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**Panama**  
**Atlantic Mesoamerican Biological Corridor Project**

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Project Document  
May 1998



**THE WORLD BANK**

## GEF Documentation

**The Global Environment Facility (GEF)** assists developing countries to protect the global environment in four areas: global warming, pollution of international waters, destruction of biodiversity, and depletion of the ozone layer. The GEF is jointly implemented by the United Nations Development Programme, the United Nations Environment Programme, and the World Bank.

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- Corredor Biológico Mesoamericano del Atlántico Panamericano
- Diversidad biológica
- Desarrollo sostenible
- Conservación de bosques - Panamá
- Reforestación - Panamá

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Eric Smith - Assistant  
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## Latin America and the Caribbean Regional Office

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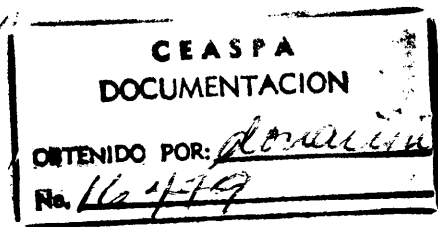
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- Corredor Bioológico Medio Americano  
 - Medio Ambiente  
 - Recursos Naturales  
 - PPI



**Currency Equivalents**  
 Currency Unit: Balboa      US\$1 = 1 Balboa

**Weights and Measures**  
 1 quintal (qq) = 100 pounds = 46 Kg.

**Fiscal Year**  
 January 1 - December 31

**ABBREVIATIONS AND ACRONYMS**

AMP	Maritime Authority of Panama ( <i>Autoridad Maritima de Panamá</i> )
CAS	Country Assistance Strategy
CBD	Convention on Biological Diversity
CCAD	Central American Commission on Environment and Development ( <i>Comisión Centroamericana de Ambiente y Desarrollo</i> )
CLDS	Local committees for sustainable development ( <i>Comités Locales de Desarrollo Sostenible</i> )
CNA	National Environment Council ( <i>Consejo Nacional del Ambiente</i> )
Comarca	Indigenous administrative district
CPA	Regional environment commissions ( <i>Comisión Provincial Ambiental</i> )
DANIDA	Danish International Development Agency
DPAW	Department of Protected Areas and Wildlife, INRENARE
EIA	Environmental Impact Assessment
EU	European Union
FUSARD	Fund for Sustainable Agricultural and Rural Development
GEF	Global Environment Facility
GOP	Government of Panama
GTZ	German Agency for Technical Cooperation
IBRD	International Bank for Reconstruction and Development
ICB	International Competitive Bidding
IDA	International Development Association
IFAD	International Fund for Agricultural Development
INRENARE	Institute for Renewable Natural Resources ( <i>Instituto de Recursos Naturales Renovables</i> )
IPAT	Panamanian Institute of Tourism ( <i>Instituto Panameño de Turismo</i> )
ITTO	International Tropical Timber Organization
LIB	Limited International Bidding
MBC	Mesoamerican Biological Corridor
ME	Ministry of Education ( <i>Ministerio de Educación</i> )
MICI	Ministry of Commerce and Industry ( <i>Ministerio de Comercio e Industrias</i> )
MIDA	Ministry of Agricultural Development ( <i>Ministerio de Desarrollo Agropecuario</i> )
MIPPE	Ministry of Planning and Economic Policy ( <i>Ministerio de Planificación y Política Económica</i> )
MOP	Ministry of Public Works ( <i>Ministerio de Obras Publicas</i> )
NAPAS	National Protected Area System
NCB	National Competitive Bidding
NGO	Non-Governmental Organization (International, National, and Local)
PAMBC	Panama Atlantic Mesoamerican Biological Corridor
PCU	Project Coordinating Unit
PEU	Project Executing Unit
PDF	Project Development Facility
PPRRN	Rural Poverty and Natural Resources Project ( <i>Proyecto de Pobreza Rural y Recursos Naturales</i> )
RUTA	Regional Unit for Technical Assistance in Agriculture and Natural Resources in Central America
SOE	Statement of Expenses
TNC	The Nature Conservancy
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
USAID	United States Agency for International Development



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Vice President: Shahid Javed Burki  
 Country Director: Donna Dowsett-Coirolo  
 Sector Director: Maritta Koch-Weser  
 Sector Leader: Mark Cackler  
 Task Team Leaders: Luis Constantino and John Kellenberg

TITN. 93713.

# Panama

## Atlantic Mesoamerican Biological Corridor Project

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# Panama Atlantic Mesoamerican Biological Corridor Project

## Project Appraisal Document

Latin America and the Caribbean Regional Office  
LCC2C

Date: May 18, 1998

Country Manager/Director: Donna Dowsett-Coirolo

Project ID: PA-GE-45937 Sector: Environment

Focal Area: Biodiversity

Task Team Leaders: Luis Constantino & John Kellenberg

Sector Leader: Mark Cackler

Sector Manager/Director: Maritta Koch-Weser

Program Objective Category: EN

Program of Targeted Intervention: ☐ Yes ☒ No

**Project Financing Data** ☐ **Loan** ☐ **Credit** ☐ **Guarantee** ☒ **Other** Global Environment Facility (GEF) Grant; associated with the *Rural Poverty and Natural Resources Project* (PPRRN) (Credit 41580-PA)

### For Loans/Credits/Others:

Amount (US\$m/SDRm): SDR 6.3 million (US\$8.4 million equivalent)

### Financing plan (US\$m):

US\$12.8 million consisting of US\$8.4 million GEF Grant plus US\$2.3 million from IBRD, US\$1.0 million in Government of Panama (GOP) counterpart financing and US\$1.1 million in beneficiary contributions. {Note that this project is part of an integrated program supporting rural poverty alleviation, natural resource management and biodiversity conservation in Panama, supported, *inter alia*, by the associated PPRRN, GOP counterpart funds, and beneficiary contributions. The total estimated cost of the *Rural Poverty and Natural Resource Project* and the *Atlantic Mesoamerican Biological Corridor Project* together are US\$40.1 million.}

	<u>Source</u>	<u>Local</u>	<u>Foreign</u>	<u>Total</u>
IBRD		1.2	1.1	2.3
Government of Panama		1.0	0.0	1.0
Beneficiaries		1.1	0.0	1.1
Global Environment Facility		5.3	3.1	8.4
<b>TOTAL</b>		<b>8.6</b>	<b>4.2</b>	<b>12.8</b>

Recipient: Republic of Panama

Responsible agency: Institute of Renewable Natural Resources (INRENARE)

Estimated disbursements (Project Year/US\$M):	Year 1	Year 2	Year 3	Year 4	Year 5
Annual	2.04	2.80	1.70	0.97	0.89
Cumulative	2.04	4.84	6.54	7.51	8.4

Expected effectiveness date: October 1, 1998

Expected closing date: June 30, 2004

## **A. Project Development Objectives**

### ***1. Project development and global objectives and key performance indicators***

The proposed project, in association with the *Rural Poverty and Natural Resources Project* (PPRRN), addresses the root causes of migration to, and expansion of, the agricultural frontier while enhancing on-site protection of areas of high biodiversity values inside and outside of protected areas. The two projects provide the Government of Panama with a coherent, multisectoral response to the interrelated issues of rural poverty, natural resources management, and biodiversity conservation.

The global environment objective of the proposed project is to contribute to the long-term conservation and sustainable use of biodiversity in the Panamanian portion of the Mesoamerican Biological Corridor. The proposed project is thus an integral part of the Mesoamerican Biological Corridor (MBC) initiative of the Central American countries and Mexico. This initiative, officially approved by the Presidents of all seven Central American countries, intends to conserve a biological link between the continents of North and South America, thus preserving ecological processes of global importance. The MBC initiative encompasses a large number of regional, national and local projects focused on conservation in the MBC as well as many associated projects that indirectly contribute to the same shared objective. These projects are supported by a large partnership involving governments, research institutions, NGOs, indigenous peoples, religious groups, private sector, donors, and multilaterals both of Central America and from elsewhere.

The project development objective of the proposed project is to promote substantial actions on the part of stakeholders to achieve conservation and sustainable use of biodiversity through land use practices that integrate biological, social and economic priorities. This objective would be achieved by: (i) developing and disseminating tools for integrating the biological corridor concept into sectoral strategies, local and regional planning and public investments; (ii) increasing information on the status of biological diversity along Panama's Atlantic Slope; (iii) increasing awareness of the importance and demand for the conservation of the PAMBC at the national and international levels; (iv) implementing and disseminating natural resource management pilots in priority areas of the PAMBC; and (v) reducing pressure upon protected areas and indigenous *comarcas* within priority areas of the PAMBC.

Key performance indicators for the project include:

- Significant decline in new colonists in priority biodiversity areas of the National Protected Area System (NAPAS) and indigenous *comarcas* by 2002.
- All environmental impact assessments for investments in the PAMBC to incorporate the biological corridor concept and mitigative measures to conserve biodiversity by 2000.
- All donor and multilateral projects greater than US\$2 million within PAMBC consistent with the biological corridor concept.

## **B. Strategic Context**

### ***1.a. Sector-related Country Assistance Strategy (CAS) goal supported by the project***

CAS document number: 13846-PAN

Date of latest CAS discussion: February 7, 1995

The Bank's Country Assistance Strategy (CAS) for Panama (Report No. 13846-PAN), dated December 28, 1994, and discussed at the Board on February 7, 1995, focuses on: (i) reviving sustainable growth; and (ii) poverty alleviation. This strategy is consistent with the overall thrust of the donor program in Panama, which emphasizes medium-term fiscal viability, sustainable growth, poverty reduction, and environmental



conservation. The proposed project is consistent with this strategy, by improving natural resource management and increasing environmental awareness.

### ***1.b. GEF Operational Strategy/Program objective addressed by the project***

The project supports the objectives of the Convention on Biological Diversity (CBD), especially through *in situ* conservation and sustainable use of biodiversity. It is consistent with the GEF Operational Strategy and is eligible for GEF funding under three Operational Programs: Coastal, Marine, and Freshwater Ecosystems; Forest Ecosystems; and Mountain Ecosystems (OPs 2, 3, & 4). The project would protect a diverse range of habitats and ecosystems including the globally distinct Choco/Darién moist forests; areas of the Talamanca range with the highest levels of biodiversity on the Central American isthmus; and an altitudinal range of habitats in the Bocas del Toro region, extending from the montane forests of the La Amistad International Park and associated watershed forests to coastal wetlands and offshore mangroves, sea grass beds and coral reefs in Islas Bastimentos. The project will also provide support for the conservation of key habitats of migratory and endangered species (e.g., green turtles and manatees).

The project will contribute to conservation and sustainable use of Panama's Atlantic corridor biological resources, supporting the nation's contribution to maintaining the MBC. The project is consistent with guidance from the Conference of the Parties of the CBD in that it supports: (i) conservation and sustainable use of habitats, ecosystems and endemic species; (ii) capacity building at the local level to involve local communities in biodiversity management and monitoring, building on traditional knowledge and practices and using economic incentives; (iii) integration of biodiversity conservation into sectoral development; (iv) local and indigenous people's involvement in biodiversity conservation; (v) increased environmental awareness and information dissemination to foster conservation and sustainable use of biodiversity; and (vi) rapid biodiversity assessments.

## ***2. Main sector issues and Government strategy***

### Sector issues

The advance of the agricultural frontier and spontaneous colonization, which affects an estimated 50,000 to 77,000 hectares annually within the PAMBC, has been rapidly closing in on the country's forests and protected areas, fueled by outmigration of the rural poor from the Pacific zone to the forests and protected areas of Darién, Colón, Chiriqui and Bocas del Toro provinces [Aylward, 1997. See Annex 12 for full citation]. Presently, the agricultural frontier has advanced from the south to within 20 to 30 km of the Atlantic coast in the Provinces of Colón and Coclé. Ineffective investment, particularly in the heavily populated rural areas of the Pacific, has contributed to resource degradation and emigration toward frontier zones.

*road to Rio Indio → Miguel de la Borda. + the Costa Playón*

New road projects will increase pressure upon the unprotected and intact ecosystems of the Atlantic. Among the relevant projects are the proposed rehabilitation of the road El Llano-Yaviza in Darién, the El Llano-Cartí road to Kuna Yala, the Almirante-Chiriqui Grande road in Bocas del Toro (now under construction), and, to a lesser extent, and the Risco link to the proposed Almirante-Chiriqui Grande Highway.

Mining concessions (mostly still at exploration stage) in the mountainous zones of Veraguas, Chiriquí, San Blas, and Darién and the coastal lowlands of Colón, considered to be one of the last major unexplored porphyry copper-gold belts in the world, could in the future pose threats to biodiversity along the Atlantic slope due to lack of resources to enforce the regulatory framework.

To protect remaining healthy ecosystems, Government has set aside nearly one-quarter of the national territory to establish the NAPAS. About 47% of the PAMBC are protected areas. A review of the conservation status of life zones represented in the entire NAPAS indicates:

- there is relatively little intact forest within the tropical dry forest and premontane dry forest, zones which are traditionally favored for human settlement; and
- significant areas of (i) humid tropical forest, (ii) premontane wet forest, (iii) premontane rain forest, (iv) lower montane wet forest, (v) lower montane rain forest, and (vi) montane rain forest remain relatively undisturbed.

However, very few protected areas, and many along the Atlantic corridor, benefit from adequate management or protection; only 149 guards are assigned to cover the fourteen national parks—on average, each pair of guards must cover over 9,125 hectares. Furthermore, too many of the protected areas are small, making their core areas vulnerable to outside activities and less effective as habitats for larger mammals and birds.

Charged with the conservation and management of renewable natural resources, INRENARE has focused most of its efforts on the formation and management of protected areas, although it also has programs targeted towards reforestation and forest management as well as regulation and control of natural resources. Considering its responsibilities, INRENARE is inadequately staffed, equipped, and financed.

About 43% of all the territory included in the PAMBC lies within indigenous *comarcas*, legally established indigenous territories. While the legal rights of these indigenous groups are more advanced than in most countries in Latin America, there are many sources of conflict that pose risks to biological resources: land disputes between indigenous peoples and colonists; disputes between indigenous peoples and miners; overlaps between protected areas and indigenous territories; population growth and cultural changes that affect natural resources; inter-ethnic conflicts between different indigenous groups; and juridical conflicts between *comarcas* and provinces.

#### Government Strategy

Government has recently taken important steps in reforming policies that adversely affect natural resources, including: reducing trade protectionism that promoted non-competitive, environmentally damaging activities; reducing urban bias in public expenditures; and reforming agricultural, livestock, forestry and land policies that encouraged deforestation. In addition, Government has put in place important pro-biodiversity legislation, including: the Environmental Education Law (1992); the Forestry Law (1994); the Environmental Impact Assessment Law (1994); the Wildlife Law (1995); and adherence to international treaties (e.g., Convention on Biological Diversity - ratified on January 17, 1995; RAMSAR, and CITES). The National Protected Area System was created in 1994.

Government, through INRENARE, is building on previous work under the Tropical Forestry Action Plan and developing three policy/strategy documents: (i) a National Biodiversity Strategy and Action Plan (UNEP/GEF); (ii) a global strategy for INRENARE to promote sustainable natural resource management as well as to implement the General Environmental Law; and (iii) the recently completed Regional Biological Corridor Plan (UNDP/GEF, as part of the regional Mesoamerican Biological Corridor initiative). The National Biodiversity Strategy and INRENARE's global strategy are to be completed in early-1999. This project will be a major contribution to the conservation and sustainable use of natural resources in Panama's Atlantic corridor.

Although certain areas that are important for biodiversity conservation remain outside protected areas, Government is initially consolidating the management of lands already in the NAPAS. This includes: strengthening the legal boundaries of protected areas; avoiding the expansion of settlements already inside protected areas; and establishing protected areas management committees with local communities in support of improved buffer zone management.

Government has initiated several conservation and sustainable development projects that directly or indirectly contribute to improved natural resource management and biodiversity conservation. These include: (i) the associated Rural Poverty and Natural Resources Project; (ii) the GEF/UNDP project focused on the Darién buffer zone; (iii) the USAID/NATURA fund for the Panama Canal watershed; (iv) IFAD's sustainable rural

development projects; (v) GTZ's community resource management projects; and (vi) ITTO's forest management projects.

Indigenous land rights are stronger in Panama than in most Latin American countries. Today there are four legally established *comarcas* (indigenous territories): Kuna-Yala (Kunas), Mandugandi (Kunas), Emberá-Wounaan (Emberás and Wounaan) and Ngobe-Buglé (Ngobes and Bugles). The Ngobe-Buglé *comarca* has just been created. There are also government plans to legalize a fifth *comarca*, for the Teribe.

### ***3. Sector issues to be addressed by the project and strategic choices***

The project, together with the associated *Rural Poverty and Natural Resources Project* (PPRRN) and the regional Mesoamerican Biological Corridor initiative, will address the sectoral issues listed above. The PAMBC will focus on reducing pressure upon high biodiversity areas by strengthening protected areas and indigenous *comarcas*. For protected areas, the PAMBC will: (i) enhance capacity for protection; (ii) demarcate protected areas boundaries in areas under pressure; (iii) create and strengthen partnership mechanisms involving private sector, NGOs, and local governments/communities to enhance protection of priority areas; (iv) mediate conflicts related to land use; (v) finance participatory management by indigenous and non-indigenous communities to monitor resource use and to conserve biological resources; (vi) upgrade management norms on public lands; and (vii) develop revenue generation and financial management systems to support protected areas management. For indigenous *comarcas*, the PAMBC will: (i) enhance resource conservation and protection of legally declared indigenous areas; (ii) facilitate legal and technical assistance for indigenous territories currently proposed for legal declaration; and (iii) support culturally-sensitive conservation activities in priority areas.

The associated PPRRN will help slow the advance of the agricultural frontier by: (i) carrying out rural development projects and extension services in natural resource management and sustainable production technology development, primarily in the Pacific region; (ii) developing community action plans in Pacific coastal communities; and (iii) developing tourism and wildlife conservation infrastructure in priority areas along the Pacific coastline and in key areas adjacent to the PAMBC.

## C. Project Description Summary

### 1. Project components

<u>Component</u>	<u>Category</u>	<u>Cost Incl. Contingencies (US\$M)</u>	<u>% of Total</u>	<u>GEF- financing (US\$M)</u>
<b>A. Corridor Planning and Biodiversity Monitoring</b>	Equipment, Services, Training, Technical Assistance, and Maintenance	2.53	20	2.07
<b>B. Awareness and Promotion</b>	Equipment, Services, Training, and Technical Assistance	1.15	9	1.07
<b>C. Capacity Building for Conservation &amp; Sustainable Use of Biodiversity</b>	Equipment, Services, Training, and Technical Assistance	1.98	15	1.18
<b>D. Investments in Priority Areas</b>	Public Works, Equipment, Services, Technical Assistance, Training, Operations and Maintenance	6.04	47	3.09
<b>E. Project Management</b>	Equipment, Technical Assistance, and Maintenance	1.10	9	0.99
<b>Total</b>		12.8	100	8.4

### 2. Key policy and institutional reforms supported by the project

The inclusion of the PAMBC as an element in the National Economic Development Plan, in the sectoral development plans of key government institutions, as an element to be considered in Environmental Impact Assessments (EIAs), and as an element or criteria in public investments, would *de facto* constitute a significant policy change. At present, “biodiversity conservation” and “ecosystem integrity” are regulatory issues rather than explicit elements of Government’s public investment decision-making.

INRENARE is in the process of restructuring to meet its evolving mandate for decentralized, participatory management of the NAPAS. The project’s support for enhancing financial resource generation to support improved protected area management as well as for training and implementation of decentralized and participatory systems will advance INRENARE’s ability to meet this mandate. The project would also assist INRENARE identifying and establishing new protect areas within the PAMBC.

### 3. Benefits and target population

An important benefit of the project is the conservation and sustainable use of globally significant biodiversity. In addition, many of the indigenous and non-indigenous communities in the protected areas live under conditions of extreme poverty. The proposed project would directly benefit approximately 10,000 families or 50,000 people, assuming 5 people per family. Indirectly, the project would benefit a significant portion of

Panamanian civil society through enhanced public awareness of the economic and social benefits of biodiversity. Finally, the project will strengthen protected areas within the PAMBC as a destination for ecotourists, which is expected to generate economic benefits for the national economy over the medium-to-long term.

#### **4. Institutional and implementation arrangements**

*Implementation period:* Five years

*Executing agency:* INRENARE

##### Project coordination and oversight

The project will be carried out by INRENARE, supported by a Project Executing Unit (PEU). The PEU will report to the Office of the Director-General of INRENARE. In order to (i) maintain adequate coordination between the integrated PPRRN and PAMBC projects, and (ii) avoid duplication of effort, the PCU of the PPRRN will be responsible for coordinating the integrated projects and for procurement, accounting and reporting. The PEU will have responsibility for project execution, supervision, contracting, and for providing to the PCU all required information necessary for procurement, accounting and reporting. The PEU will coordinate with the Technical Departments and Units within INRENARE, including inter alia Protected Areas and Wildlife, Forestry Administration, Environmental Education, Watershed Management, Environmental Impact Assessment, and the Information Center. The regional offices of INRENARE, located in Bocas del Toro, Coclé, Colón y Kuna Yala, will coordinate activities at regional and local levels. Other than direct interventions in priority protected areas, most investments will be implemented by decentralized entities such as municipalities, NGOs, indigenous and non-indigenous organizations and local communities, coordinated by INRENARE.

##### Accounting, financial reporting, and auditing arrangements

INRENARE, through the PEU in coordination with the PCU, will be responsible for project financial management, reporting, and auditing following established procedures acceptable to the World Bank. An independent accounting firm will be contracted to provide regular audits of project accounts. The financial management system for the PPRRN (Credit 41580-PA) has been reviewed by the Inter-American Institute for Cooperation in Agriculture (IICA), and judged satisfactory. This financial control system will likewise be utilized for the proposed project to provide financial reports necessary for project supervision. In addition, an international consultant has been hired to provide support for the financial control system. The PEU and the PCU will share financial and audit reports to ensure complementarity of expenditures on activities included in both projects.

##### Monitoring and Evaluation

The PEU will establish monitoring and evaluation (M&E) procedures acceptable to the World Bank. These will build on procedures in place under PPRRN. Procedures and M&E reports will be guided by the Project Design Summary and the Monitoring Plan, as detailed in the Operational Manual. M&E will be conducted through: (a) activities of the PEU, and reported through quarterly reports beginning in December 1998; (b) World Bank supervision missions, which will take place twice annually beginning in March 1999; (c) annual progress reviews; (d) project mid-term review, conducted jointly by the Government of Panama and the World Bank; (e) periodic evaluations and other special studies; and (f) the Implementation Completion Report.

*Handwritten signature/initials*

#### **D. Project Rationale**

##### **1. Project alternatives considered and reasons for rejection**

The principal objective of the project is to promote substantial actions on the part of stakeholders to achieve conservation and sustainable use of biodiversity through land use practices which integrate biological, social and economic priorities. This objective would be achieved by: (i) developing and disseminating tools for integrating the biological corridor concept into sectoral strategies, local and regional planning, and public

investments; (ii) increasing information on the status of biological diversity along Panama's Atlantic Slope; (iii) increasing awareness of the importance and demand for the conservation of the PAMBC at the national and international levels; (iv) implementing and disseminating natural resource management pilots in priority areas of the PAMBC; and (v) reducing pressure upon protected areas and indigenous *comarcas* within priority areas of the PAMBC.

Alternatives considered and reasons for rejection include: (a) completely exclude the Darién region, due to security issues along the Colombian border and significant donor resources currently targeted to that region — rejected in favor of a selective approach which will strengthen indigenous communities and protected area management where priorities, inadequate support from other donors, and low security risks so justify; (b) exclude the Bocas del Toro region, as potential for economic development driven by ecotourism could arguably provide sufficient economic incentive for biodiversity conservation — rejected due to lack of evidence (based on Costa Rican experience) to support that argument and the construction of the Chiriqui Grande–Almirante road which, in the near term, will open the area to colonization and development pressures; (c) establish mechanisms within this project to adjudicate rights in forested national lands — rejected due to issue being better addressed within Government's overall land administration program, although this project would prepare strategy and proposal for adjudication to facilitate a response from the land administration program; and (d) finance protected areas and buffer zone activities throughout the Atlantic region instead of focusing on key priority areas — rejected due to need to concentrate funds for purpose of strengthening local participation mechanisms and complementary projects financed or planned by other donors.

**2. Major related projects financed by the Bank and/or other development agencies**

Sector issue	Project	Latest Supervision (Form 590) Ratings (Bank-financed projects only)	
		Implementation Progress (IP)	Development Objective (DO)
<b>Bank-financed</b>			
<ul style="list-style-type: none"><li>• Reform of trade and price policies, including the agricultural sector</li></ul>	<ul style="list-style-type: none"><li>• Economic Recovery Loan (Credit 3438-PA)</li></ul>	S	S
<ul style="list-style-type: none"><li>• Poverty alleviation, sustainable agriculture, small-scale forestry, alternative livelihood, rural development</li></ul>	<ul style="list-style-type: none"><li>• Rural Poverty and Natural Resources Project (Credit 41580-PA)</li></ul>	S	S
<b>Other development agencies</b>			
<ul style="list-style-type: none"><li>• Develop conceptual framework for PAMBC; prepare regional project to support national-level activities</li></ul>	<ul style="list-style-type: none"><li>• Regional Mesoamerican Biological Corridor Project (UNDP/GEF)</li></ul>		
<ul style="list-style-type: none"><li>• Protected areas management</li></ul>	<ul style="list-style-type: none"><li>• Management and Development of Protected Areas (USAID, TNC)</li><li>• Darién National Park - World Heritage Site &amp; Biosphere Reserve (UNESCO)</li><li>• International Park La Amistad (UNESCO)</li></ul>		
<ul style="list-style-type: none"><li>• Natural Resources and Sustainable Rural Development</li></ul>	<ul style="list-style-type: none"><li>• Biodiversity Conservation through Sustainable Community Development - Bio-Darién (UNDP, GEF)</li><li>• Sustainable Development Program in Central American Agricultural Frontier Zones (CCAD, EU)</li><li>• Sustainable Rural Development (IFAD)</li><li>• Ngobe-Buglé (IFAD)</li><li>• Natural Resource Management – MARENA (USAID)</li><li>• Conservation For Sustainable Development (DANIDA)</li><li>• Conservation for Sustainable Development (CATIE)</li></ul>		
<ul style="list-style-type: none"><li>• Forestry</li></ul>	<ul style="list-style-type: none"><li>• Agroforestry Development – NGOBE (GTZ)</li><li>• Non-timber Forest Products (ITTO)</li><li>• Forestry Dev. for Sustain. Mgt. of Donoso Forests (ITTO)</li></ul>		

IP/DO Ratings: HS (Highly Satisfactory), S (Satisfactory), U (Unsatisfactory), HU (Highly Unsatisfactory)

### ***3. Lessons learned and reflected in the project design***

Two of the most important lessons learned from activities associated with the regional MBC include the importance of: (i) involving local populations and institutions (e.g., local government, community and sectoral organizations, NGOs) in the design, implementation and benefits of the project in order to assure the long-term conservation of the biodiversity within and outside of protected areas; and (ii) viewing the development of the “biological corridor” concept within the broader context of sustainable development and land use, such that the corridor becomes an integral part of a long-term process focusing on achieving intersectoral agreements between relevant actors at the national, regional and local levels.

Experiences of bilaterally financed and NGO projects in the MBC have been integrated into the design of buffer zone activities. This experience has shown that small farmer training for the adoption of appropriate technologies is the single most cost-efficient intervention for environmental protection in the region. A recent World Bank review of such projects in Latin America indicated that: (i) by encouraging the active involvement of community groups, such projects are more likely to meet local needs than if they simply reflect the priorities of government agencies, and hence be more sustainable in the long term; (ii) once local communities develop a sense of ownership of particular projects, they are willing to share in project costs and to ensure project sustainability; and (iii) once a community group is given responsibility for implementing a project that it has helped to design, it shows great interest in ensuring that the private contractor executing the project does so well and honestly.

The UNDP/GEF Biodiversity Project underway in the Darién incorporates several of these lessons, including substantive buffer zone community involvement in implementation and increased economic incentives for project beneficiaries. The experience of this project with buffer zone communities indicates the importance of: (i) tailoring expected outputs and project phasing to the rhythms and pace of indigenous people’s traditional decisionmaking processes; (ii) understanding, and designing project activities around, the limited absorptive and implementation capacity found in the communities; (iii) clearly defining the roles of the project and the communities in project administration, fund management, decisionmaking, and implementation in order to avoid creating false expectations or leaving ambiguities which cause implementation delays; (iv) providing adequate training to enable participatory planning (relatively simpler) to translate into participatory implementation (more complex); (v) providing for a strong administrative and coordinative capacity supported by adequate technical assistance and, initially, close implementation supervision; and (vi) establishing clear linkages between conservation and development activities.

An expert from the GEF Scientific and Technical Advisory Panel (STAP) Roster reviewed the project concept in February 1997. The reviewer found that this was a much needed project, that it would help fill the gaps in existing conservation work in Panama, and it would therefore enhance the probabilities of success for every conservation effort in Panama and in Central America. The reviewer supported the integration of biodiversity conservation activities into rural poverty alleviation activities, the strengthening of the administrative unit, and the project’s focus on participation, all within the regional framework of the MBC. The reviewer also recommended giving more emphasis to legislation related to indigenous people in Panama and the opportunities created by this legislation for biodiversity conservation.

### ***4. Indications of country commitment and ownership***

Panama is a signatory of most international conventions, including the Convention on Biological Diversity, RAMSAR, Convention on International Trade in Endangered Species (CITES), the Central American Agreement for the Conservation of Biodiversity, and the Central American Alliance for Sustainable Development. Panama has participated actively in the UNDP/GEF/CCAD regional Mesoamerican Biological Corridor planning exercise, and the proposed project would implement its major recommendations related to



the Panamanian portion of the MBC. The President of Panama, with the other Central American Presidents, officially approved the MBC initiative, of which this project is an integral part, at the XIX Summit of the heads of government of the Central American countries.

### ***5. Value added of World Bank and GEF support in this project***

GEF support is warranted because of the global significance of the Mesoamerican Biological Corridor and the need for incremental financing for its long-term conservation. The project builds upon the efforts of the World Bank and UNDP in Panama as well as the regional Mesoamerican Biological Corridor project (UNDP/GEF). Furthermore, UNEP, the third Implementing Agency of the GEF, is implementing Enabling Activities for Biodiversity in Panama. In this regard, the project draws upon each GEF Implementing Agency and ensures cooperation between regional and national programs. Finally, value-added of Bank support also lies in technical support for preparation, supervision capacity, and linkages with PPRRN.

## **E. Summary Project Analysis**

### ***1. Economic Assessment***

☐ Cost-Benefit Analysis    ☐ Cost Effectiveness Analysis    ☒ Other: Incremental Cost Analysis  
(see Annex 4)

### ***2. Financial Assessment***

Estimates generated during project preparation suggest that, with the state maintaining its traditional role, adequate management of protected areas within the PAMBC for biodiversity protection would require investments of approximately US\$9.75 – US\$11.25 million in equipment and infrastructure and an annual budget for recurrent costs of US\$3.75 – US\$5.25 million [Aylward, 1997. See Annex 12 for full citation.]; in contrast, the current annual budget is about US\$2.25 million for investments and recurrent costs. Project interventions are expected to assist in lowering the state's costs through assisting in rationalizing priorities and roles of local and national government, communities, private sector and NGOs in protected area management. Preliminary estimates suggest the potential to: (a) reduce the recurrent costs for adequate management of protected areas within the PAMBC to US\$3 – US\$4 million per annum; and (b) over the medium-to-long term, generate income through park entrance fees on the order of US\$2.6 million per annum. Other potential areas for direct revenue generation in the PAMBC explored were carbon markets and bioprospecting; both were shown to have significant potential generating revenues.

Recurrent costs are to be contained through a project design which seeks to minimize costs through pursuing objectives related to integration of the PAMBC and biodiversity conservation into ongoing activities, as opposed to establishing new mechanisms or activities, and by: (a) relying upon existing institutional structures (or proposed, as in the case of the General Environmental Law); (b) seeking coordination, cooperation and strategic alliances with existing groups, projects, and institutions with compatible objectives rather than seeking to “purchase” behavioral change; (c) integrating biodiversity concerns into ongoing processes rather than attempting to establish “new” or “parallel” processes; and (d) strengthening local individuals and/or groups so that they may subsequently seek out sources of financial assistance.

### ***3. Technical Assessment***

Technical issues resolved during project preparation include the geographic prioritization for field-level interventions of the project based on biophysical, economic, social and institutional capacity criteria; and the identification of appropriate interventions which balance the need for local economic development with biodiversity conservation goals. Other issues included: assessing opportunity costs for biodiversity conservation in the PAMBC to focus interventions where likelihood for success would be greater; and

developing a better understanding of the potential nature of sustainable development/biodiversity subprojects through analyzing existing opportunities in order to develop appropriate financing and eligibility criteria.

#### **4. Institutional Assessment**

##### Executing agency

INRENARE is responsible for the management and conservation of natural resources; nevertheless, institutional weakness and minimal interaction with local resource users limit INRENARE's ability to enforce environmental regulations. The project includes institutional strengthening of INRENARE's central and regional offices as well as NGOs, local user groups, and other governmental entities. The project will decentralize administration of some project components to regional and local organizations.

##### GEF implementing agency

The World Bank will serve as GEF Implementing Agency for the project. Project activities will be coordinated with those of PPRRN as well as other GEF- and World Bank-financed projects in the MBC.

##### Project management

The project will be managed by INRENARE and implemented through a Project Executing Unit. Activities financed under the project will be coordinated with activities being financed by the PPRRN, currently under implementation, through a common Project Coordinating Unit.

LC  
CLDS  
The project will support participatory mechanisms which promote and contribute to the conservation and sustainable use of natural resources in priority areas. These areas include selected protected areas and local corridors of high biodiversity value. At the local level, local committees for sustainable development (CLDS) will be strengthened; these organizations will be responsible for the identification and selection of subprojects supporting biodiversity conservation. At the regional level, regional environmental commissions (CPA) and municipal governments will coordinate complementary activities in support of community subprojects. The project will provide technical assistance and capacity building for the CLDS and CPAs. In indigenous areas, the project would assist to strengthen and support both community and indigenous mechanisms for participation and decisionmaking. The project will work with and through the Indigenous Congresses and their official representatives to develop local participatory and decisionmaking mechanisms.

#### **5. Social Assessment**

A Social Assessment (SA) has started and will continue during implementation to assure proper involvement of all social actors in project design and implementation, assess social impacts and verify the soundness of assumptions and operational arrangements made. The SA has been conceived as a living process to be developed in two phases. The first phase, which has been completed, covered: (a) identification of stakeholders; (b) field visits; (c) analysis of main conflicts among actors, and (d) institutional arrangements to involve stakeholders in project execution. The second phase will continue during implementation and will focus on validation of social assumptions, feasibility of the operational arrangements made and adjustment of project strategies. The results of the first phase of the SA, analysis of indigenous issues in the Atlantic Corridor as well as records of the meetings and evidences of the consultation-participation process, are contained in self-standing documents (in Spanish) available in project files.

##### Social Actors in the Atlantic Corridor

The total population living in the Atlantic Corridor is estimated at 352,000. The main social actors in the corridor include: (a) indigenous communities and their organizations; (b) mestizo small farmers and local NGOs; (c) private forestry, mining and tourism investors, (c) national and local governmental institutions such as INRENARE; Ministry of Agriculture; Ministry of Public Works; Ministry of Government and Justice; Ministry of Education; and the Maritime Authority of Panama; and (d) international agencies working in the corridor.

IPAT, AR1

### Indigenous Communities

Indigenous communities are among the poorest groups in Panama. Occupying the most significant percentage of pristine ecosystems in the Atlantic Corridor, they represent 50% of the rural population of the Atlantic Corridor, pertaining to the following indigenous groups: Teribe; Ngobes; Bugle; and Kunas. Indigenous *comarcas* account for 60% of the geographic Atlantic region with approximately 13,000 km<sup>2</sup>, (including the Wargandi Reserve and the area occupied by Teribes). In general, productive systems among indigenous communities are environmentally sustainable. However, under market pressures, indigenous communities have started utilizing unsustainable practices.

### Small Farmers

The rural non-indigenous and mestizo population in the Atlantic Corridor (excluding Darién and Coclé) is estimated at 120,000. Small farmers are mainly located in the agricultural frontier along several colonization fronts and dispersed settlements along the biological corridor. These areas are subject to intense deforestation and environmental degradation. The majority of small farmers come from the Pacific Region bringing with them extractive, agricultural and cattle ranching patterns which are not *a priori* synonymous with environmental conservation. Although each community has its own characteristics, there are some outstanding commonalities: extreme poverty; illiteracy, lack of access to education and health services, particularly among women and girls; and geographical isolation. Typical land use by small farmers follows a pattern of nutrient mining, including: extracting marketable timber, land clearing, planting cereals and other short-term crops, and eventually cattle raising on increasingly degraded soils.

### Other actors

Extensive consultation meetings with the mining sector and related governmental agencies were held during project preparation. The project will support activities to develop environmental and social considerations in mining concessions that make mining compatible with protection of biodiversity and sustainable development of indigenous communities. As tourism is increasing in coastal and mountainous areas of the biological corridor, the Panamanian Institute of Tourism (IPAT) and private groups were contacted during project preparation. Ongoing Bank support related to infrastructure development includes, inter alia, support to the Ministry of Public Works for environmental institutional strengthening as well as to increase environmental awareness within sectoral planning. Within the PAMBC project, the project will support national planning and intersectoral coordination related to mainstreaming the biological corridor concept within key ministries, including INRENARE, MICI, MOP, ME, AMP, IPAT, MIDA, and MIPPE.

### Main Conflicts

Because of the strategic importance of the PAMBC, both in economic and environmental terms, multiple conflicts exist related to natural resource management and local development goals. These relate to: (a) land tenure (e.g., conflicts between indigenous communities and colonists; overlaps between protected areas and indigenous territories); (b) land use (rural development vs. protected areas; expansion of agricultural frontier and/or commercial tourism vs. conservation of intact ecosystems); (c) extraction of non-renewable resources, particularly in and around indigenous territories; (d) construction of roads in protected areas and indigenous communities; (e) population growth and cultural changes within indigenous communities; and (f) juridical conflicts (*comarcas* vs. provincial governments; traditional vs. local governmental authorities).

### Action Plan

Biodiversity conservation and sustainable development of local economies is only possible to the extent that key social actors become involved in constructive, informed debate and decisionmaking. To promote such development, the project will support: (a) education, training and institutional capacity building among national, regional, local and community stakeholders; (b) participatory planning exercises to identify opportunities for sustainable use and productive practices, priorities and investments; (c) land security (including assistance for the declaration of the *Teribe Comarca*, physical demarcation and control); (d) environmentally sustainable development subprojects (including agroforestry, ecotourism, fisheries, bioprospecting); (e) pilot cases for conflict mediation among social actors in buffer zones and protected areas within indigenous territories); (f) incentives for biodiversity conservation; and (g) joint monitoring.

### Gender Issues

Consultations with women's associations, indigenous craft-makers women, and indigenous social workers took place during project preparation. From these meetings, it was clear that women in rural areas face certain disadvantages and discrimination relating to access to credit, training and political decisionmaking. Such disadvantages occur in both indigenous and non-indigenous communities. INRENARE has hired a gender specialist to design a strategy for environmental education and community-based sustainable projects. The project will strengthen women's participation in decisionmaking and ensure equitable access to project services and benefits.

### Strategy for involving indigenous and non-indigenous communities

The strategy to assure indigenous participation has started during project preparation. During project preparation, an indigenous professional was hired and given the responsibility for visiting indigenous communities, gathering relevant information, coordinating and consulting with indigenous NGOs and leaders; the local indigenous congresses as well as other indigenous authorities designated representatives to coordinate with the project preparation activities and assist in the design of participation and decision-making mechanisms; significant resources were allocated to assist indigenous communities and groups to participate in the project, assume leadership roles in PAMBC planning, and prepare and implement eligible subprojects; and processes were designed to ensure the informed participation of indigenous peoples throughout project implementation. During project implementation, subprojects will be prepared by indigenous communities with the clearance of local indigenous congresses, who will submit them to the PEU for project support; indigenous communities will be also represented in the Corridor Commission at the national level; and the PEU will include a technical team operating in the provinces to help indigenous (and non-indigenous) with the preparation of eligible subprojects.

The strategy to assure participation of small farmers during project implementation will rely upon the major NGOs acting in the corridor which are involved in rural radio communication activities, alternative agricultural systems, commercial assistance, education and training of leaders in rural communities.

Cooperatives and producers associations will be entry points as well. Representatives of small farmers will be members of the Local Committees for Sustainable Development at the municipal level; they will also participate in the Corridor Commission, which is expected to be a national fora for analysis and actions related to biodiversity conservation and sustainable development in the Atlantic Corridor. Likewise indigenous, mestizo rural communities will benefit from project investment in sustainable development. Small farmers associations are expected to prepare subprojects to be considered by the respective CLDS and sent to the PEU for approval and financial support.

## **6. Environmental assessment**

Environmental Category [ ] A [X] B [ ] C

Certain investment subprojects could involve risk of localized, negative impacts, particularly investments in infrastructure in or near protected areas or in zones of high biological or other environmental values. The project will apply mechanisms for evaluation and mitigation of environmental impacts, developed and approved by the Bank for:

- Protected Areas – environmental impact evaluations with mitigation plans would be included for all infrastructure and trails;
- Community Subprojects – local participatory planning would assist to identify wildlands and existing habitats, serving as a guide for zoning of subproject activities;
- Technical units of the Provincial Governments and indigenous Congresses would be strengthened in the integration of biodiversity issues into development planning; and
- Community-level subprojects with potential for causing negative impacts on locally significant scales (i.e., requiring environmental impact assessment) would not be eligible for financing.

## 7. Participatory approach

Beneficiaries/	<u>Identification/Preparation</u>	<u>Implementation</u>	<u>Operation</u>
Community Groups	COL	COL	COL
Intermediary NGOs	COL	COL	COL
Academic Institutions	IS	IS	IS
Local Government	CON	CON	COL
Other donors	CON	IS	IS
UNDP	COL	CON	CON

Note: Information Sharing (IS), Consultation (CON), and Collaboration (COL)

During project preparation, a multi-disciplinary team carried out a two-phased process, beginning with local visits to priority PAMBC to identify stakeholders, followed by a series of local consultations and provincial and national-level workshops with stakeholders from priority zones and representatives of government.

Due to time constraints, low geographic priority, and remoteness, contact was not made with the Bribri in Yorkin and, due to low thematic priority and internal differences within the leadership of the Emberá Congress, no direct contact was made. Two national level workshops were held with representatives of government, NGOs, academic institutions and researchers, indigenous congresses and NGOs. Five district/provincial level consultations were held: (a) two with the Kuna Congress and indigenous communities of San Blas; (b) with the *Comarca* Madugandi (Kuna) congress and leaders; (c) with the Regional Congress of Veraguas (Ngobe-Bugle); and (d) with representatives of local government, NGOs, and academic institutions in Bocas Del Toro. Also, a presentation on the project was made to the General Congress of the Ngobe-Bugle.

## F. Sustainability and Risks

### 1. Sustainability

To ensure the sustainability of the PAMBC beyond the project period, the project would: (i) seek to develop cost recovery and financing mechanisms for the priority protected areas within the PAMBC to augment Government's current budget and cover the incremental costs of providing adequate management inputs; (ii) promote activities favorable to biodiversity, such as participatory land use planning and environmental zoning, ecotourism, sustainable forest use by indigenous communities, agroforestry systems, improved management of non-timber forest products, bioprospecting, and protection of areas critical to municipal or community quality of life (such as watersheds and mangroves); (iii) improve the ability of local and national institutions to assess and integrate biodiversity values in development planning; (iv) create fora for ongoing dialogues, consultations, and negotiations between key actors at the local, regional, and national levels; (v) promote rural development activities under the IBRD-financed activities which would assist in reducing poverty and resource degradation-driven migration into forested and protected areas; (vi) promote the selection by local communities of activities that are environmentally, socially and financially sustainable; and (vii) establish mechanisms, including biodiversity monitoring and land use planning, to ensure that projects support biodiversity conservation. Finally, and perhaps most importantly, the project would develop strategic partnerships with stakeholders (including communities, indigenous groups, private sector, local governments, and NGOs), involving them in implementation and capacity building activities. Their involvement would help to ensure that project objectives are "owned" locally and institutionalized nationally and that the capacity to further these objectives exists at both levels.

## 2. Critical Risks

Risk	Risk Rating	Risk Minimization Measure
<b>Project Outputs to Development Objectives</b> National markets do not favor adoption of appropriate land use models.	Substantial	Investment program gives priority to micro-level community projects with proven success records. Financial analysis will be carried out on community projects to support investments.
Parallel donor projects, including the regional corridor project (GEF) do not share or contribute to program objectives.	Modest	Awareness raising and planning activities will provide tools to Panamanian officials to negotiate with donors inclusion of PAMBC objectives in donor-funded projects.
Conflicts over land use and access to resources between indigenous communities, campesinos, private sector interests and government will create an environment hostile to the biological corridor concept.	Substantial	The project will invest in conflict mediation.
Private investment in tourism and mining does not respect the biological corridor concept	Modest	Substantial dialogue with the mining industry and the Institute of Tourism indicated that these two sectors could benefit from the corridor and are willing to accommodate special restrictions.
<b>Project Components to Outputs</b> A national-level interlocutor, with sufficient influence to facilitate coordination between sectors, cannot be found.	Substantial	In the short-term, the project will utilize mechanisms established under the PPRRN, including public-private partnerships to support the biological corridor concept. In the medium - term, outreach activities will be targeted at locating and strengthening an appropriate interlocutor.
The concept of the Mesoamerican Biological Corridor, and the subsequent processes associated with its realization, fail to gain support from other bilateral, multilateral, and private voluntary donors	Modest	Awareness raising among donors; creation of a foundation of influential Panamanians to represent the PAMBC.
Inadequate coordination between the project and the regional MBC project.	Modest	Regional consultation between regional MBC project and PAMBC PEU.
Insufficient support in civil society for environmental issues to ensure receptivity to the biological corridor concept.	Modest	Awareness raising and outreach.
Inadequate resources available for training	Substantial	Collaboration with existing and proposed donor and bilateral projects to finance training activities.
Key individuals cannot be identified from other government and non-government institutions who can subsequently have an impact in raising biodiversity and the PAMBC to the level of debate in their institution.	Modest	Awareness raising and outreach.
Lack of creativity and foresight in critical private sector companies.	Substantial	Awareness raising and outreach.
<b>Overall Risk Rating</b>	Substantial	

Risk Rating - H (High Risk), S (Substantial Risk), M (Modest Risk), N (Negligible or Low Risk)

### **3. Possible Controversial Aspects**

The rights of rural, principally indigenous, communities vis-à-vis mining activities in Panama are always controversial. In specific instances, the project will seek to engage the mining sector to support projects to benefit local communities, individuals and biodiversity that might be affected by mining sector activities in the PAMBC. Second, in relation to indigenous land rights in protected areas with high biodiversity value, such as in the Darién National Park (*Comarca Emberá-Wounaan* in Cemaco) and the region north of La Amistad International Park (*Territorio Teribe*), the project will finance legal and technical assistance to resolve land rights conflicts, including territorial demarcation and the protection of usufruct rights in critical areas.

## **G. Main Grant Conditions**

### **1. Effectiveness Conditions**

Signed subsidiary agreement between INRENARE and the Ministry of Planning and Economic Policy, reflecting responsibilities of participating agencies.

Qualified personnel, acceptable to the World Bank, contracted as the Project Coordinator and Financial Officer for the PEU.

### **2. Other**

#### Counterpart funds

Counterpart funds from the Government of Panama will be available in the amounts and at the times specified within the agreed project financing plan.

#### Procurement

Procurement will be carried out in accordance with the agreed categories detailed in the Procurement and Disbursement Arrangements and will follow the Guidelines For Procurement Under IBRD Loans and IDA Credits (January 1995, revised January and August 1996 and September 1997). All contracting of consultants and consulting services will be in accordance with the Guidelines For Use of Consultants (January 1997 and revised September 1997).

#### Accounts/Audits

Project will implement agreed plan of accounts and auditing.

#### Annual Work Programs

Annual work programs will be submitted for World Bank no-objection for review.

#### Monitoring

Quarterly and annual reports will be prepared according to agreed formats and submitted to World Bank within 30 days of the end of each quarter, and by January 31, for quarterly and annual reports, respectively.

#### Conditions for Disbursements of Subprojects

That the Project Operations Manual has been issued by INRENARE.

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## **H. Readiness for Implementation**

[ ] The engineering design documents for the first year's activities are complete and ready for the start of project implementation. [X] Not applicable.

☒ The procurement documents for the first year's activities are complete and ready for the start of project implementation.

☒ The Project Implementation Plan has been appraised and found to be realistic and of satisfactory quality.

☐ The following items are lacking and are discussed under loan conditions (Section G):

1. The Project Operations Manual is currently only in draft, as are detailed institutional and participation arrangements. Funds have been reserved in the PDF for preparation work to continue on these aspects up to Loan Effectiveness. Given the decentralized and participatory nature of the project, design of institutional and participation arrangements requires an iterative process of consultations at local, provincial and national levels which must subsequently be incorporated into the Operations Manual.

### **I. Compliance with Bank Policies**

☒ This project complies with all applicable Bank policies.

Task Team Leaders: Luis Constantino and John Kellenberg

Sector Manager/Director: Maritta Koch-Weser

Country Manager/Director: Donna Dowsett-Coirolo

For. 



# Annex 1

## Project Design Summary

### Panama Atlantic Mesoamerican Biological Corridor Project

Narrative Summary	Key Performance Indicators	Monitoring and Evaluation	Critical Assumptions
<p><b>1. CAS Objective (December 1994):</b> Environmental conservation and poverty alleviation.</p> <p><b>2. Global Environment Objective:</b> Long-term conservation and sustainable use of biodiversity in the Panamanian portion of the MBC.</p>	<p>1. More rational allocation of lands and natural resources to balance economic development and conservation needs.</p> <p>2. Declines in rates of deforestation and habitat fragmentation in high priority areas of the Panamanian portion of the MBC.</p>	<p>1.1 Evaluation of public expenditures and policies in the PAMBC.</p> <p>2.1 Analysis of deforestation rates; remote sensing; aerial and field surveys.</p>	<p>(Goal to Bank Mission)</p>
<p><b>Project Development Objectives:</b> 1. Substantial actions on the part of stakeholders to achieve conservation and sustainable use of biodiversity in the PAMBC through land use practices which integrate biological, social, and economic priorities.</p>	<p>1.1 By 2002: Significant decline in new colonists in priority biodiversity areas of the NAPAS and indigenous <i>comarcas</i>.</p> <p>1.2 By 2000: All EIAs for investments in the PAMBC to incorporate the biological corridor concept.</p> <p>1.3 By 2000: All donor and multilateral projects greater than US\$2 million within the PAMBC consistent with the biological corridor concept.</p>	<p>1.1 Annual reports of INRENARE; reports from indigenous <i>comarcas</i>.</p> <p>1.2 Evaluations of EIAs; INRENARE annual reports.</p> <p>1.3 Surveys of donor and multilateral projects.</p>	<p>(Objective to Goal)</p> <ul style="list-style-type: none"> <li>Political will exists to support sustainable use and conservation of biodiversity and the MBC within Panama</li> <li>Public investment in development and alleviation of rural poverty reduce the factors which draw people from the Pacific zone to the Atlantic agricultural frontier.</li> <li>Price trends do not favor extensive cattle ranching in frontier areas</li> <li>Government policy does not promote big development projects within corridor without mitigating measures</li> <li>Demographic pressures from populations already within the corridor do not explode</li> <li>Development of public infrastructure, increases in land prices, and structural changes in agriculture toward high input market crops will not create a local land market which displaces the poor into upper watersheds and protected areas.</li> </ul>

*Indicators*

<p><b>Outputs:</b></p> <p>1. Tools for integrating the biological corridor concept into sectoral strategies, local and regional planning and public investments developed and disseminated</p> <p>2. Increased information on the status of biological diversity along Panama's Atlantic Slope.</p> <p>3. Increased awareness of the importance and demand for the conservation of the PAMBC at national and international levels.</p> <p>4. Natural resource management pilots in priority areas implemented and information disseminated by communities.</p> <p>5. Reduced pressure upon protected areas and indigenous <i>comarcas</i> within priority areas of the PAMBC.</p>	<p>1.1 By year 5: 1 national and 5 regional participatory corridor plans developed and officially adopted.</p> <p>2.1 Monitoring reports with quantitative analysis regarding deforestation, ecosystem conditions and <u>threats and indicator species</u>, disseminated in years 2 and 5 of the project</p> <p>2.2 Production of ecosystem map for PAMBC.</p> <p>3.1 30% of local populations and 50% of primary school teachers within the PAMBC and 25% of decisionmakers within Panama (e.g., members of Congress, business leaders, national and local NGOs, <u>indigenous leaders, governors, mayors</u>) know and understand PAMBC concept by year 5.</p> <p>4.1 By year 5: Subprojects compatible with the aims of the PAMBC implemented in 100 communities.</p> <p>4.2 By year 5: 120 local leaders received training on PAMBC objectives and project mechanisms and 500 local individuals received training in natural resources management techniques by year 5.</p> <p>5.1 By year 5: 295 kilometers of priority protected areas demarcated, with participatory management plans under implementation.</p> <p>5.2 150 park guards and volunteers trained and equipped to effectively patrol priority protected areas.</p> <p>5.3 175 kilometers of <i>comarca</i> boundaries demarcated.</p>	<p>1.1 Review of completed plans; project annual reviews and supervision reports.</p> <p>2.1 Project annual reviews and supervision reports.</p> <p>3.1 Survey in year 5.</p> <p>3.2 Project annual reviews and Supervision reports.</p> <p>4.1 Project annual reviews and Supervision reports.</p> <p>4.2 Stakeholder surveys conducted in year 5</p> <p>5.1 Annual reports of INRENARE.</p> <p>5.2 Project annual reviews and Supervision reports.</p> <p>5.3 Reports from indigenous congresses.</p>	<p><b>(Outputs to Objective)</b></p> <ul style="list-style-type: none"> <li>Markets and innovation favor adoption of appropriate land use models</li> <li>Parallel donor projects, including the regional corridor project (GEF) become effective and share program objectives</li> <li>Conflicts over land, land use and access to resources between indigenous communities, campesinos, private sector interests and government will not create an environment hostile to the biological corridor concept.</li> <li>Private investment in tourism, and mining respects the corridor concept</li> </ul>
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*what does that mean*

*what does that mean?*

<p><b>Project Components/Sub-components:</b></p> <p><b>1. Corridor Planning and Biodiversity Monitoring</b></p> <p>1.1 National Planning and Intersectoral Coordination.</p>	<p><b>Inputs: (budget for each component) US\$2.53 million for:</b></p> <p>1.1.1 Development of sectoral strategies and guidelines for the Panamanian portion of the MBC by INRENARE, AMP, IPAT, ME, MICI, MIDA, MIPPE, MOP, Ministry of Government and Justice, Indigenous Policies.</p> <p>1.1.2 Development of strategy and proposal for adjudication of forested, national lands.</p> <p>1.1.3 Development of mining strategy within context of MBC.</p> <p>1.1.4 Five annual PAMBC coordination workshops with donors, NGOs, local authorities, MIPPE, INRENARE.</p> <p>1.1.5 Five annual meetings of CNA to discuss and formalize global strategy and policy for PAMBC.</p>	<p>1.1.1 Official strategy documents.</p> <p>1.1.2 Disbursement and progress reports.</p> <p>1.1.3 Workshop and meeting Reports from workshops.</p>	<ul style="list-style-type: none"> <li>• A national level interlocutor, with sufficient influence, can be allied to the project to facilitate coordination between sectors.</li> <li>• That project processes can result in the participation of sufficiently representative and politically influential local bodies such that planning processes are credible.</li> <li>• That the concept of the Mesoamerican Biological Corridor, and the subsequent processes associated with its realization, are sufficiently credible so as to gain support from other bilateral, multilateral, and private voluntary donors.</li> <li>• Adequate coordination between the project and the regional MBC project.</li> </ul>
<p>1.2 Local &amp; Regional Planning In Priority Areas</p>	<p>1.2.1 Regional PAMBC participatory plans for Bocas del Toro, Comarcas Teribe, Ngobe-Bugle, Kuna Yala, and Madugandi.</p> <p>1.2.3 Four protected area management plans, four protected area resource assessments, and validation and public consultation of annual operating plans.</p>	<p>1.2 Disbursement and progress reports and completed plans.</p>	
<p>1.3 Biodiversity Monitoring</p>	<p>1.3.1 Design, equipment and operation of monitoring system.</p> <p>1.3.2 Purchase and interpretation of images; vegetation/ecosystems map.</p> <p>1.3.3 Establishment and support of monitoring network.</p> <p>1.3.4 Rapid Biological Assessments.</p> <p>1.3.5 Monitoring of three indicator species.</p>	<p>1.3 Disbursement, progress and monitoring reports; vegetation and ecosystems maps.</p>	
<p><b>2. Mesoamerican Biological Corridor Awareness and Promotion</b></p> <p>2.1 National Awareness</p>	<p><b>US\$1.15 million for:</b></p> <p>2.1 Public Awareness Campaign.</p>	<p>2.1 Disbursement and progress reports; opinion survey results.</p>	<ul style="list-style-type: none"> <li>• Sufficient support in civil society for environmental issues to ensure receptivity to the biological corridor concept.</li> </ul>
<p>2.2 International Promotion</p>	<p>2.2. International Program.</p>	<p>2.2 Disbursement and progress reports; promotion products.</p>	

<p><b>3. Capacity Building for Conservation &amp; Sustainable Use of Biodiversity</b>  <b>3.1 Strengthening of Local Communities</b></p>	<p><b>US\$1.98 million for:</b></p> <p>3.1.1 Selection and training of 64 local promoters.  3.1.2 120 indigenous and non-indigenous leaders trained on PAMBC objectives, activities and implementation arrangements.  3.1.3 Develop. a training program  3.1.4 Legal and institutional strengthening of indigenous tenure and resource access.  3.1.5 Strengthening of local and regional councils  3.1.6 Strengthening of provincial and regional units  3.1.7 500 individuals trained in legal, planning, subproject preparation, gender, and appropriate technology  3.1.8 Exchange visits</p>	<p>3.1 Disbursement and progress reports; course material; course participant surveys; mid-term and final reviews.</p>	<ul style="list-style-type: none"> <li>• Training needs are not greater than available resources.</li> <li>• Key individuals can be identified from other government and non-government institutions who can subsequently have an impact in raising biodiversity and the PAMBC to the level of debate in their institution.</li> <li>• That sufficient creativity and forward looking exists in critical private sector companies with interests in the PAMBC such that they will participate.</li> <li>• That sufficient institutional will exists to restructure and reorganize the NAPAS along decentralized lines.</li> </ul>
<p><b>3.2 Training in Environmental Management</b></p>	<p>3.2.1. Eight workshops for private sector companies on PAMBC, EIA norms and biodiversity.  3.2.2. Eight workshops for private sector on international trends/opportunities regarding biodiversity and sustainability.  3.2.3 Forty professionals trained in methodologies for economic valuation of biodiversity and incorporation of biodiversity in sectoral and regional planning related to the PAMBC.  3.2.4 Twenty professionals trained in concepts and methods of policy analysis and biodiversity.  3.2.5 Development and implementation of mining/biodiversity course for GOP regulators.</p>	<p>3.2 Disbursement and progress reports; course/workshop materials; course/workshop participant surveys; mid-term and final reviews.</p>	
<p><b>3.3 Modernization of NAPAS, focusing upon Protected Areas within the PAMBC</b></p>	<p>3.3.1 Implementation of reorganization plan  3.3.2 Strategy development and implementation for increased resource generation for priority protected areas within the PAMBC  3.3.3 Forty central, regional and local DPAW staff trained on administrative, technical, social aspects of PA mgt.  3.3.4 150 park guards and volunteers trained in park management.</p>	<p>3.3 Disbursement and progress reports; reorganization plan; consultant reports; mid-term and final reviews; NAPAS Financial Strategy document; annual NAPAS budget.</p>	



## **Annex 2**

### **Project Description**

#### **Panama Atlantic Mesoamerican Biological Corridor Project**

The on-going IBRD *Rural Poverty and Natural Resources Project* (Credit 41580-PA) and the proposed IBRD/GEF Panama Atlantic Mesoamerican Biological Corridor Project together address the root causes leading to migration to, and expansion of, the agricultural frontier while enhancing on-site protection of areas of high biodiversity values inside and outside of protected areas. The two closely-related projects provide the Government of Panama with a coherent, multi-sector response to the interrelated issues of rural poverty, natural resources management, and biodiversity conservation.

The two projects focus one set of instruments on the poorer and more populous southern provinces of the Pacific to reduce outmigration from poverty and resource degradation leading to migration that pushes the agricultural frontier and leads to subsequent invasions of public forests and protected areas; and another set of instruments within the Atlantic portion of the Mesoamerican Biological Corridor, reducing pressure upon high biodiversity areas and thus reducing the pull factors and controlling *in situ* threats to biodiversity.

This will be accomplished by (i) investing heavily in areas of origin of poor migrants; (ii) improving protection of protected areas; (iii) assisting indigenous and non-indigenous dwellers of the Cordillera and Atlantic coast to protect their community lands from external threats and assisting them with biodiversity conservation and sustainable resource use activities; (iv) increasing awareness and promoting land use planning to enlist local governments in the Atlantic behind the principles of the biological corridor; (v) assisting public and private development activities (e.g., roads) to appropriately internalize the corridor concept and biodiversity measures within sector development planning and projects; (v) actively seeking to build partnerships with commercial interests (e.g., mining) in the Atlantic to enhance biodiversity protection and private sector involvement in biodiversity management activities; and (vi) strengthening INRENARE and local government capacity to coordinate other on-going projects to ensure more coherent and efficient use of resources in pursuit of corridor objectives.

#### **IBRD Rural Poverty and Natural Resources Project - US\$27.9 million**

The principal objective of the *Rural Poverty and Natural Resources Project* is to apply, on a pilot basis, methodologies that would channel financial resources to rural communities to assist them in promoting sustainable productive systems and thereby reduce rural poverty, natural resource degradation, and migration. More specifically, operational goals include:

- Creating capacity at the local level to organize, self-diagnose problems, plan activities through participatory means, seek out and negotiate assistance, and act in pursuit of resolving priority quality of life issues.
- Establishing a demand-driven financing mechanism that operates in high poverty areas and provides matching grants to communities for activities that help reduce rural poverty, improve the quality of life, and offer alternatives for sustainable natural resource management and livelihood.

Implemented by the Ministry of Agricultural Development, NGOs, and private and community organizations, the *Rural Poverty and Natural Resources Project* will: (i) provide training and organizational assistance to communities to identify their needs, in activities related to production technology, production support, community organization and rural development, and to prepare community development or action plans using participatory methodologies; and (ii) establish a demand-driven Fund for Sustainable Agricultural and Rural Development that would provide matching grants to communities to help finance these plans in whole or in part (other sources of funds would also be used when available). Eligible investments include: agricultural system research; agricultural extension; technical assistance; training and productive infrastructure, including mini-irrigation schemes, processing facilities, reforestation and rehabilitation of rural roads.

#### **IBRD/GEF Panama Atlantic Mesoamerican Biological Corridor Project - US\$12.8 million**

The *Panama Atlantic Mesoamerican Biological Corridor Project* would complement the *Rural Poverty and Natural Resources Project* by: (i) integrating the biological corridor concept into sector strategies and investments; (ii) increasing information on the status of biological diversity along Panama's Atlantic Slope; (iii) increasing awareness of the importance