environmental Sustainability pillar, especially on the policy, legal and institutional front. The Bank's support aimed to: (i)in tegrate principles of sustainable development into country policies and programs; (ii) address issues of air pollution, solid waste management, clean energy technologies, and greenhouse gas emissions; (iii) address water scarcity problem and high rates of deforestation; and (iv) promote sustainable natural resource management. Instruments to pursue this pillar of support included programmatic analytical work, investment and development policy loans, and a series of GEF and PCF grants.	Page 61 - Par. 58
	2008	Environmental Management, has been postponed to FY 10.	Page 68 - Par. 75
	1998	The first steps in establishing the legal and regulatory framework for environmental protection and the rational exploitation of natural resources are being taken. An important initiative to protect the Atlantic Biodiversity Corridor has been launched.	Summary - Page i
	1998	IDA will help the government to establish an appropriate legal and regulatory framework for environmental protection and the rational exploitation of natural resources, to protect the Atlantic Biodiversity Corridor (ABC) and to clarify the property rights of indigenous people.	Page 13 - Par. 32
Nicaragua	2002	A GEF-funded Atlantic Biodiversity Corridor Project (Credit 28361-NI) approved in FY97 also is contributing to these objectives by seeking to ensure environmentally sustainable land use in the Atlantic Coast region through better land use and biodiversity planning, monitoring and evaluation, and financial mechanisms to sustain the corridor.	Page 21 - Par. 50
	2002	Two new tasks are being proposed to help reduce environmental vulnerability: a second GEF-funded Atlantic Biological Corridor Project (FY04) and a Renewable Energy Resources Policy Paper (FY03). The last activities should also help position Nicaragua to participate in the global market for carbon sequestration.	Page 21 - Par. 51
	2002	As of September 30, 2002, IIDA's active portfolio consisted of 15 credits totaling \$461.1 million, of which \$258.1 million were undisbursed, plus one \$7.1 million GEF grant for the Atlantic Biodiversity Corridor Project.	Page 25 - Par. 62
	2007	New legislation on biodiversity, water resources, fisheries, and forestry was approved and implemented. The forest law marks a major shift in the legislative framework of the sector, reforming institutional roles and setting up appropriate incentives (e.g., giving ownership of trees to the owners of land and offering fiscal incentives to forestation and reforestation) and regulations (through a system of regents supervised by the forest institute, INAFOR). The major achievements of the GEF-financed ABC project were its legislative, institutional, capacity building, and cultural innovations, which created an enabling base to ensure the conservation and sustainable use of biological resources in this area. The recently initiated "Corazon" project is a follow-up to the ABC, given that, as pointed out by the OED ICR review of ABC, the establishment of a biodiversity conservation program requires a long-term program approach.	Page 57 - Par. 37

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Country	CAS date	MBC Mentions	Location
	1998	Second, although females do not appear to suffer discrimination in land titling, the Social Assessment for the Mesoamerican Biological Corridor Project found that rural women do face discrimination in credit and extension services	Page 9 – Par. 26
		Bank Support. Under the Rural Poverty and Natural Resources Project and the GEF financed Atlantic Meso-American Biological Corridor Project, the Bank is supporting land demarcation and titling activities in selected protected areas and nearby buffer zones. In addition, the government is preparing, with Bank support, a national Land Administration Program that would improve delivery of land services, building in part on pilot activities supported by IDB in Veraguas Province. The proposed Land Administration Project (FY00) would modernize the registry and cadastre system, support implementation of a nationwide land titling program, extending property rights to thousands of small farmers and enabling them to leverage financial resources, fostering efficiency and environmental conservation.	Page 10 – Par. 31
	2007	More than 12 percent of the country's territory falls within the National Protected Area System. Yet poverty pressures have pushed the poor to exploit the Mesoamerican Biological Corridor's natural resources in unsustainable ways.	Page 1 - Par. 2
Panama	2007	The area of sustainable rural productivity is supported by the on-going Land Administration project and the recently approved Rural Productivity Project and its GEF counterpart, which funds sustainable use of the Atlantic Mesoamerican Biological Corridor.	Page 22 – Par. 37 - second bullet
	2007	Promote sustainable use of the Atlantic Mesoamerican Biological Corridor. Under its 2004-2009 Strategy of Conservation for Sustainable Development, Panama's National Environment Authority (ANAM) aims to strengthen stakeholder partnerships and institutional capacity to better manage protected areas and biodiversity. Bank Contribution over the ISN. Building from gains under the Panama Mesoamerican Biological Corridor GEF project, a new project was prepared to invest in small-scale rural groups to promote natural resource management and sustainable productive opportunities in fourteen protected areas and buffer zones. The project was also designed to continue supporting improved management of the National Protected Areas System (SNAP), strengthened co-management arrangements and enhanced monitoring and evaluation capacity in ANAM.	Annex 2 - Page 4 - 3rd bullet
	2007	Promote sustainable use of the Atlantic Mesoamerican Biological Corridor. The ongoing GEF project will continue support for sustainable conservation and productive activities in or near protected areas as noted above.	Annex 2 - Page 5 - third bullet

Annex F. Persons Consulted

Name	Title	Organization
World Bank - HQ		
John Redwood	Consultant Former Sector Director Latin America and the Caribbean Environment	World Bank
John Kellenberg	Sector Manager, Environment	World Bank
Jim Smyle	Consultant Sr. Natural Resources Management Specialist	World Bank
Teresa Serra		World Bank
Ricardo Hernandez	TTL Mexico MBC Project	World Bank Mexico (VC)
Ed Bresnyan	Senior Rural Development Economist	World Bank
Bilateral Agencies - Wasl	nington, D.C.	
Rebecca Butterfield	Senior Forestry Advisor EGAT/NRM/W	USAID
Peter Keller	Biodiversity Advisor Latin America and the Caribbean/RSD	USAID
International NGOs - Was	shington, D.C.	
Ladd Connell	Director, Multilateral Relations	Conservation International
Carlos Manuel Rodriguez E.	Former Minister of Environment, CR Vice President for Conservation Policy	Conservation International
Archie (Chuck) Carr III		
Universities		
James R.Barborak	Co-Director, Center for Protected Area Management and Training	Colorado State University, Warner College of Natural Resources- HDNR
Margaret Buck Holland	PhD Postdoctoral Fellow, Land Tenure Center	UW-Madison and Conservation International
Evaluators		
Allen Putney	Evaluator	
Clemencia Vela	Independent Consultant	
Carlos Rivas	Team Leader - Evaluator	Associates in Rural Development, Inc.
El Salvador		
Carolina Dreikorn	Program Representative for Environment and Sustainable Development	UNDP – El Salvador

Name	Title	Organization
Edgar Rodriguez	Coordinator	World Bank-implemented GEF Projects: Protected Areas and Consolidation and Administration
Oscar Moloina	Regional Coordinator for Bahia de Jiquilisco	World Bank-implemented GEF Projects: Protected Areas and Consolidation and Administration
Herman Santos Castillo	Nacuchiname Forest Guard	MARN/CCAD
Jose Juventino	Nacuchiname Forest Guard	MARN/CCAD
Concepcion Martinez	Representative	Community Council in Canoa – a canton outside of the Nacuchiname Naitonal Park
Rene Flores		Committee for the Development of the Environment and Entrepreneurial Activity for Puerto Parada /MARN/CCAD Puerta Parada – Mangroves
Antonio Eriquez		
Edil Arnoldo Funescastro	Chaguantigue Forest Reserve Guard	MARN/CCAD
Jorge H. Fernandez Ramirez	Chaguantigue Forest Reserve Guard	MARN/CCAD
Marco Gonzalez Pastora	Executive Secretary	CCAD
Dimas M. Lopez Artero	Evaluation Officer	CCAD
Jorge E. Quezada Diaz	Director General for Natural Heritage	Ministry of the Environment and Natural Resources (MARN)
Zulma Ricord d Mendoza	MBC Coordinator	MARN
Honduras		
Dante Mossi	Operations Officer	World Bank Honduras
Henrik Franklin	Natural Resource Management Specialist	InterAmerican Development Bank - Honduras
Emelie B. Weitnauer	Natural Resources and Environment	InterAmerican Development Bank - Honduras
Dina Salinas	PROBAP Project Manager	UNDP - Honduras
Antonio Pereira	Senior Official for the Environment and Risk Management	UNDP - Honduras
Alcides Rodriguez	Technical Advisor	Committee for the Defense and Development of the Flora and Fauna of the Gulf of Fonseca
Saul Maontufar	Fisheries	Committee for the Defense and Development of the Flora and Fauna of the Gulf of Fonseca
Jose Danilo Gomez	President	National Association of Apiculture (Beekeeping)

Name	Title	Organization
Oscar Umberto Reyes		National Association of Apiculture (Beekeeping)
Adonis Hernandez Amaya	Director	Pico Bonito National Park Foundation
Donald Estrada	Regional Administrator of PROBAP project/Financial Administrator of Pico Bonito National Park Foundation	Pico Bonito National Park Foundation
Leslie Alcantara	Small Projects Executor for PROBAP/Program Coordinator for Ecotourism	Pico Bonito National Park Foundation
Rosario Lobo	Head of the Association	Juan Pablo II Women's Association in Pital (and El Olbido)
Alexis	Administrator	Cabanas Aventura in El Bosque
James Adams	Manager	Pico Bonito Ecolodge
Maria Auxiliadora Pineda	Chief Financial Officer	Fundacion Vida
Williams Marroquin		Fundacion Vida
Monika Grossman		GTZ
Holger Afflerbach		GTZ
Victor Leonel Archaga	External Relations Officer PROBAP Project Manager (2001-2005)	The Nature Conservancy
Patricia Bourdeth	Advisor Designed	El Corazon Project
Ivon Oviedo		State Forestry Administration/Corporation for Forestry Development
David Carias Davila	Director of Foreign Investment	SEFIN- Honduras Secretary of Finance
Jackelyn Molina	Assistant	SEFIN- Honduras Secretary of Finance
Andy Rodriguez	Agroforestry Sector Coordinator	SEFIN- Honduras Secretary of Finance
Sonia Suazo	Pro-Corridor Project/EU	The Ministry of Environment (SERNA)
Juan Carlos Ramirez	MBC	The Ministry of Environment (SERNA)
Atilio Ortiz	PBPR Project Coordinator	Secretary of Agriculture and Livestock - Ministry of Agriculture
Nicaragua		
Coleen LittleJohn	Senior Project Officer	World Bank Nicaragua
Joseph Manoharan Owen	Country Manager	World Bank Nicaragua

Name	Title	Organization
William Schwartz	Director	INAFOR -Managua
Roberto Araquistain Cisneros	Vice Minister of the Environment	MARENA- Managua
Angela Y. Meza-Vargas	Protected Areas Specialist	MARENA - Managua
Edilberto Duarte	Flora, Bio-safety, and Land Management	MARENA - Managua
Juana Argeñal Sandoval	Minister of Environment	
Georgina Orozco	Director POSAF Program	MARENA - Managua
Jorge Canales	Subdirector	INAFOR -Managua
Norwing Torres	Director	Fundacion de los Amigos de Rio San Juan (FUNDAR) in Managua
Erick Blandon Mortada	Director of planning	INAFOR -Managua
Ramon Canales	Director	Secretaria para el Desarrollo de la Costa Caribe - Managua
Damarys Sanchez	Coordinator, Nicaraguan Land Administration Project	Office of the Government Secretariat, Managua
Francis Castro		Bluefields Indian & Carribbean University, Bluefields
Luís Valerio	Director of Rural Development	Ministry of Agriculture and Livestock Managua
Karin von Loebenstein	Program Coordinator Sustainable Management of Natural Resources and Promotion of Entrepreneurial Competence (MASRENACE)	GTZ
Hans Wessels	Head of Cooperation Counselor	Dutch Embassy
Jan (Johannes) A. Bauer	First Secretary, Private Sector Development	Dutch Embassy
Silvia Porras	Senior Expert, Gender and Environment	Dutch Embassy
Jan Karremans	Worked with Forest Development Project of the Atlantic Coast	Dutch Embassy
Manuel Le Bris	First Secretary, Development	CIDA
Mercedes Salgado	Environmental Specialist	CIDA Unidad de Apoyo al Programa de Cooperación Canadiense
Anna-Karin Jansson	Gerente Regional	Fondo Nórdico para el Desarrollo Nordic Development Fund
Mariela Montero	Program Officer / Consular Assistant	Royal Danish Embassy

Name	Title	Organization
Bayardo Quintero	Program Officer	National Environmental Program (PASMA)
Shanda Vanegas		Universidad de las Regiones Autónomas de la Costa Caribe Nicaragüense (URACCAN)
Wilfredo Machmou B.	Director	Asociación de Desarrollo y Promocion Humana de la Costa Atlantica (ADEPHCA) in Bluefields
Roger Montalvan	Director (ex- Director of the RAAS branch of MARENA)	SERENA- Bluefields
Johnny Hogson	Professor , mediator in land issues between Rama and Mestizo communities	Bluefields Indian & Carribbean University
Diala Lopez		Instituto del Medio Ambiente y Desarrollo Sostenible (IREMADES) de la Universidad de las Regiones Autónomas de la Costa Caribe Nicaragüense (URACCAN) Bluefields
Ilenia Arllery Garcia Peralta		Universidad de las Regiones Autónomas de la Costa Caribe Nicaragüense (URACCAN) - IREMADES in Bluefields
Marvin Gonzalez		Sustainale Harvest/ Cosecha Sostenible - Bluefields
Denys		Sustainale Harvest/ Cosecha Sostenible - Bluefields
Eric Ramirez	Director	Association of Environmental Rights in Mesoamerica to support Jaguar
Panama		
Rita Spadafora	Chief of Economic Growth and Environment	USAID – Panama
Rodrigo A. Coloane	Specialist in Natural Resources and Environment	IDB – Panama
Sylvia Marin	Director / Regional Repreentative	WWF Central America San Jose, Costa Rica
Miguel Angel Vasquez	Specialist for Partners	TNC Institutional Development
Julio Rodríguez	Chagres Site Manager	TNC
Malena Sarlo	Conservation Planner	TNC
Carlos Espinosa		WWF
Jaana Keitaanranta	Country Program Manager	IFAD
Aleida Salazar	National Director	Protected Areas and Forest

Annex G. Response to IEG's Global Program Review

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(Unofficial translation)

San Salvador, March 28, 2011

Ref: SE-CCAD-106-11

Mr. Mark Sundberg Manager, IEGPS World Bank Washington DC

Dear Mr. Sundberg,

With respect to your request for a formal response by the CCAD to the Regional Program Review of the Mesoamerican Biological Corridor prepared by the Independent Evaluation Group of the World Bank on the evaluations of a number of GEF projects, we offer the following comments.

Since 1992, the Mesoamerican Biological Corridor was formally institutionalized in the Convention for the Conservation of Biodiversity and Protection of Priority Wildlife Areas in Central America. In 1994, it was included in the Central American Alliance for Sustainable Development (ALIDES) as one of the region's commitments on environmental matters. In 1997, the Presidents of the seven Central American countries and Mexico formally launched the Agreement for the Establishment of the MBC. In 2000, the Program for the Consolidation of the MBC was initiated, which has resulted in a grounded and recognized concept, experiences of local biological corridors, institutional development, and a series of strategic programs that are still operating.

However, at the same time that the CCAD was managing the regional project, some countries were also presenting national MBC projects to the GEF. The added value of the regional project was to establish conditions to facilitate the entry of the national projects. The lessons learned are the following:

- (1) Any current regional, national or local political agenda incorporates the environmental dimension and the approach of biological corridors. The regional project was effective in establishing a political agenda and building networks that have put in place harmonized regional policy instrument that are necessary to advance the creation of biological corridors.
- (2) Over the past decade, the Central American countries and the [five] Mexican southeast states have been actively establishing local biological corridors and trying to contain the fragmentation of their natural habitats.
- (3) The process of consolidating the MBC has been supported by the international community through various forms of technical and financial cooperation, demonstrating the relevance of this initiative at a global scale. [The process of consolidating the MBC] has occurred within the context of reconstruction after prolonged armed conflicts and several severe geologic and meteorological natural phenomena.



SISTEMA DE LA INTEGRACIÓN CENTROAMERICANA COMISIÓN CENTROAMERICANA DE AMBIENTE Y DESARROLLO







Presidencia Pro Témpore

Aguila Arpía Icono del Corredor Biológico Mesoamericano. Ave rapaz más poderosa de Mesoamérica

- (4) The Mesoamerican countries participate jointly, through their governments and delegations of civil society, in workshops on topics of mutual interest in international forums on multilateral environmental agreements. [The Mesoamerican countries] are also part of the main multilateral global environmental agreements.
- (5) The Biological Corridors have been constructed with the participation of the rural population as a way to recognize the rights of these groups, including the land rights of indigenous peoples. This is an ongoing task that demands larger commitment on the part of the governments and civil society.

From the experiences and lessons learned from the past decade, some recommendations can be taken-up to help further consolidate the MBC:

- (1) Regional complementary and intersectoral policy instruments will be closely linked to the consolidation of the MBC, with clearly defined objectives and results. [These include the] Central American Strategy of Territorial Rural Development; the Regional Program of Vulnerability Reduction and Environmental Degradation; the Agro-environmental and Health Regional Strategy; the Central American Strategy for Integrated Water Resources Management; and the Regional Strategy of Climate Change.
- (2) The Environmental Plan for the Central American Region (2010-2014) views the MBC as a Regional Program and sets forth the following strategic objectives: [it] gives a boost to the MBC by strengthening the Mesoamerican System of Protected Areas; strengthening the Management of Coastal Marine Resources; and materializing the added value of regional environmental management.
- (3) Improve environmental governance and build a shared vision. One of the key challenges of the MBC initiative is to reconcile the interests of the different actors involved, and through them to achieve (particularly at the national level) commitment to create social platforms and active participation in the political processes to empower organizations and the decentralization of natural resource management. The re-launching of the MBC should strive to build a regional-national-local vision with shared spatial goals and functions, from the [level of the] local communities [to] individual protected areas [to] bi-national or tri-national and regional initiatives that can help to realize a contiguous biological corridor.
- (4) Promote financial sustainability. Overall, the region and the countries should promote initiatives that value the role of ecosystem functions and services [by supporting] payment of environmental services (PES) programs, that can be channeled to invest in the strengthening of local organizations which may in turn implement biological corridors at the local level.

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- (5) Institutional strengthening at local and national levels. To create a stronger national platform, it is essential that a more effective intervention model exists such that it helps design more clearly the roles for the institutions, organizations, and individuals involved. Each National authority involved [will need to] strengthen its commitment to incorporate the MBC in its institutional plans, programs and projects. This will guarantee that the application of policies, instruments for environmental management, and operational measures [will be] regionally harmonized and accepted.
- (6) Take advantage of global sustainable market trends to generate cleaner production that would be compatible with biodiversity conservation. The liberalization of trade within the region through the Free Trade Agreement between the Dominican Republic Central America and the United States of America (DR-CAFTA), and more recently the European Union's Partnership Agreement with Central America, will have implications for the environment. To address some of these potentially negative impacts, the MBC should use these strategies to its advantage to harness the power of markets to create positive environmental impacts.

Before the publication of this review, a more detailed review of the grammar of the document, and an adjustment of paragraph 2.5 should be done. [The review states that the] CCAD is financed from the application of a fee charged to the projects, when in practice it does not work this way. [CCAD] funding actually comes from various sources and methods not necessarily linked to the application of a fee. Additionally, paragraph 3.47 needs to be corrected because it mistakenly refers to the Plan Puebla Panama and the Free Trade Agreement (between the Dominican Republic, Central America and the United States).

Finally, the opportunity to review this report provides a chance to recognize the contribution of the World Bank to the regional and national efforts to consolidate the Mesoamerican Biological Corridor and its subsequent contributions to poverty reduction, biodiversity conservation, adaptation and mitigation of climate change. We also appreciate the invitation received by the World Bank to participate in this analysis.

With Highest Consideration and Esteem,

Signed Architect Jorge Cabrera Hidalgo The Mesoamerican Biological Corridor (MBC) is a land-use planning system that spans Central America and the five southern-most states of Mexico. It promotes the conservation and sustainable use of the region's natural resources. Formally endorsed by the Central American heads of state in 1997, the MBC seeks to enhance the effectiveness of the region's System of Protected Areas by strengthening the management of key sites while developing a network of sustainable-use land corridors to link them. A number of countrylevel GEF-financed projects have been implemented by the World Bank since 1997 to consolidate the MBC. The MBC offers lessons for ecological corridor design in so far as the desired function(s) of a corridor must be determined a priori so that it can be managed in a way that yields optimal outcomes based on the functions it is expected to perform. Corridor planning requires heavy investment in local consultation, community-level planning, and participation in the monitoring and reporting of conservation aims. The MBC projects reviewed have been more successful in supporting the enhanced management of key protected areas within the System of Protected Areas than in enabling an enforceable, sustained biodiversity corridor regionally. World Bank support was also effective in helping to strengthen the central environment ministries and protected area agencies in the countries. Although the data on forest cover suggest that overall forest cover is higher and forest cover change is lower inside the corridor units than outside, intense deforestation continues in key agricultural frontier areas. The biodiversity content of the MBC system remains threatened by a low level of intersectoral cooperation, by the lack of a strong regional coordinating body, and by the absence of a corridor-level financing mechanism for the MBC. Nevertheless, the MBC is a useful platform on which the international donor can continue to help support regional conservation efforts, including planning for climate change.





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The Mesoamerican Biological Corridor