

Document of  
The World Bank

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Report No: PAD769

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED GRANT

FROM THE GLOBAL ENVIRONMENT FACILITY TRUST FUND  
IN THE AMOUNT OF US\$9.59 MILLION

TO THE

REPUBLIC OF PANAMA

FOR A

SUSTAINABLE PRODUCTION SYSTEMS AND  
CONSERVATION OF BIODIVERSITY PROJECT

January 21, 2015

*Agricultural Global Practice  
Central America Country Management Unit  
Latin America and the Caribbean Region*

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CURRENCY EQUIVALENTS  
(Exchange Rate Effective January 21, 2015)

Currency Unit = Balboas (B/)  
1.00 B/ = US\$1.00

PANAMA GOVERNMENT FISCAL YEAR  
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

ANAM	National Environment Authority ( <i>Autoridad Nacional del Ambiente</i> )
CBD	Convention on Biological Diversity
CBMAP	Atlantic Mesoamerican Biological Corridor Project
CBO	Community-based organization
CBD	Convention on Biological Diversity
CCA	Consultative Environmental Commission ( <i>Comisión Consultativa Ambiental</i> )
CDD	Community Demand Driven
CONABIO	National Commission for the Knowledge and Use of Biodiversity ( <i>Comisión Nacional para el Conocimiento y Uso de la Biodiversidad</i> )
CTF	Conservation Trust Fund
DA	Designated Account
DAPVS	Department of Protected Areas and Wildlife/ANAM
EMF	Environmental Management Framework
ESMF	Environmental and Social Management Framework
FAO	Food and Agricultural Organization (of the UN)
FM	Financial Management
FMIS	Financial Management Information System
GDP	Gross Domestic Product
GEF	Global Environment Facility
GOP	Government of Panama
IDD	Integrity Due Diligence
IEG	Independent Evaluation Group
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IFR	Interim Financial Report
IPP	Indigenous Peoples' Plan
IUCN	International Union for Conservation of Nature
MBC	Mesoamerican Biological Corridor
M&E	Monitoring and Evaluation
MEF	Ministry of Economy and Finance
METT	Management Effectiveness Tracking Tool (GEF)
MIDA	Ministry of Agricultural Development
NGO	Non-Governmental Organization
NPAS	National Protected Areas System ( <i>Sistema Nacional de Áreas Protegidas</i> )
NPV	Net Present Value
OM	Operational Manual
PA	Protected Area

PES Payment for Environmental Services  
PIU Project Implementation Unit  
SIAMP Integrated System for Project Administration and Monitoring (*Sistema Integrado de Administración y Monitoreo de Proyectos*)  
SNIMDB National Biodiversity Monitoring System (*Sistema Nacional de Monitoreamiento de Biodiversidad*)  
WA Withdrawal Application  
WB World Bank

Regional Vice President:	Jorge Familiar
Country Director:	J. Humberto Lopez
Senior Global Practice Director:	Juergen Voegele
Practice Manager:	Laurent Msellati
Task Team Leader:	Norman Bentley Piccioni



**PANAMA**  
**Sustainable Production Systems and Conservation of Biodiversity**

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**PAD DATA SHEET**

*Panama*

*Sustainable Production Systems and Conservation of Biodiversity (P145621)*

**PROJECT APPRAISAL DOCUMENT**

*LATIN AMERICA AND CARIBBEAN  
AGRICULTURE*

Report No.: PAD769

<b>Basic Information</b>			
Project ID P145621	EA Category B - Partial Assessment	Team Leader Norman B. Piccioni	
Lending Instrument Investment Project Financing	Fragile and/or Capacity Constraints [ ]		
	Financial Intermediaries [ ]		
	Series of Projects [ ]		
Project Implementation Start Date 30-March-2015	Project Implementation End Date 30-Dec-2019		
Expected Effectiveness Date 30-March-2015	Expected Closing Date 30-December-2019		
Joint IFC No	GEF Focal Area Biodiversity		
Practice Manager Laurent Msellati	Senior Global Practice Director Juergen Voegele	Country Director J. Humberto Lopez	Regional Vice President Jorge Familiar
Borrower: Republic of Panama			
Responsible Agency: Autoridad Nacional del Ambiente			
Contact: Telephone No.: (507) 232-9600	Zuleika Pinzon	Title: Email: zpinzon@anam.gob.pa	Director of Protected Areas and Wildlife
<b>Project Financing Data(in USD Million)</b>			
[ ] Loan	[ X ] Grant	[ ] Guarantee	
[ ] Credit	[ ] IDA Grant	[ ] Other	

Total Project Cost:	28.97	Total Bank Financing:	9.59			
Financing Gap:	0.00					
<b>Financing Source</b>						
			<b>Amount</b>			
Borrower			10.16			
Global Environment Facility (GEF)			9.59			
Municipalities of Borrowing Country			0.09			
Local Beneficiaries			0.63			
Foreign Private Commercial Sources (identified)			8.50			
Total			28.97			
<b>Expected Disbursements (in USD Million)</b>						
Fiscal Year	2015	2016	2017	2018	2019	2020
Annual	0.59	2.00	2.50	3.00	1.00	0.50
Cumulative	0.59	2.59	5.09	8.09	9.09	9.59
<b>Global Environmental Objective(s)</b>						
The proposed project global environmental objective (GEO) is the same as the Project's development objective (PDO), namely to conserve globally significant biodiversity through the improvement of the management effectiveness of the Project Protected Areas and biodiversity mainstreaming in the Buffer Zones.						
<b>Components</b>						
<b>Component Name</b>					<b>Cost (USD Millions)</b>	
Sustainable Management of Protected Areas					15.16	
Biodiversity and Sustainable Productive Landscapes					6.81	
Knowledge Management, Training, and Communications					5.17	
Project Management					1.83	
<b>Institutional Data</b>						
<b>Practice Area / Cross Cutting Solution Area</b>						
Agriculture Global Practice						
<b>Cross Cutting Areas</b>						
<input checked="" type="checkbox"/>	Climate Change					
<input type="checkbox"/>	Fragile, Conflict & Violence					
<input type="checkbox"/>	Gender					



[ ] Jobs				
[ ] Public Private Partnership				
<b>Sectors / Climate Change</b>				
Sector (Maximum 5 and total % must equal 100)				
Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %
Agriculture, fishing, and forestry	General agriculture, fishing and forestry sector	70	60	40
Public Administration, Law, and Justice	Public administration-Agriculture, fishing and forestry	30	10	10
Total		100		
<input type="checkbox"/> I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this project.				
<b>Themes</b>				
Theme (Maximum 5 and total % must equal 100)				
Major theme	Theme	%		
Environment and natural resources management	Biodiversity	40		
Rural development	Rural non-farm income generation	20		
Financial and private sector development	Micro, Small and Medium Enterprise support	20		
Social dev/gender/inclusion	Participation and civic engagement	10		
Public sector governance	Decentralization	10		
Total		100		
<b>Compliance</b>				
<b>Policy</b>				
Does the project depart from the CAS in content or in other significant respects?			Yes [ ]	No [ X ]
Does the project require any waivers of Bank policies?			Yes [ ]	No [ X ]
Have these been approved by Bank management?			Yes [ ]	No [ ]
Is approval for any policy waiver sought from the Board?			Yes [ ]	No [ X ]

Does the project meet the Regional criteria for readiness for implementation?		Yes [ X ]	No [ ]
<b>Safeguard Policies Triggered by the Project</b>			
		<b>Yes</b>	<b>No</b>
Environmental Assessment OP/BP 4.01		X	
Natural Habitats OP/BP 4.04		X	
Forests OP/BP 4.36		X	
Pest Management OP 4.09		X	
Physical Cultural Resources OP/BP 4.11		X	
Indigenous Peoples OP/BP 4.10		X	
Involuntary Resettlement OP/BP 4.12		X	
Safety of Dams OP/BP 4.37			X
Projects on International Waterways OP/BP 7.50			X
Projects in Disputed Areas OP/BP 7.60			X
<b>Legal Covenants</b>			
<b>Name</b>	<b>Recurrent</b>	<b>Due Date</b>	<b>Frequency</b>
Fiduciary agent	No	Two months after effectiveness	
<b>Description of Covenant</b>			
The Recipient shall cause ANAM, by not later than two months after the effective date, to employ for the period of project implementation, a fiduciary agent to handle the financial management aspects of the Project under terms and conditions satisfactory to the World Bank. Schedule 2, Section I.C.2.			
<b>Name</b>	<b>Recurrent</b>	<b>Due Date</b>	<b>Frequency</b>
Annual Operations Plan	Yes		Annual
<b>Description of Covenant</b>			
The Recipient shall cause ANAM to prepare an Annual Operations Plan on the basis of activities and indicators agreed with the World Bank. Each Annual Operations Plan shall cover the period of one calendar year, and shall be furnished to the Bank not later than one month before the end of calendar year. Schedule 2, Section II.C.2.(a).			
<b>Conditions</b>			
<b>Source of Fund</b>	<b>Name</b>	<b>Type</b>	
GEF	Subsidiary Agreement	Effectiveness	
<b>Description of Condition</b>			

The Subsidiary Agreement has been executed on behalf of the Recipient and ANAM and has become effective, duly authorized or ratified by the Recipient and ANAM and is legally binding upon the Recipient and ANAM in accordance with its terms. Article V.5.01. (a).

Source of Fund	Name	Type
GEF	Retroactive Financing	Disbursement

**Description of Condition**

No withdrawals shall be made for payments made prior to the date of the GA, except that withdrawals up to an aggregate amount not to exceed \$1,900,000 equivalent may be made for payments made up to twelve months prior to the date of signature of the GA, for Eligible Expenditures. Schedule 2, Section IV. B.1.(a).

GEF	GEF contribution to the endowment fund for the National Protected Areas System	Disbursement
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**Description of Condition**

No withdrawal will be made under disbursement category 2 for the endowment fund unless: (i) the endowment fund has been established in form and substance satisfactory to the World Bank; (ii) the Asset Management Contract has been executed and delivered on behalf of the parties thereto in terms and conditions acceptable to the World Bank; and, (iii) the endowment fund operational manual as described in the Grant Agreement has been adopted by the Recipient in form and substance satisfactory to the World Bank. Schedule 2, Section IV.B.1.(b).

Source of Fund	Name	Type
GEF	Additional Event of Default	Disbursement

**Description of Condition**

The World Bank would be authorized to suspend disbursements in the event that: (i) an amount of at least US\$3,500,000 has not been deposited in the Endowment Fund by December 31, 2016 or such later date as the World Bank shall agree; and (ii) the Endowment Fund has been dissolved or any payment shall have been made out to the proceeds of the Endowment Fund in breach of the provisions of the GA. Article IV. 4.01.

**Team Composition**

**Bank Staff**

Name	Title	Specialization	Unit
Norman Bentley Piccioni	Senior Rural Development Specialist	Team Leader	GFADR
Mary Lisbeth Gonzalez	Senior Social Development Specialist	Senior Social Development Specialist	GURDR
Evelyn Villatoro	Senior Procurement Specialist	Senior Procurement Specialist	GGODR
Patricia De la Fuente Hoyes	Senior Finance Officer	Senior Finance Officer	GGODR

Teresa M. Roncal	Operations Analyst	Co-Team Leader	GFADR
Abdelaziz Lagnaoui	Senior Environmental Specialist	Senior Environmental Specialist	GENDR
Rocio Mariela Malpica Valera	Senior Counsel	Senior Counsel	LEGLE
Dmitri Gourfinkel	Financial Management Specialist	Financial Management Specialist	GGODR
Gustavo de Montalvao G. Abath	Program Assistant	Program Assistant	GFADR

**Non Bank Staff**

<b>Name</b>	<b>Title</b>	<b>Office Phone</b>	<b>City</b>
Alberto Yanoski	Biodiversity Consultant		Asuncion
Otoniel Campos	M&E Consultant		Tegucigalpa
Ricardo Castellon	Social Development Consultant		Managua
Kathryn Johns-Swartz	Operations Consultant		Fairbanks
Juan Morelli	Economist		Montevideo
Liz Pasquel	Consultant (Costs)		Lima

**Locations**

<b>Country</b>	<b>First Administrative Division</b>	<b>Location</b>	<b>Planned</b>	<b>Actual</b>	<b>Comments</b>
Panama	Veraguas	Santiago de Veraguas		<b>X</b>	
Panama	Kuna Yala	Kuna Yala		<b>X</b>	
Panama	Panama	Provincia de Panama		<b>X</b>	
Panama	Los Santos	Provincia de Los Santos		<b>X</b>	
Panama	Colon	Provincia de Colon		<b>X</b>	
Panama	Cocle	Provincia de Cocle		<b>X</b>	
Panama	Chiriqui	Chiriqui		<b>X</b>	
Panama	Ngoebe-Bugle	Ngoebe-Bugle		<b>X</b>	

## **I. STRATEGIC CONTEXT**

### **A. Country Context**

1. Panama has experienced an average of 8 percent annual GDP growth over the last several years and is ranked as an upper-middle income country. Yet, 60 percent of the country's rural residents, a third of the total population, live below the poverty line. The major contributors to the country's GDP, including the Panama Canal, are highly dependent on the sustainable management of natural resources. Panama's forests and natural resources are strategically important for the country's socioeconomic development and poverty alleviation. They also conserve globally significant biodiversity, provide livelihoods and sustain cultural heritage.

2. Panama ranks 10<sup>th</sup> in the world for its high level of biodiversity in proportion to its size and 29<sup>th</sup> based on the Global Environment Facility (GEF) Benefits Index for Biodiversity. Panama has important and critical natural habitats in high priority ecosystems containing globally-significant biodiversity and high endemism. Notably, there are 976 species of birds, the second highest number in Central and North America and more than 10,000 species of plants, 21 times more plant species per km<sup>2</sup> than Brazil. Approximately 40 percent of the country is covered by forests and many of these areas have high beta-diversity.

### **B. Sectoral and Institutional Context**

3. Panama's unique geographic location and globally significant biodiversity make it a critical link in the Mesoamerican Biological Corridor (MBC), a multi-national effort to connect natural habitats from Mexico through Central America to Colombia. The rural and indigenous communities living in high biodiversity areas of the corridor, such as in the Buffer Zones of Protected Areas (PAs) have some of the highest poverty rates. Smallholders in these areas may farm forest gardens, practice shifting agriculture, and/or raise cattle, with main products such as bananas, coffee, cocoa, and oranges. There is also some emerging ecotourism related activities (see Annex 6). Habitat fragmentation threatens the MBC despite its importance for climate change adaptation. The conservation of biodiversity in the Panamanian MBC depends on reducing the pressures that affect unsustainable land use decisions near PAs (such as poor land use planning, agriculture and cattle ranching, poorly managed large-scale extractive activities and energy projects, unplanned tourism development, deforestation, soil and water contamination, and population growth) and valuing the corridor's ecosystems and its services.

4. The Government of Panama (GOP), through its National Environment Authority (*Autoridad Nacional del Ambiente*, ANAM) seeks to promote sustainable economic growth, conserve its rich natural resources and biodiversity, and raise awareness of the important environmental services provided by its ecosystems. ANAM administers the National Protected Areas System (NPAS) (*Sistema Nacional de Areas Protegidas*) and is responsible for the implementation of the Convention on Biological Diversity (CBD). The NPAS consists of 104 PAs encompassing 3.6 million ha (39 percent of the country; 2.7 million ha of terrestrial land). In support of these objectives in the MBC, ANAM has benefited from collaboration with many different bilateral and multilateral organizations and Non-Governmental Organizations (NGOs).

5. Panama has already benefited from two World Bank (WB)/GEF projects supporting the MBC. The proposed Project builds on this solid foundation and supports ANAM's efforts to apply a new conservation paradigm based on the creation of economic incentives to preserve

biodiversity, financial sustainability of the NPAS, and alternative livelihood options for the resource-dependent local residents.

6. The Atlantic MBC Project<sup>1</sup> (CBMAP; P045937) helped build the basic functioning of a newly-established PAs system with attention to the management plans. The CBMAP involved rural communities in biodiversity conservation, while changing ANAM's reputation from an institution that restricted people's access to natural resources to one that helped provide environmentally-friendly alternative livelihoods. It also supported preparation of management plans for four priority PAs (La Amistad, San San Pond Sak, Volcán Barú, and Palo Seco) and 100 community subprojects (80 percent in remote areas, and 75 percent with indigenous peoples).

7. The Rural Productivity and Consolidation of the Atlantic MBC Project (CBMAP II; P083045)<sup>2</sup> continued work in the PAs and conservation. Specifically it helped implement priority actions in management plans in 14 PAs, brought 40,334 ha in the Buffer Zones under effective conservation, and supported the National System of Information and Monitoring of Biological Diversity (*Sistema Nacional de Información y Monitoreo de la Diversidad Biológica*, SNIMDB). The Project also supported the development of municipal environmental plans and establishment of Consultative Environmental Commissions (CCAs). CBMAP II financed 350 subprojects to develop capacity in rural, indigenous, and extremely poor communities, mainly for agro-forestry production systems, ecotourism and handicraft production initiatives. A survey of 140 of these subprojects confirms that they are contributing significantly to family income, varying between 33 and 67 percent. The GEF Management Effectiveness Tracking Tool (METT) implemented in 14 PAs improved over five years (67 percent in 2013, from a 45 percent average in 2006).

8. Panama is benefiting from support for its NPAS from a variety of sources and while not part of the proposed Project, these programs provide the opportunity for synergy and collaboration. These programs may complement one or more components of the Project, such as the Sustainable and Climate-friendly Development Project in the Veraguas Province (IFAD/GEF) and the NATURA Foundation (Fundación NATURA) (See Annex 3).

9. Although Panama has expanded its PAs system to provide good coverage in terms of national area, the Government faces the following challenges to long-term sustainability:

(a) Financial sustainability. A preliminary financing gap study of a sample of 39 areas (about 71 percent of total area of the NPAS) shows an estimated annual financial gap for basic coverage for the entire system of US\$5.2 million and an even larger gap of over US\$12 million for optimal coverage. In particular, the financing gap of the 12 prioritized PAs is US\$1.5 million (2013).

(b) Participatory management. In 2005 and 2009, regulations for administrative and service concessions and co-management in the PAs were approved. Presently, out of the 104 PAs, 31 percent (32 PAs) are currently co-managed by ANAM with local NGOs, municipalities and other entities. ANAM is seeking to incentivize the involvement of the private sector, civil society and local governments in the financial sustainability of the PAs.

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<sup>1</sup> The CBMAP was implemented from November 1998 to June 2005 with an ICR Outcome rating of Satisfactory.

<sup>2</sup> The CBMAP II was implemented from November 2007 to July 2014.

(c) Contribution of biodiversity and biodiversity monitoring. There has been a lack of articulation to policy makers on the contribution of biodiversity to economic and social well-being and limited dissemination of the value of Panama's biodiversity to the country as a whole. The biological monitoring system (SNIMDB) is operational and is being implemented in three PAs. As part of the monitoring of the PAs, the SNIMDB will help capture this information, systematize it, and allow for dissemination.

(d) Mainstreaming biodiversity. In order to maximize the integrity and connectivity of the corridor, there is a need to mitigate the negative impact that extractive and productive activities exert on biodiversity. Local organizations need financial support for organizational development and for introducing biodiversity-friendly and improved production techniques, such as agro-forestry, organic agriculture, and erosion control. Municipalities near the PAs need support to implement their environmental management plans.

(e) Marketing and private sector linkages. To pursue marketing of biodiversity-friendly products, producers' organizations must be linked to business alliances to build long-term sustainability, develop business plans and marketing, and explore differentiation initiatives such as bio-labeling/certification and geographical indications. There are untapped opportunities to address sustainable sourcing, link to the work of the International Finance Corporation (IFC) in global agribusiness, identify production chains, and explore private sector involvement in the sustainable production activities. An added challenge is that the cost of entry into these programs can be high, particularly for more remote producers.

10. The GOP has requested assistance in preparing the proposed Project to further the conservation efforts undertaken by two earlier MBC projects, and introduce innovation in sustainability options and support for biodiversity mainstreaming. From the analysis of the METT scores of the 12 PAs, several weaknesses have been identified including: (i) insufficient staff; (ii) limited budget; (iii) limited control due to lack of appropriate equipment and facilities; (iv) no boundary demarcation (four PAs—Santa Fe, La Amistad, Palo Seco and Fortuna); and (v) limited involvement of local actors (community and tourism operators). Therefore, activities proposed in the Project include: (i) promotion of co-management mechanisms (services/administrative concessions, shared-management); (ii) a comprehensive study of the PAs' financial gap and identification of viable financing options to achieve at least a basic management effectiveness level; and (iii) support for ANAM initiatives on PA management and surveillance. The Project will support enhanced corridor integrity and connectivity, and will contribute to preserve the resilience of regional ecosystems to climatic and other external pressures, including preservation of species of conservation concern. The benefits will be derived from removing habitat transformation and encouraging sustainable harvesting or integration of biodiversity elements at the farm level through biodiversity-friendly practices.

### **C. Higher Level Objectives to which the Project Contributes**

11. The proposed project will contribute to two strategic objectives of the Biodiversity Strategy for GEF-5, namely: a) improve the sustainability of PA systems; and b) mainstream biodiversity conservation and sustainable use into production landscapes/seascapes and sectors. The threats that the Project seeks to address are aligned with this strategy. Namely, gaps identified in PAs management effectiveness, particularly financial sustainability, lack of capacity and sufficient incentives (in the public and private levels to mainstream biodiversity), and lack of information for policy makers about the contribution of biodiversity to economic and social well-

being. The Project will also contribute to the achievement of the Aichi Targets of the CBD.<sup>3</sup> The proposed Project supports many of Panama's global commitments, including to the CBD, the MBC, the United Nations Framework Convention on Climate Change, and it contributes to the Millennium Development Goal for environmental sustainability.

12. At the national level, the Project supports the government's Strategic Plan (2010-2014), the National Environment Strategy (1999-2020), the National Biodiversity Policy (2008), the Strategic Plan of the Agriculture Sector (2010-2104), and the National Climate Change Policy (2007). The Project also contributes to the 2007 decentralization policy on environmental management and its action plan, providing support to municipalities to improve management of their environmental responsibilities through the Consultative Environmental Commissions.

13. The proposed Project directly responds to the World Bank's Twin Goals of eradicate extreme poverty and promoting shared prosperity. The Project will support inclusive economic growth among some of the country's poorest communities by improving sustainable livelihood options. Families in the Project PA Buffer Zones will benefit from specific and sustained support to build their capacity to plan and implement economically sustainable activities to bring new and better income generating opportunities.

14. The proposed Project is aligned with the new World Bank Group's Panama Country Partnership Framework (CPF), that is being prepared and is expected to be discussed by the World Bank's Board of Executive Directors on April 14, 2015. The proposed Project will contribute to the CPF objective that aims to expand opportunities for indigenous and rural poor by seeking to enhance the well-being of some of the country's poorest rural and indigenous communities. In addition, the proposed Project will enhance agricultural productivity, biodiversity and conservation. The complexities associated with biodiversity conservation call for GEF and WB expertise and experience in environmental sustainability, stakeholder engagement and improving effectiveness and good governance of the NPAS. One of the objectives of the WBG partnership with Panama has been to help decrease gender gaps, *inter alia* by improving the lives of poor and indigenous women. The proposed Project aims to strengthen further the participation of women and benefit indigenous and poor communities.

## **II. PROJECT DEVELOPMENT OBJECTIVE(S)/GLOBAL ENVIRONMENT OBJECTIVE(S)**

### **A. PDO**

15. The Project's Development Objective (PDO) is the same as the Project's Global Environmental Objective (GEO), namely, *to conserve globally significant biodiversity through the improvement of the management effectiveness of the Project Protected Areas and biodiversity mainstreaming in the Buffer Zones* (see Annex 1 for definitions).

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<sup>3</sup> Target 1 on awareness of values of biodiversity; Target 4 on governments and stakeholders actions on sustainable production and consumption; Target 7 on areas under agriculture, aquaculture and forestry managed sustainably; Target 11 on areas of importance for biodiversity and ecosystems services under effective management; Target 14 on restoration and safeguarding of ecosystems; and, Target 18 on traditional knowledge, innovation and practices of indigenous and local communities.



## **B. Project Beneficiaries**

16. The proposed Project will generate global, regional, and local environmental benefits. Global environmental benefits are the conservation of biodiversity at the landscape level through improved PAs management and biodiversity mainstreaming. The countries along the MBC will also gain environmental benefits. Locally, Panamanians will benefit from improved livelihoods, ecosystem services provided by the corridor, and biodiversity conservation. The proposed Project will directly benefit approximately 48,450 people, including small producers, organized in associations or networks in rural or indigenous communities near the twelve selected PAs or in their Buffer Zones. It is expected that at least 50 percent of the direct beneficiaries will be women. The Project will also benefit Community-based Organizations (CBOs), local governments and traditional authorities interested in pursuing co-management agreements in PAs with ANAM and the private sector and civil society organizations interested in administration or services concessions in PAs. Municipal governments, ANAM, community members and others directly involved in project training activities and South-South exchanges among countries within the MBC will also benefit.

## **C. PDO Level Results Indicators**

17. Outcome indicators to measure progress on the Project's objectives are as follows: (a) 550,000 ha brought under enhanced biodiversity protection (Biodiversity Core Indicator--ha corresponds to the METT for each PA selected, see Annex 8); and (b) 1,200 ha of landscapes certified by internationally or nationally recognized environmental standards that incorporate biodiversity considerations (GEF Indicator--ha corresponds to the areas where products will be certified through Project actions).

# **III. PROJECT DESCRIPTION**

## **A. Project Components**

18. The proposed Project will be implemented in 12 PAs and respective Buffer Zones in the Atlantic and central-eastern part of the country in the MBC. Ten of these twelve PAs correspond to the ones that have been supported under the CBMAP II, and two are new. Project activities will take place in seven provinces (Bocas del Toro, Coclé, Colón, Chiriquí, Los Santos, Panamá and Veraguas), two *comarcas* (Guna Yala and Ngäbe-Buglé) and two indigenous peoples territories, Bribri and Naso-Teribe. Environmental and socio-economic criteria were applied in targeting these areas (see Annex 2).

19. Component 1 – Sustainable Management of Protected Areas (US\$15.16 million, GEF financing US\$4.68 million). This component will improve management effectiveness and long-term sustainability of the Project PAs with a focus on financial sustainability, monitoring of biodiversity, and monitoring and evaluation of the Project. This goal will rest on three interdependent areas of intervention:

- (a) Alliances for participatory management. The proposed Project would support ANAM in carrying out activities to facilitate and promote concessions and co-management with NGOs, municipalities, traditional authorities and other entities, for the administration of

PAs through financing of technical assistance, training and promotional material. It would also support carrying out of a study of a system of payment for environmental services (PES), including a review of relevant regional experiences in implementing such a system.

- (b) Biodiversity monitoring. The Project will finance the identification of a baseline of the existing biodiversity information of Project PAs, and monitoring of variations in the biological situation of such areas annually to make available reliable scientific information for decision-making and for substantiating financing from partners and sponsors. As part of the support to the SNIMDB, biological information will be collected for at least eight PAs.
- (c) Endowment fund. The Project will facilitate the establishment and operation of a mechanism to support the financing of the implementation of Operational Plans of PAs (the endowment fund) in the first year of the Project. Once the endowment fund is established and meets all national and WB requirements, US\$1.5 million from the GEF will be allocated as a start-up endowment. The GOP and a private sector company have also committed funds for the start-up of the endowment fund in the amount of US\$2.0 million and US\$1.5 million, respectively (see Annex 3 for details on the fund and co-financing). Other groups, including donors, NGOs, and the private sector, have also expressed strong interest in contributing to the endowment fund. The initial capital will total US\$5.0 million. It is expected in the long run that financial returns of the endowment fund would be used for activities of the PA operational plans, reducing the financing gap, as well as for the administration cost of the endowment fund. The design and operating arrangements of the endowment fund are being informed by best practices from GEF and from within and outside the World Bank to provide transparency, maximize synergies, and improve social and financial accountability.

20. Component 2 – Biodiversity and Sustainable Productive Landscapes (US\$6.81 million, GEF financing US\$3.25 million). This component will mainstream biodiversity and sustainable production in PAs and Buffer Zones. It focuses on three areas of intervention:

- (a) Biodiversity-friendly production systems. The Project will finance sub-grants to beneficiary CBOs operating in the Buffer Zones for the carrying out of Bio-diversity Friendly Production Subprojects to scale up their operations and implement biodiversity-friendly and climate-smart production and management practices with a focus on gaining or increasing access to markets for their products so that biodiversity-friendly practices become economically sustainable. Subprojects to be developed may include adoption of practices for biodiversity-friendly and climate-smart production in agro-forestry and nature-tourism activities. Participation of local communities and citizen engagement and inter-sector alliances will be promoted from the beginning. A detailed list of potential activities is incorporated in the subproject chapter of the Operational Manual (OM). Subproject grants would range from US\$50,000 to US\$100,000 for which producer organizations, communities and municipalities will contribute at least 10 percent (in cash or in kind) of total subproject cost.
- (b) Strengthening of CBOs. Activities to be financed include the development and implementation of a capacity building and training strategy to strengthen the technical and business management skills of CBOs, including customized training to indigenous communities in their native languages.

(c) Municipal environmental subprojects. Sub-grants to municipalities will be provided under the Project to finance Municipal Environmental Subprojects for priority activities identified in environmental municipal plans developed under CBMAP II.

21. Component 3 – Knowledge Management, Training and Communications (US\$5.17 million, GEF financing US\$1.19 million). This component will develop and implement: (i) a communication and outreach strategy for dissemination of information on the Project and promotion of partnerships for the management of PAs; (ii) an awareness and fundraising campaign for the endowment fund; and (iii) an educational campaign addressed to consumers on biodiversity-friendly products and the economic value of biodiversity. It will focus on the following three areas of intervention:

(a) Knowledge management. Activities to be financed include: (i) capacity-building activities with key Project stakeholders on good practices and knowledge management at local and regional levels to support biodiversity mainstreaming and develop ownership for the realization of long-term goals and sustainability; (ii) promotion of citizen engagement to ensure effective conservation; (iii) on-the-ground training and professional certification of park guards by qualified universities; (iv) strengthening ANAM's capacity to carry out environmental economic analysis as needed to support the Recipient's decision and policy makers in Panama of the economic value of biodiversity; (v) dissemination of information and promotion of PAs biodiversity; and (vi) carrying out of a communications and fundraising strategy for the endowment fund.

(b) South-South cooperation and promotion of partnerships. Activities to be financed include the implementation of a regional program for training and technology transfer related to sustainable production in coordination with the National Commission for the Knowledge and Use of Biodiversity (CONABIO) in Mexico, the development of standards and/or market labels, and/or certification of biodiversity-friendly products and sharing of experiences on private reserves and the connectivity of biological corridors. Actions will be oriented to have an impact on capacity building in Panama.

(c) Strategic communication and outreach. The Project will finance the development and implementation of communications and educational campaigns to raise awareness among citizens, businesses, and producers to influence production and consumption of Biodiversity-Friendly goods and to promote fundraising and contributions from private companies, donors, government agencies and citizens. Communications and sharing knowledge through networks and communities is perceived as a catalyst for change across the NPAS.

22. Component 4 – Project Management (US\$1.83 million, GEF financing US\$0.47 million). This component will strengthen ANAM's capacity for Project implementation by supporting the technical and administrative coordination of the Project. Consulting services, office equipment, audits and operational costs for activities to be undertaken by the Project Implementation Unit (PIU) for project management and supervision will be financed.

## **B. Project Financing**

23. The Project will be funded by a GEF grant in the amount of US\$9,589,000. The GOP will provide counterpart financing of US\$10.16 million (including a US\$2.0 million contribution to the endowment fund). Two private sector companies, AES-Changuinola and Minera Panama S. A. (MPSA), have committed parallel co-financing to the Project of US\$1.0 and US\$6.0,

respectively through existing concession agreements with ANAM to finance activities of annual operating plans of selected Protected Areas. AES-Changuinola has also committed a contribution of US\$1.5 million for the endowment fund. See table below and Annex 3 for co-financing details. The GEF funding will be implemented following the World Bank’s OP/BP 10.00 guidelines and procedures for investment project financing.

### C. Project Cost and Financing

24. The total project cost is US\$28.97 million, consisting of the GEF grant of US\$9.59 million and US\$19.38 million in co-financing. The implementation period is five years.

Project Components	GEF	GOV	BENEF	Municip	Other a/	Total Cost (US\$ M)	% GEF of Total
1. Sustainable Management of Protected	4.68	4.28	-		6.20	15.16	30.9%
2. Biodiversity and Sustainable Productive Landscapes	3.25	2.84	0.63	0.09	0.00	6.81	47.7%
3. Knowledge Management, Training and Communication	1.19	2.18	-		1.80	5.17	23.0%
4. Project Management	0.47	0.86	-		0.50	1.83	25.7%
<b>TOTAL</b>	<b>9.59</b>	<b>10.16</b>	<b>0.63</b>	<b>0.09</b>	<b>8.50</b>	<b>28.97</b>	<b>33.1%</b>

a/ Other includes parallel co-financing from the private sector for US\$8.5 million (AES-Changuinola with US\$2.5 million over five years, including contribution to endowment fund), and Minera Panama S.A. (MPSA) with US\$6.0 million over five years).

### D. Lessons Learned and Reflected in the Project Design

25. The Project incorporates lessons learned from a decade of engagement under previous WB/GEF programs in the country. The Project design builds on the two MBC GEF projects, particularly the CBMAP II. The main lessons included: (a) establish a biodiversity baseline and monitoring system, such as the SNIMDB, for both inside and outside PAs; (b) establish a baseline to measure the financing gap for each PA; and (c) implement a capacity building strategy for local organizations.

26. Building on strong foundation of stakeholder participation and expanding linkages to private sector and civil society is an effective delivery mechanism for Project benefits. The Project capitalizes on existing mechanisms to involve different stakeholders, including indigenous populations and rural poor using communications materials in indigenous languages and consideration of cultural heritage. The Project will work with proven, cost-effective and transparent business models.

27. Creating incentives for conservation among communities and stakeholders is critical for successful implementation. Project design is informed by Implementation Completion Reports, Independent Evaluation Group (IEG) reviews, similar projects in Panama, Mexico, Costa Rica, Nicaragua, Brazil, and Uruguay and evidence-based studies. An IEG review of the MBC Program (2011) shows that 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.

28. Implementing a communications strategy and transparency regarding subproject process and procedures ensures strong ownership at the community level. Experience from World Bank projects shows that a transparent demand-driven approach with a strong communications team is

critical to the success of subprojects. In this approach, the operational aspects of the subproject cycle, as well as the timing of calls for proposals should be carefully addressed to avoid credibility issues. Climate variability and beneficiary vulnerability should also be a consideration in production systems.

29. Public-private partnerships play a critical role in ensuring long-term financial sustainability of PAs. Public-private partnerships play an important role in mobilizing funding with the increasing role of civil society and the private sector.<sup>4</sup> Identifying innovative funding models is critical to support basic operations and strategic planning for effective long-term management of the PAs. The endowment fund will be informed by WB/GEF best practices and Practice Standards for Conservation Trust Funds (CTF). The WB presence in many countries provides the architecture for facilitation of mutual learning and technical assistance between projects, including the establishment and operation of CTFs.

## **IV. IMPLEMENTATION**

### **A. Institutional and Implementation Arrangements**

30. The implementation arrangements will be similar to CBMAP II to ensure a seamless transition to the new Project (see Annex 3). The recipient of the grant will be the Republic of Panama represented by the Ministry of Economy and Finance (MEF). The implementation of the Project will be delegated to ANAM as executing agency through a Subsidiary Agreement between MEF and ANAM. ANAM was established by Law 41 in 1998 as an autonomous public entity. ANAM will be responsible for overall oversight and strategic direction of the Project, including the management, coordination, supervision, and monitoring of Project activities through the same PIU established for CBMAP II. The PIU will be responsible for the technical and fiduciary implementation of the Project, including financial management and procurement, ensuring compliance with the Project's Environmental and Social Management Framework (ESMF) and the World Bank safeguard policies. The PIU that implemented CBMAP II had high staff turnover. The PIU staffing turnover has improved and its current performance demonstrates sufficient implementation capacity. The PIU staff have been trained and most will be retained for the proposed Project. As in CBMAP II, ANAM will require a fiduciary agent for the administration of Project funds.

31. ANAM will follow international best practices for the establishment of the endowment fund. A preparation committee is set up to design the supervisory structure of the endowment fund. The members of the Board would represent different interest groups. Panama's internal procedures would be followed for the establishment of the fund, which include the participation of the MEF in the design, and as part of the Board. Institutional mechanisms will be incorporated to promote transparency in decision making processes and to avoid actual, potential and perceived conflicts of interest. The assets of the endowment fund would be managed by a professional and independent asset manager to be selected based on WB competitive selection procedures for consultants under the Guidelines "Selection and Employment of Consultants by World Bank Borrowers" dated January 2011, and the provisions stipulated in the Grant Agreement. Given the fact that the World Bank as trustee of the GEF is capitalizing the endowment fund in its inception phase, and the life term of the Project is relatively short in

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<sup>4</sup> *Expanding Financing for Biodiversity Conservation: Experiences from Latin America and the Caribbean* (2012).

comparison with the potential long life of the endowment fund, covenants have been added to the Grant Agreement between the GOP and the World Bank.

32. Other executing entities include:

a) Rural Producer Organizations or Associations: Legally-constituted groups of small farmers or indigenous producers that have experience in implementing environmental subprojects financed by CBMAP II, and that have reached a stage for marketing biodiversity products or services, and would be eligible to prepare and implement subproject proposals under component 2 of the proposed Project. These organizations would contribute (in cash and in-kind) toward total subproject costs.

b) Municipalities: Selected municipalities that have developed municipal environmental plans under CBMAP II would implement subprojects resulting from the priority activities identified in those plans. Municipalities will submit their proposals through their mayors for consideration and evaluation by ANAM, and will contribute toward total subproject costs.

33. Project operations procedures: The OM, with a detailed Subprojects chapter, describes the implementation arrangements and the responsibilities and specific tasks of the PIU. A draft OM was reviewed by the World Bank during appraisal. A final revised version was endorsed at negotiations.

34. Results Monitoring and Evaluation: The Monitoring and Evaluation (M&E) strategy is detailed in Annex 3 and consists of: (i) progress monitoring and evaluation; (ii) monitoring of the biodiversity in the selected PAs and in the Buffer Zones; and (iii) measure of the progress and effectiveness in managing the Project PAs. The Project will be evaluated at the mid-term and there will be an impact evaluation at the end of the Project. In order to ensure consistency between the Project monitoring system, the SNIMDB requirements, and the overall M&E framework, an Integrated System for Project Administration and Monitoring (*Sistema Integrado de Administración y Monitoreo de Proyectos, SIAMP*) has been developed under the CBMAP II.

## **B. Sustainability**

35. The Project has a strong focus on sustainability and builds on the success of its predecessors, while introducing important innovations based on the GEF/Bank best practices. Financial sustainability will be achieved through the creation of a US\$5.0 million endowment fund, which will attract financial assets to provide more permanent and predictable financing for the NPAS. The Project also includes support for a communications and fundraising strategy/campaign for the endowment fund. Socioeconomic sustainability will be achieved through the successful implementation of subprojects. The proposed Project will promote participation and ownership at every level. Project beneficiaries in particular will play a key role in decision making, implementation, and cost sharing, thus increasing sustainability. Likewise, the creation of business and marketing linkages will provide added sustainability to the productive activities in the buffer areas. Finally, knowledge management and dissemination will raise awareness, promote behavior change, and enhance political and financial support for the NPAS. The likelihood of environmental sustainability will be improved by implementing biodiversity monitoring and the SNIMDB in at least eight PAs.

## V. KEY RISKS AND MITIGATION MEASURES

### A. Risk Ratings Summary Table

<b>Risk Category</b>	<b>Rating</b>
<b>Stakeholder Risk</b>	<b>Substantial</b>
<b>Implementing Agency Risk</b>	
- Capacity	<b>Substantial</b>
- Governance	<b>Moderate</b>
<b>Project Risk</b>	
- Design	<b>Substantial</b>
- Social and Environmental	<b>Moderate</b>
- Program and Donor	<b>Moderate</b>
- Delivery Monitoring and Sustainability	<b>Moderate</b>
<b>Overall Implementation Risk</b>	<b>Substantial</b>

### B. Overall Risk Rating Explanation

36. Overall Project implementation risk is rated as Substantial. The overall implementation risks takes into account risks and mitigation measures along the following risk categories:

(i) Stakeholders. Regarding private sector co-financing and transparency, the World Bank carried out an institutional analysis of the companies with identification of best practices to strengthen the transparency, effectiveness and sustainability of the endowment fund. This analysis was informed by the IFC procedures for conducting Integrity Due Diligence (IDD) and details the companies' current operations and corporate social responsibility policies. During preparation, an open consultation process with all indigenous peoples within the expected Project area was carried out and most sent letters of support for the new Project. The communication strategy will support a culture of transparency and dialogue, including conflict resolution, and the grievance and redress mechanism. ANAM and the World Bank have proactively engaged with civil society organizations to explain the implementation arrangements for the Project.

(ii) Implementing agency/PIU. While staff turnover issue has been an issue in the past, ANAM has experience as an implementing agency with WB/GEF projects and incentives to mitigate turnover have been considered in the Project design. All payments to the beneficiaries will be centrally made by ANAM through a fiduciary agent, while subproject monitoring will be carried out through the SIAMP.

(iii) Project design. Counterpart funding for the Project is committed from the GOP. The two companies providing parallel co-financing are expected to sign an addendum to their existing contracts with ANAM to establish the co-financing arrangements for the Project. To build interest and support for the fund and in the unlikely event that the private sector contribution to the endowment fund does not materialize, a fundraising campaign for the endowment fund will be financed under the Project that will allow ANAM to capture other resources for the fund. For producer groups, indigenous

communities, municipalities, private institutions, and project staff, the Project will provide training on good practices in financial and procurement management as well as in WB social and environmental safeguards. ANAM has identified a significant number of partner institutions to support activities related to marketing and commercialization.

## **VI. APPRAISAL SUMMARY**

### **A. Economic and Financial Analysis**

37. Biodiversity is a public good with invaluable ecosystem functions and services. GEF financing for this Project will provide a significant contribution to maintaining biodiversity, ensuring the livelihoods of people in the surrounding areas, and creating a positive influence on the overall integrity and effectiveness of the MBC across the Central America isthmus. The proposed Project will produce both tangible and intangible economic benefits (see Annex 6).

38. Financing gap study shows significant shortfall. Based on the preliminary NPAS financing gap study, the entire system (104 areas) requires at least US\$11.4 million for basic coverage, but receives just US\$6.2 million, and for the management of only 39 PAs. The endowment fund will potentially produce a significant impact on existing financial gap (US\$5.2 million for covering basic needs and US\$12.5 million for covering optimal needs). In particular, the financial gap of the 12 prioritized PAs is US\$1.5 million for 2013. Assuming an initial capital of US\$5.0 million, the endowment fund will reduce the financial gap for the 12 PAs by 20 percent (considering as financial resources only the interest generated at a rate of 5 percent). Increasing the capital to US\$15 million will reduce the financial gap up to 60 percent, and reaching an endowment of US\$25 million will cover all basic needs of the 12 prioritized PAs. In order to build this capital, different mechanisms will be developed, including private sector contributions, fee collection from PAs, other fees collected by ANAM, and service concessions in PAs.

39. Biodiversity mainstreaming can support production and conservation. An important development impact of the proposed Project is to support beneficiary producer organizations to implement production systems that are economically and environmentally sustainable. Conservation will only be possible if the standard of living of the key beneficiaries is improved. This improvement is associated with the incorporation of environmentally and biodiversity-friendly production practices, which would allow production increase and diversification as a strategy for access to markets, while favoring conservation of natural resources. The financial returns from mainstreaming biodiversity into agricultural landscapes are difficult to measure as investments are difficult to predict given its demand-driven nature and diversified livelihood and productive practices. Important positive co-benefits of such investments accrue to the environmental services that will improve watershed management, enhance carbon sequestration and groundwater aquifer recharge while protecting biodiversity.

40. Subprojects are financially feasible and contributing to family income. The subprojects most likely to be supported would be similar to those supported under CBMAP II, including agroforestry production systems, ecotourism and handicraft production initiatives. An assessment of a sample of 140 subprojects confirmed that the activities are contributing significantly to the family income, varying between 33 and 67 percent. In about 81 percent of the analyzed cases, the Net Present Value (NPV) of the environmentally friendly activities is



positive when valuing both commercialized and self-consumed production. If externalities (CO<sub>2</sub> sequestration and recharge capacity of aquifers stemming mainly from reforestation schemes) are added into the equation, then 100 percent of the sampled cases show positive NPVs. This preliminary study confirmed the financial feasibility of the most likely activities to be supported and that the approach is effective. The cases of four permanent crops that could be the base for most of the production systems in the Project area were analyzed (banana, coffee, cacao, and orange), as well as for several annual crops that have good potential for the different targeted regions. The prefeasibility analysis was done based on the average yields, the prices and the cost of production revealed by the same sample of 140 subprojects.

41. WB involvement adds value and expertise. As an implementing agency of the GEF, the World Bank has played an important role in establishing the basis for biodiversity conservation and PAs management in Panama. The World Bank will draw on its considerable expertise in the environmental and agricultural sectors, particularly related to land use and sustainability, production systems and productive alliances, environmental services, long-term financial mechanisms and strategic adaptation responses to the potential impacts of climate change in new investments.

42. An incremental cost analysis was carried out, comparing a baseline scenario with the proposed Project. The baseline scenario considers the progress under CBMAP II and the absence of the new Project and is based on the planned ANAM activities. The overall incremental benefits of the proposed Project will continue far beyond the duration of the Project with the establishment of the endowment fund and building capacity that will allow efforts to be replicated in all PAs of the system. Details are provided in Annex 7.

## **B. Technical**

43. The Project design conforms with international best practices and lessons learned from WB/GEF and other projects. Effective management and operation of the PAs in the MBC depends on adequate financial resources and a consistent budget. The Project includes support for initiatives to ensure sustainability of PA operations with the endowment fund, self-financing mechanisms and greater involvement of different public and private sectors. The producers and their associations will benefit from financing and the information and skills needed to implement biodiversity-friendly practices and enter specialized markets. The Project design is also based on best practices related to biodiversity mainstreaming in productive sectors in Buffer Zones, agro-forestry and bio-labeling and certification programs..

## **C. Financial Management**

44. A Financial Management (FM) assessment of the proposed Project has been conducted and found to be adequate. The Project execution will be carried out by ANAM through the PIU, which will be responsible for most project FM-related tasks, including budgeting, accounting, financial reporting, and disbursements. From an operational perspective, the Project design is relatively complex, mainly due to the financing of an ample set of expenditures, such as works, goods, creation of the endowment fund, and financing of subprojects, through processing of payments to multiple beneficiaries. The creation of the endowment fund also represents additional risk in terms of financial sustainability (credit, market, and operational risks), and monitoring once the grant is closed. However, the Project will be implemented by well

experienced technical and administrative team, and based on the same FM arrangements adopted by the CBMAP II project. ANAM will employ, for the period of project implementation, a fiduciary agent to handle the financial management aspects of the Project under terms and conditions satisfactory to the World Bank. Risk assessment and mitigating measures are detailed in Annex 3.

#### **D. Procurement**

45. An assessment of agency capacity to implement procurement was carried out. In CBMAP II, the majority of the procurement activities have been shopping or selection of individual consultants. Based on the findings of the assessment, the variety of procurement methods, and fiduciary staff an Action Plan was prepared (Annex 3). The action plan includes the need to retain the procurement officer and provide training, hire legal support on a retainer and prepare a Procurement Plan.

#### **E. Social (including Safeguards)**

46. The Indigenous Peoples (OP/BP 4.10) and Involuntary Resettlement Policies (OP/BP 4.12) are triggered. ANAM conducted a Social Assessment and collected basic baseline information from the five indigenous groups to determine impacts of the operation and to prepare the Indigenous Peoples Plan (IPP) that includes provisions for subproject specific plans when needed. The IPP is acceptable to the Bank and has been disclosed in country and posted on the Bank's external website. Based on prior experience, this Project will continue implementing a free, prior and informed consultation with indigenous peoples. It is expected that the Project would have positive impacts on indigenous peoples' lives and as well on the poor and extremely poor rural communities' livelihoods by supporting productive subprojects, alliances and networks to strengthen their productivity and commercialization.

47. As part of Project preparation, consultations with civil society organizations were held to ensure the Project benefits from participatory approach and safeguard broad community support. ANAM organized two public consultation workshops, in April and September 2014. In April, ANAM and community members presented the achievements of CBMAP II, as well as the new proposed Project. Overall, the community organizations expressed support for the Project and emphasized the need for a new phase focused on marketing and commercialization. The grievance redress mechanism was presented and discussed and the final version has been incorporated in the OM. Following the elections in May, the new ANAM authorities convened the September consultation session to further clarify Project implementation arrangements, answer questions from civil society organizations, and explain opportunities for collaboration during implementation. Continuing open dialogue and feedback during implementation will foster community and civil society engagement with the GOP on these issues.

48. A Process Framework was prepared to ensure that procedures are in place to mitigate any potential restrictions in access to protected areas and ensure consultations with potential beneficiaries on resource management activities in and around protected areas as part of the management plans. The Project is not expected to displace people or cause any type of involuntary resettlement. The Process Framework is part of the ESMF to ensure that adverse environmental and social impacts are avoided or appropriately mitigated and compensated for. Environmental and social issues will be tracked during all stages of the subproject cycle to

ensure that supported activities comply with the guidelines laid out in the ESMF and with the M&E system. The Framework was disclosed in country and is available on the World Bank's external website.

49. The Bank carried out an institutional analysis of the two companies providing co-financing. This analysis was informed by the IFC procedures for conducting integrity due diligence (IDD). The institutional analysis presents a profile of each company. Both companies are subsidiaries of international corporations with sufficient instruments to prevent, mitigate and manage the risks and impacts generated by their activities. However, the magnitude of their projects is very large and complex which gives them broad exposure to claims from civil society and local communities. The institutional analysis presents recommendations to strengthen the transparency, effectiveness and sustainability of the proposed endowment fund. The Grant Agreement will include provisions with requirements for the specific rules and procedures for the operation of the endowment fund (including governance, to prevent conflict of interest situations) as well as provisions for compliance with environmental and social safeguards.

#### **F. Environment (including Safeguards)**

50. The following environmental safeguards are triggered: Environmental Assessment (OP/BP 4.01), Natural Habitats OP/BP 4.04, Forests OP/BP 4.36, Pest Management OP 4.09 and Physical Cultural Resources OP/BP 4.11. For detailed information, see Annex 3. The proposed Project builds on the experience and lessons learned from the CBMAP projects. This, combined with the activities under the proposed Project, should have a strong overall positive environmental impact and advance global biodiversity goals by: (i) strengthening management of PAs and natural habitats; and (ii) fostering environmentally sustainable productive activities in rural areas that encourage preservation of natural resources.

51. Potential negative environmental impacts from productive activities and small public works are expected to be minimal and are adequately addressed through a solid identification, screening, evaluation, and mitigation framework. Considering the minimal environmental impacts, the Project was assigned a category B requiring a partial assessment. An ESMF acceptable to the Bank was prepared to screen environmental and social impacts related to the proposed Project. The ESMF was disclosed in country and is available on the Bank's external website. The ESMF outlines the process to prepare any additional environmental and social safeguards instruments for each investment activity. The ESMF outlines the procedures and mechanisms for screening out activities that may cause degradation or contemplate any significant conversion of natural habitats to meet the requirements of the policies on Forests and Natural Habitats. Overall, the ESMF emphasizes positive environmental impacts and goes beyond safeguarding to adding value to productive activities. It provides specific guidelines to avoid or minimize risks. It is expected that the Project will yield some important overall environmental benefits ranging from reduction of deforestation and depletion rates of biodiversity, reduction of soil erosion and land degradation to reduced agricultural intervention in strategic areas for biodiversity conservation.

## Annex 1: Results Framework and Monitoring

### PANAMA: Sustainable Production Systems and Conservation of Biodiversity Project

<b>PDO Statement:</b> The Project's Global Environmental Objective (GEO) is the same as the Project's Development Objective (PDO), namely, to conserve globally significant biodiversity through improved management effectiveness of the Project Protected Areas and biodiversity mainstreaming in the Buffer Zones.*												
PDO Level Results Indicators	Core	Unit of Measure	Baseline	Cumulative Target Values					Frequency	Data Source/ Methodology	Responsibility for Data Collection	Description (indicator definition etc.)
				YR 1	YR 2	YR3	YR 4	YR5				
<b>Indicator 1:</b> Areas brought under enhanced biodiversity protection (ha)	X	hectare	0	0	0	310,000	0	550,000	Year 3 and Year5	Mid-term and final report	External evaluator	Ha corresponds to the METT score for each PA selected (see Annex 8 for METT scores for project PAs)
<b>Indicator 2:</b> Landscapes certified by internationally or nationally recognized environmental standards that incorporate biodiversity considerations (ha)		hectare	0	0	0	600	0	1,200	Year 3 and Year5	Mid-term and final report	External evaluator	Ha corresponds to the areas where products will be certified through project actions.

\*The specific terms in the PDO are defined as follows:

(a) *Management effectiveness*: Enhanced biodiversity protection results from the establishment or upgrading of a functioning management system in PAs, including a management plan and the capacity and resources to implement the plan (Biodiversity Core Sector Indicators).

(b) *Biodiversity mainstreaming*: measures to help reduce the negative impacts that productive sectors exert on biodiversity, particularly outside of Protected Areas and those affecting landscape species, and highlight the contribution of all components of biodiversity to ecosystem functioning, economic development and human well being (Biodiversity Strategy GEF-5)

(c) *Protected Areas*: A clearly defined geographical space, recognized, dedicated and managed, through legal or other means to achieve the long-term conservation of nature with associated ecosystem services and cultural values (IUCN).

(d) *Buffer 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. *Target groups in Buffer Zones* are eligible rural producer organizations or associations in the Project Buffer Zones and indigenous communities as defined in Annex 2.

Intermediate Indicators	Core	Unit of Measure	Baseline	Cumulative Target Values					Frequency	Data Source/ Methodology	Responsibility for Data Collection	Description (indicator definition etc.)
				YR 1	YR 2	YR3	YR 4	YR5				
<b>Component 1: Participatory Management of Protected Areas - Strengthen the management of the selected PAs, promote partnerships with local governments, communities, NGOs and the private sector to achieve financial sustainability of PAs.</b>												
<i>Indicator 1.1:</i> Endowment fund to support sustainable management of PAs established and operating <sup>5</sup>		% Implementation percentage	0	25% implemented Endowment fund Established				100% implemented Endowment fund is used to finance several PAs	Annual	Progress Reports	ANAM/PIU	Endowment fund considered operational once it receives funds from at least one partner organization and is used to finance at least one PA
<i>Indicator 1.2:</i> Number of operating concessions for administration or services to support the management of 3 PAs <sup>6</sup>		Number of concessions	0	0	1	2	2	3	Annual	Progress Reports	DAPVS and PIU	Number of concessions with demonstrated financial commitment
<i>Indicator 1.3:</i> Number of PAs where the SNIMDB is implemented		Number of PAs	3	3	4	5	7	8	Annual	Progress Reports	DAPVS and PIU	Information on PAs is uploaded to the SNIMDB
<b>Component 2: Biodiversity and Sustainable Productive Landscapes. Mainstream biodiversity and sustainable production landscapes in production areas in the Buffer Zones of selected PAs.</b>												
<i>Indicator 2.1:</i> Producer association groups implement at least 30 subprojects <sup>7</sup>		Number of subprojects	0	0	0	10	20	30	Annual from year 3 onward	Progress Report, Technical visits	ANAM/PIU	Number of subprojects implemented by producer association groups
<i>Indicator 2.2:</i> Two business alliances with buyers for marketing of biodiversity-friendly products are established		Number of alliances	0	0	0	1	2	2	Annual from year 3 onward	Progress Reports	ANAM/PIU	Number of alliances formed and operating
<i>Indicator 2.3:</i> Number of municipalities that have implemented activities in their environmental plans		Number of municipalities	0	0	2	4	4	6	Annual	Progress Reports	ANAM/PIU	The activities will be counted once fully implemented. The activity must

<sup>5</sup> Corresponds to the GEF goal of new financial mechanisms established for management of PAs

<sup>6</sup> *Ibid*

<sup>7</sup> Corresponds to the GEF indicator “Number of subprojects”

Intermediate Indicators	Core	Unit of Measure	Baseline	Cumulative Target Values					Frequency	Data Source/ Methodology	Responsibility for Data Collection	Description (indicator definition etc.)
				YR 1	YR 2	YR3	YR 4	YR5				
												be in the municipalities' environmental plan and be funded by the Project.
Indicator 2.4 Direct project beneficiaries 48,450, of which 50% are female	X	Number of beneficiaries	0	3,000	4,000	19,150	34,050	48,450	Annual	Progress Report	PA management team (director of PA, DAPVS and PIU)	Direct project beneficiaries are people or groups who directly derive benefits from an intervention
<b>Component 3: Knowledge Management, Capacity Building and Communication. Raised awareness and capacity on best practices and knowledge management at local and regional levels supporting biodiversity mainstreaming and the consumption of bio-labeled goods.</b>												
<i>Indicator 3.1:</i> Number of outreach or educational activities to promote the benefits of biodiversity and the public's role in conservation		Number of activities	0	6	12	18	24	30	Annual	Progress Reports	ANAM/PIU	The outreach and educational activities must be part of the broader campaign to promote biodiversity
<i>Indicator 3.2:</i> Analysis of the financial gap for the entire PA system published		Studies published	0		1	0	0	0	Annual	Progress Report	ANAM/PIU Economic Unit	Studies conducted and published
<i>Indicator 3.3:</i> At least one biodiversity-friendly product (i.e., coffee, cacao, orange, or banana) receives bio-labels and/or denomination of origin <sup>8</sup>		Number of products	0	0	0	0	0	1	Annual	Progress Reports	ANAM/PIU	One product sold with bio-labels and denomination of origin

<sup>8</sup> International recognized standards incorporating biodiversity considerations (and associated certifications) have already been developed for several products/services), thus, the project will support the adoption of those standards through subprojects as response to market opportunities. Efforts to support new bio labels would be done only for products lacking those standards and where a potential opportunity to generate demands for those differentiated products in the market place has been identified.

## Annex 2: Detailed Project Description

### PANAMA: Sustainable Production Systems and Conservation of Biodiversity

1. The proposed project will be implemented in twelve Protected Areas (PA) and respective Buffer Zones in the Atlantic and central-eastern part of the country within the Panamanian MBC (see Table 1 and Map). Ten of these twelve PAs correspond to the ones that have been supported under the CBMAP II, and two are new. Project activities will take place in seven provinces: Bocas del Toro, Coclé, Colón, Chiriquí, Los Santos, Panamá and Veraguas; two *comarcas*: Guna Yala and Ngäbe-Buglé; and two indigenous peoples territories: Bribri and Naso-Teribe. A large number of the species of conservation concern in Panama are found in these PAs. Some of these PAs have a high level of endemism for animals such as La Amistad (88 species), Volcán Barú (55), Palo Seco (46), Fortuna (45), Santa Fé (42) and Omar Torrijos (39) and for birds, such as La Amistad (61) and Volcán Barú (41).

#### Methodology to Select Project PAs

2. The Project area was determined through a two-stage selection process. In the first stage, consideration was given to: (a) location, giving priority to PAs located in the MBC; (b) size, giving priority to PAs above 10,000 hectares; and (c) PAs with experience in implementing environmental subprojects under CBMAP II or similar programs. In the second stage, environmental and socio-economic criteria were evaluated by a system of points and weights (detail in project files).

**Table 1 Protected Areas in the Project**

N°	Protected Area	Surface (ha)	Established	Mgt. Plan	Int'l Recognition
1	Corregimiento N°. 1 de Narganá Wildlife Refuge, Comarca Guna Yala	100,000 ha.	1994	Yes	No
2	Palo Seco Protector Forest, Bocas del Toro y Ngäbe-Buglé	167,410 ha.	1983	Yes	Biosphere Reserve La Amistad
3	Damani-Guariviara Internationally Important Wetland, Comarca Ngabe-Buglé	24,089 ha.	2004	Under prep.	Ramsar <sup>9</sup> site
4	San San Pond Sak Internationally Important Wetland, Bocas del Toro	16,987.48 ha.	1994	Yes	Ramsar site and Biosphere Reserve La Amistad
5	La Amistad International Park, Bocas del Toro and Chiriquí	207,000 ha.	1988	Yes	Biosphere Reserve La Amistad
6	Altos de Campana National Park, Panamá	4,816 ha.	1966	Yes	No
7	Cerro Hoya National Park, Veraguas and Los Santos	32,557 ha.	1984	Yes	No

<sup>9</sup> Ramsar Convention on Wetlands.

8	General Omar Torrijos National Park, Coclé, Veraguas and Colón	25,275 ha.	1986	Yes	No
9	Isla Bastimentos National Marine Park, Bocas del Toro	13,226 ha.	1988	Yes	Biosphere Reserve La Amistad
10	Santa Fe National Park, Veraguas	72,636 ha.	2001	Yes	No
11	Volcán Barú National Park, Chiriquí	14,322 ha.	1976	Yes	Biosphere Reserve La Amistad
12	Fortuna Forest Reserve, Chiriquí	19,500 ha.	1976	Under prep.	No
	Total	697,818.48 ha.			

## Project Components

3. Component 1 – Sustainable Management of Protected Areas (US\$15.16 million, GEF financing US\$4.68 million). The objective is improvement of the management effectiveness and long-term sustainability of the Project PAs with a focus on financial sustainability and the monitoring of biodiversity, and monitoring and evaluation of the Project. This goal will rest on three areas of intervention:

- a) Alliances for participatory management. The proposed project would support ANAM in carrying out of activities to facilitate and promote concessions and co-management with NGOs, municipalities, traditional authorities and other entities, for the administration of PAs. It would also support carrying out of a study of a system of payment for environmental services, including a review of relevant regional experiences of implementation of such a system. Technical assistance for the formulation and implementation of concessions, and capacity building activities for NGOs, CBOs, local government, and traditional authorities interested in participating actively in the management of PAs with ANAM will be financed.
- b) Biodiversity monitoring. The Project will finance the identification of a baseline of the existing biodiversity information of project PAs, and monitoring of variations in the biological situation of such areas annually to make available reliable scientific information for decision-making and for substantiating financing from partners and sponsors. As part of the support to the SNIMDB, biological information will be collected for at least eight PAs and (three already established in CBMAP II, and five others). Activities to be financed include the biological inventory (e.g. setting and monitoring of permanent sample plots, field and laboratory work for the identification of species, study, access and physical consultation of national and international collections), hardware and software for the biological monitoring system, design and generation of an ecosystems map, and dissemination of scientific information (e.g., publication of guides, books and scientific articles).
- c) Endowment fund. The Project will facilitate the establishment and operation of a unified mechanism for the financing of the implementation of Operational Plans of PAs (the endowment fund) in the first year of the Project. Once the endowment fund is established by ANAM and meets all national and WB requirements, a total of US\$1.5 million from GEF will be allocated as a start-up endowment. The GOP and a private sector company have also committed funds for the start-up of US\$2.0 million and 1.5 million, respectively (see Annex 3 for details on the fund and co-financing). Other groups, including donors, NGOs, and the private sector, have also expressed strong interest in contributing. The initial capital will total US\$5.0 million. It is expected in the long run that financial returns of the endowment fund



would be used for activities of the PA operations plans, reducing the financing gap, as well as for the administration cost of the endowment fund.

4. Component 2 – Biodiversity and Sustainable Productive Landscapes (US\$6.81 million, GEF financing US\$3.25 million). This component focuses on mainstreaming biodiversity and sustainable production in the Buffer Zones of selected PAs. Building on the experience of the previous project, the component will support producer groups or producer associations that live outside PAs and that have implemented successful subprojects with financing from CBMAP II, to scale up their operations and implement biodiversity-friendly production and management practices with a focus on gaining or increasing access to markets for their products so that biodiversity-friendly practices become economically sustainable. Additionally, selected municipalities that have developed environmental municipal plans under CBMAP II will be supported for the implementation of activities identified in these plans. This component will provide sub-grants for implementation of demand-driven productive and municipal environmental subprojects. Training and technical assistance will be provided to producers for implementation of subprojects and improvement of their technical and business management skills. Subproject grants would range from US\$50,000 to US\$100,000 for which producer organizations, communities and municipalities will contribute at least 10 percent (in cash or in kind) of total subproject cost. Subprojects would be disbursed directly to producer organizations which will be responsible for procurement, financial management and overall implementation.

5. There are three areas of intervention:

(a) Biodiversity-friendly production systems. The Project will finance sub-grants to beneficiary CBOs operating in the Buffer Zones for the carrying out of activities to scale up their operations and implement biodiversity-friendly and climate-smart production and management practices with a focus on gaining or increasing access to markets for their products so that biodiversity-friendly practices become economically sustainable. Subprojects to be developed may include adoption of practices for biodiversity-friendly and climate-smart production in agro-forestry and nature-tourism activities, such as use of agro-forestry crops, diversified crops, organic compost, contour lines, integrated pest management, solar dryers, living fences, use of native species, erosion control as well as exploring ways of including adaptation to climate change elements. The economic analysis carried out during preparation of a sample of 140 CBMAP II subprojects has identified four main profitable agroforestry crops that would be supported by the proposed project: bananas, coffee, cacao and oranges.

i. Potential Activities. A detailed list of potential activities is incorporated in the Subprojects chapter of the Operational Manual. Activities expected to be financed under the productive subprojects include: (i) business plans; (ii) technologies for improving productivity and/or quality of the products generated in biodiversity-friendly production systems; (iii) purchase of equipment and supplies for processing, conservation, classification and monitoring of product quality and preservation of products (e.g., refrigerators for perishable products); (iv) basic infrastructure to improve quality of the products; and (v) adoption of technologies for adaptation to climate change. For ecotourism subprojects, the list of items to be financed may include basic infrastructure for ecotourism and handicrafts; logistics to provide ecotourism services, marketing and/or certification of products. In relation to the latter, support for the achievement of sustainability

certifications (that include biodiversity considerations) will be provided through the subprojects, in response to identified market opportunities.

- ii. Subproject eligibility and cycle. To be eligible for financing, subprojects would need to comply with certain criteria. Subprojects for productive systems would need to respond to project selected geographical locations, land tenure and social group criteria. Socio-environmental, economic, and organizational criteria have been identified. Municipal environmental subprojects would also have to comply with geographical location and scope (previously developed under CBMAP II), and socio-environmental criteria. These criteria and the subproject cycle will be described in the Subprojects chapter of the Operational Manual. The subprojects will have a strong market-orientation; therefore, projects that promote alliances between producer associations and buyers will be encouraged.
- (b) Strengthening of CBOs. Activities to be financed include development and implementation of a capacity building and training strategy to strengthen the technical and business management skills of CBOS, including customized training to indigenous communities in their native languages. Technical service providers to be selected according World Bank guidelines will be accredited by ANAM to provide specialized assistance to groups and associations of producers. A training strategy will be developed by ANAM to include capacity building activities to improve technical and business management skills of producers, and marketing strategies, and customized training to indigenous communities in their native language.
- (c) Municipal environmental subprojects. Sub-grants to municipalities will be financed for priority activities identified in environmental municipal plans developed under CBMAP II. Subprojects would be selected applying criteria on environmental relevance, economic viability, and contribution to the management of natural resources and conservation of PAs. To be eligible, municipalities should have established a municipal environmental unit or be in the process of establishing one, and have an active CCA (Consultative Environmental Commission). Subproject agreements between the respective municipalities and ANAM will be signed. Municipalities will provide counterpart financing of approximately 20 percent. Technical assistance and training will be provided to municipalities for the implementation of subprojects.

6. Component 3 – Knowledge Management, Training and Communications (US\$5.17 million, GEF financing US\$1.19 million). The Project will finance the development and implementation of a communication and outreach strategy for dissemination of information on the Project and promotion of partnerships for the management of PAs, an awareness and fundraising campaign for the endowment fund; and an educational campaign addressed to consumers on biodiversity-friendly products and the economic value of biodiversity. It will focus on the following three areas of intervention:

- (a) Knowledge management. Activities to be financed include (i) capacity-building activities with key project stakeholders of both genders on good practices and knowledge management at local and regional levels to support biodiversity mainstreaming and develop ownership for the realization of long-term goals and sustainability; (ii) promotion of citizen engagement to ensure effective conservation; (iii) on-the-ground training and professional certification of park guards by qualified universities; (iv) strengthening ANAM's capacity to carry out environmental economic analysis as needed to inform decision and policy makers in Panama

on the economic value of biodiversity; (v) dissemination of information and promotion of PAs biodiversity; and (vi) carrying out of a communications and fundraising strategy for the endowment fund.

- (b) South-South cooperation and promotion of partnerships. Activities to be financed include implementation of a regional program for training and technology transfer related to sustainable production in coordination with the National Commission for the Knowledge and Use of Biodiversity (CONABIO) in Mexico, and the development of biodiversity standards and/or market labels, and certification of biodiversity-friendly products and sharing of experiences on private reserves and the connectivity of biological corridors. Actions will be oriented to have an impact on capacity building in Panama. On the issue of financial sustainability of PAs, exchanges will be promoted with local NGOs within Panama, and with other countries like Peru and Mexico (e.g., PROFONANPE and the Mexican Fund for Nature Conservation). On private reserves, a cooperation agreement with Nicaragua will be developed to learn from their experience on private reserves and connectivity biological corridors.
- (c) Strategic communication and outreach. The Project will finance the development and implementation of communications and educational campaigns to raise awareness among citizens, businesses, and producers to influence production and consumption of bio-labeled goods and to promote fundraising and contributions from private companies, donors, government agencies, and citizens. Communications and sharing knowledge through networks and communities is perceived as a catalyzer for change across the NPAS. Items to be funded include information and communication technologies, printed materials, conferences, business round tables, products exhibits, and mass media publicity.

7. Communication Strategy. The objective is to develop participatory communication to conduct free, prior and informed communication and participation to empower communities and beneficiaries (indigenous and rural residents of both genders) to identify culturally adequate ways to engage in the project and benefit from it. Some of the specific objectives of the strategy are (a) strengthen local and regional training capacity to improve the communication skills of intermediate-level professionals of ANAM; and (b) encourage networks of producers.

8. Component 4 – Project Management (US\$1.83 million, GEF financing US\$0.47 million). This component will strengthen ANAM’s capacity for project implementation by supporting the technical and administrative coordination of the Project. Consulting services, office equipment, and operational costs for activities to be undertaken by the Project Implementing Unit (PIU) for project management and supervision will be financed. Consultants and staff involved in the implementation of the CBMAP II are expected to be involved in this project as they have already been trained and have the needed skills for the immediate implementation of the Project.

## **Annex 3: Implementation Arrangements**

### **PANAMA: Sustainable Production Systems and Conservation of Biodiversity**

#### **Project Institutional and Implementation Arrangements**

1. The implementation arrangements will be similar to the ones used to implement CBMAP II. The Grant recipient will be the Republic of Panama represented by the Ministry of Economy and Finance (MEF). The implementation of the Project will be delegated to ANAM as executing agency. ANAM will be responsible for the management, coordination, supervision, and monitoring of project activities through the same PIU established for CBMAP II. The PIU will be responsible for technical and fiduciary implementation, including financial management and procurement, ensuring compliance with the project's ESMF and World Bank safeguard policies. The CBMAP II PIU had high staff turnover initially, but the staffing has improved and its current performance shows that the institution has the sufficient implementation capacity, knowledge of Bank procedures, and technical staff to be the implementing agency of choice for the Project. The PIU staff have been trained and most will be retained for the proposed Project.

2. The team is led by a Project Manager supported by technical, financial management, procurement, and monitoring and evaluation specialists. In addition, technical specialists, including those with skills in biodiversity conservation, agribusiness, marketing, environmental economy, social and environmental safeguards, biodiversity monitoring, communications and outreach, will be part of the Project team. The Project Manager reports to ANAM's Administrator General. The PIU coordinates activities with ANAM's existing departments, such as planning, M&E, financial management, procurement, biodiversity monitoring, mapping, etc. For the administration of the Project funds, a fiduciary agent will be hired. See Organizational Chart below.

3. Technical implementation will be the responsibility of the PIU, managed through a Technical Coordinator in close collaboration with ANAM's Directorate of Protected Areas and Wildlife (DAPVS) central office in Panama City and a network of ANAM's regional offices in the Project area. ANAM currently has regional offices located in each of Panama's provinces and *comarcas* (13). Each regional office in the Project area will be supported by technical specialists hired by the PIU that will provide direct support to subproject implementation and coordination of provision of training and technical assistance. In general, ANAM's regional offices performed well, and worked in close coordination with ANAM's central office.

4. Institutional framework for the endowment fund for NPAS. The creation of the endowment fund will be subject to approval by National Economic Advisory Committee (CENA) and Ministers cabinet, while its operation will be subject to a solid legal and operational framework to be included in the endowment fund's manual Bylaws, Manual of Procurement Procedures, operational manual; said documents to include details on governance structure, eligible expenditures, financial management requirements, investment strategy, and annual financial plan, etc which should be acceptable to the Bank at all times. A preparation committee is established to design the supervisory structure of the endowment fund. The members of the Board would represent the different interest groups. Institutional mechanisms will be established to promote transparency in decision making processes and to avoid actual, potential and

perceived conflicts of interest. An asset manager will be selected based on WB competitive selection procedures. Terms of Reference (TORs) for the selection of an asset manager would be agreed with the Bank. The operation of the endowment fund should be also subject to: (i) annual audits; (ii) supervision of performance; (iii) compliance with the Bank's Anti-Corruption Guidelines. The grant proceeds under this component would be subject to compliance with (a) the disbursement condition stated in the Grant Agreement that no withdrawal could be made under disbursement for the endowment fund unless (i) the endowment fund has been established in form and substance satisfactory to the World Bank;(ii) the asset management contract has been executed and delivered on behalf of the parties; and, (iii) the endowment fund operational manual as described in the Grant Agreement has been adopted by the Recipient in form and substance satisfactory to the World Bank; and (b) additional events of suspension that have been included in the Grant Agreement to allow the World Bank to suspend disbursements in the event that, *inter-alia*: (i) an amount of at least US\$3,500,500 has not been deposited in the Endowment Fund by December 31, 2016 or such later date as the World Bank shall agree, and (ii) the Endowment Fund has been dissolved or any payment shall have been made out to the proceeds of the Endowment Fund in breach of the provisions of the Grant Agreement.

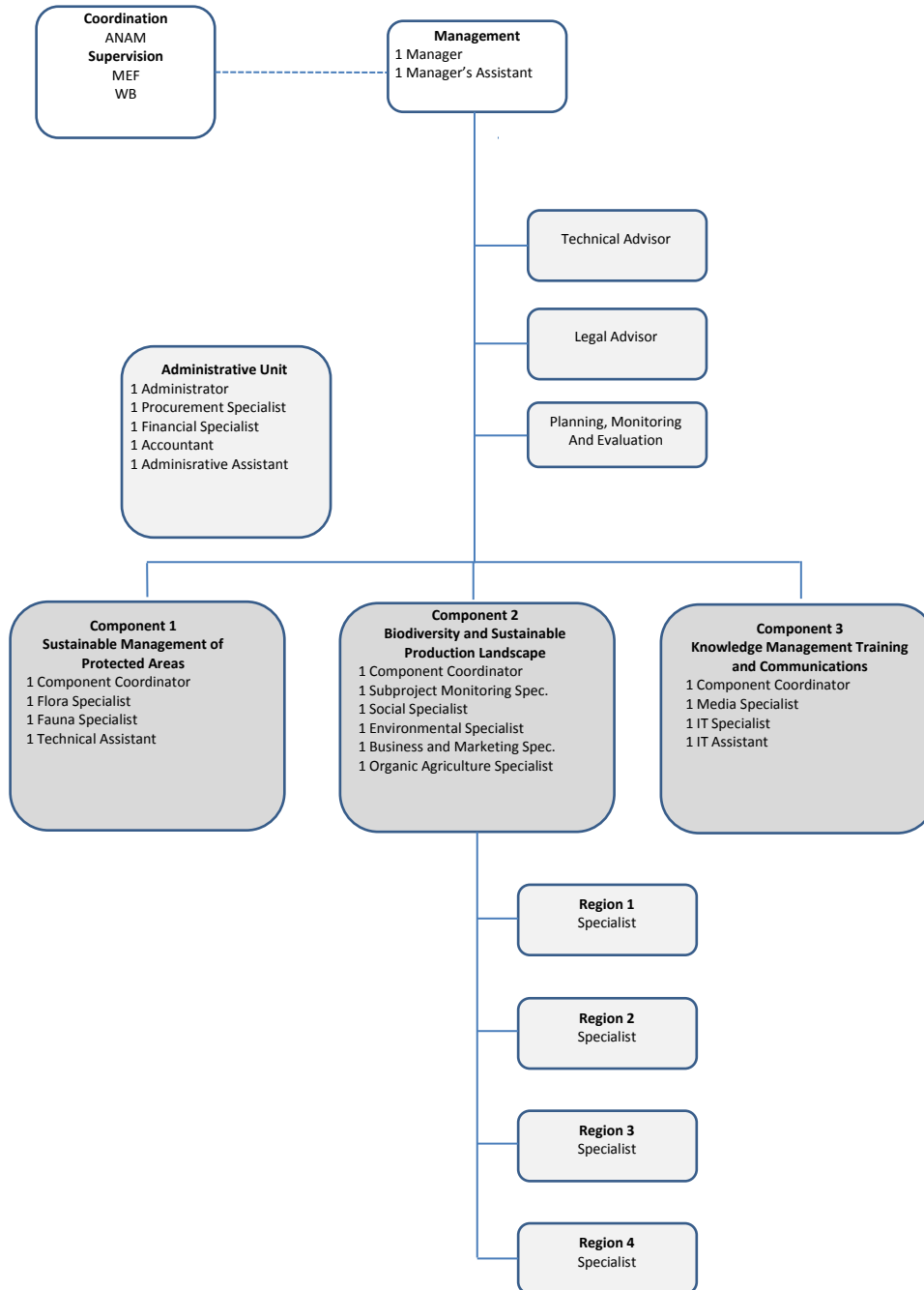
**5. Other executing entities:**

- a) *Rural Producer Organizations or Associations*: These are legally-constituted groups of small farmers or indigenous producers that have experience in implementing environmental subprojects financed by CBMAP II, and that have reached a stage for marketing its biodiversity products or services, and would be eligible to prepare and implement subproject proposals under component 2 of the proposed project. These organizations would contribute (in cash and in-kind) toward total subproject costs.
- b) *Municipalities*: Selected municipalities that have developed municipal environmental plans under CBMAP II would implement subprojects resulting from the priority activities identified in those plans. Municipalities will submit their proposals through their mayors for consideration and evaluation by ANAM, and will contribute toward total subproject costs.

6. Participating organizations: NGOs, Mexico's National Commission for the Knowledge and Use of Biodiversity (CONABIO), private sector (private companies for the management of PAs; within the context of biodiversity mainstreaming for the production of good and services private sector actors include: producer-based organizations; industry-based organizations; national and international buyers; NGOs and other organizations working in the Project targeted areas, etc.).

7. Project operations procedures: The Operational Manual (OM), with a detailed Subprojects chapter, describes the implementation arrangements and the responsibilities and specific tasks of the PIU, including the responsibility for preparing the annual operating plans to the WB for no objection. A draft OM was reviewed by the World Bank during appraisal. A final revised version was endorsed at negotiations.

## Organizational Chart



## **Financial Management, Disbursements and Procurement**

### ***Financial Management***

8. This annex contains the results of the Financial Management (FM) Assessment of the proposed project which was conducted by Bank staff in accordance with OP/BP 10.00 and FM Manual for World Bank-financed Investment Operations. The grant will finance the following type of expenditures: (i) non-endowment expenses of US\$8.09 million including financing of small works, goods, subprojects, consultants' and non-consultants services, training, and operational costs; and (ii) creation of the endowment fund of US\$1.5 million to be administered by an asset manager selected based on WB competitive selection procedures in the first year of project implementation.

9. The PIU has suitable organizational structure with trained staff that possesses required experience and credentials to ensure the responsible project management, while the Project internal control environments would be supported by the following mitigating measures: (i) the FM arrangements for this grant would be based on those adopted by CBMAP II(ii) the primary project disbursement methods would be: (a) advance to a segregated Designated Account (DA) in US\$ for financing of non-endowment funds; and (b) direct payment of WB contributions to the endowment fund subject to compliance with the disbursement conditions stated in the Grant Agreement (GA); (iii) selection of subprojects is competitive and subject to a solid evaluation, monitoring and reporting framework, which will be documented in a specific annex of the Operational Manual; (iv) the Project implementation will be based on the Annual Operational Program (POA) and Operational Manual; (v) the creation of the endowment fund will be subject to its approval by the National Economic Board (CENA) and national Board of Ministers, while its operation will be based on a solid legal and operational frameworks to be approved by the Bank; (vi) all payments to the beneficiaries will be centrally made by ANAM, while the financial records and monitoring of subprojects would be carried out through the Integrated System for Project Management and Monitoring (SIAMP); (vii) ANAM will prepare and submit to the Bank semiannual non-audited Interim Financial Reports (IFRs); (viii) project financial statements and Statements of Expenditures (SOEs), as well as operation of the endowment funds, will be subject to annual audits, to be conducted by eligible external auditors and based on TORs acceptable to the Bank; (ix) the Project will be formally supervised at least every six months. The overall proposed FM risk, i.e. the inherent and control risks mitigated by existing controls, is Substantial.

### **Action plan and conditions**

10. The agreed FM-related actions were completed by negotiations and they were: (i) preparation and approval of Annual Operation Plan (POA) for first year of implementation (ii) confirmation of the use of fiduciary agent for proposed project; (iii) preparation of draft TORs for audits; and (iv) agreement on IFR template. In addition, during first year of implementation, preparation and approval of the endowment fund's Bylaw and Manual of Procurement Procedures is required, as well as the development and implementation of the Integrated System for Project Management and Monitoring (SIAMP).

11. The following FM-related conditions have been agreed:

#	Action/Condition	Responsible party	By when/Type
1	Bank's No Objection to project's Annual Operational Program (POA) for the first year of implementation.	PIU/Bank	Negotiations
2	No withdrawal could be made under disbursement category 2 for the endowment fund unless (i) the endowment fund has been established in form and substance satisfactory to the Bank; (ii) the Asset Management Contract has been executed and delivered on behalf of the parties thereto under terms and conditions acceptable to the Bank; and (iii) the endowment fund operational manual as described in the Grant Agreement has been adopted by the Recipient in form and substance satisfactory to the World Bank.	PIU	Disbursement Condition
3	The Recipient shall cause ANAM by not later than two months after the effective date, employ for the period of project implementation, a fiduciary agent to handle the financial management aspects of the Project under terms and conditions satisfactory to the World Bank.	MEF/ANAM	Dated covenant

### Description and assessment of project FM arrangements

12. The Project execution from a technical and fiduciary perspective will be carried out by ANAM, through the Project Implementation Unit (PIU), based on its many years of experience with implementation of the Bank-financed projects. Moreover, the project implementation will be also overseen by the Directorate of the Technical Cooperation (DCT) of the Ministry of Finance and Economy (MEF), and all project Withdrawal Applications (WAs), as it is usual for country portfolio, will be approved by the Minister of Finance or any of two Vice-ministers. Moreover, the administration, control, and processing of payments made from the Project Designated Account (DA) would be done by a fiduciary agent, which would be hired prior to the Grant effectiveness.

13. Regarding the implementation of the subprojects under component 2, their execution will be based on the Operational Manual, which will include, among other, the following criteria: (i) process of preparation of subproject proposals; (ii) evaluation and selection processes based on the eligibility criteria agreed with the Bank; (iii) signing of the legal agreements; (iv) implementation and fiduciary arrangements, including financial reporting and procurement; (v) closing of subprojects. All payments to the beneficiaries will be centrally made by ANAM, while the monitoring of subprojects will be carried out through the Integrated System for Project Management and Monitoring (SIAMP), which is being designed specifically for the needs of the Bank financed projects, and will include a specific module for subprojects' management and monitoring. In terms of flow of funds, ANAM will use the grant advances to make transfers to eligible beneficiaries of subprojects, which, in turn, will pay for their eligible expenditures directly. The documentation of those expenditures will be done through use of traditional SOE template. The subproject payments would be also reported through semi-annual Interim Financial Reports, and the eligibility of the expenditures will be verified by the external auditors acceptable to the Bank.



14. The endowment fund institutional framework is described above. The grant's proceeds under this component would be subject to compliance with the disbursement conditions stated in the GA. The proposed initial amount of the fund is as follows:

<b>Donor institution</b>	<b>Amount in US\$ million</b>
GEF	1.5
AES-Changuinola	1.5
Government of Panama	2.0
<b>Total</b>	<b>5.0</b>

15. Staffing arrangements. The PIU will be responsible for the most project FM-related tasks, including budgeting, accounting, financial reporting, and preparation of the WAs. The unit has suitable organizational structure with trained staff that possesses required experience and credentials to ensure the responsible project management. The Project execution will be also supervised by: (i) ANAM, through its Directorate for Protected Areas, Environmental Planning and Policy Office (OPPA), and Administrative and Financial Directorate (DAyF); (ii) MEF's Directorate of the Technical Cooperation (DCT).

16. Budgeting arrangements. The Project will be registered into the National System for Public Investments (SINIP), hence all project funds will be allocated into the ANAM's annual budget to be concurred by the MEF and approved by the National Congress, and subject to provisions of the General Law on Budgeting, Budgeting Classification Manual, and General Rules on Budgeting, among others. The set of legal and regulatory arrangements, together with use of the institutional FM Information System (SIAFPA), provide for sound budget formulation, execution and control arrangements. At the Project level, the Project implementation will be based on the Annual Operational Program (POA), which will include, among other, the following information: (i) activities to be implemented and its detailed budget; (ii) annual goals; (iii) deliverables; (iv) impact indicators. The POA for the first implementation year should be prepared and approved by the Bank by negotiations.

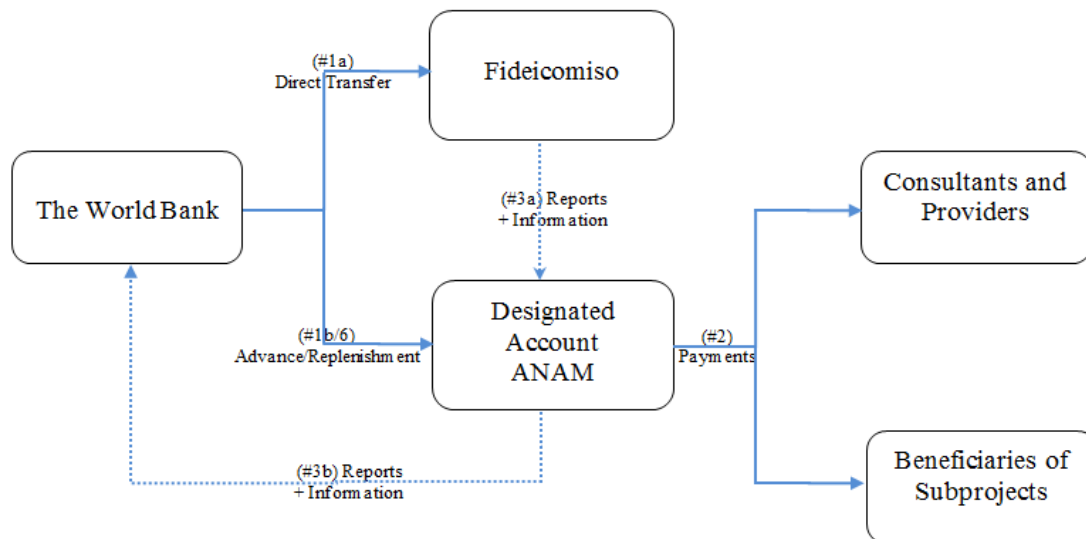
17. Accounting system. ANAM, in its capacity of a public agency, is subject to compliance with the Governmental Accounting Manual, issued by MEF and General Comptroller Office (CGR). Hence, the PIU will also use the accounting standards applicable to public sector, including the standardized chart of accounts. In terms of Financial Management Information System (FMIS), the PIU currently uses the SAGE50 Peachtree information system, which provides basic accounting and monitoring features. However, it is expected that by the end of the first year of implementation of the new operation, the PIU would finalized the implementation of the SIAMP, which is being designed specifically for the needs of the Bank financed projects. This new system would include the following modules: (i) planning and budgeting; (ii) accounting, finance and disbursements; (iii) procurement; (iv) management and control of long-term assets; (v) subprojects management and monitoring.

18. Internal control and written procedures. The Project internal control system, in addition to use of the POA, will be mainly focused on: (i) proper segregation of FM-related functions and training of the PIU staff; (ii) management and control of long-term assets; (iii) monitoring and control of implementation of subprojects; (iv) adequate control of disbursements and flow of

funds, among others. These procedures will be documented in the Project Operational Manual, which will include at least the following specific sections: (i) project FM and disbursement arrangements; (ii) technical and administrative framework for implementation of subprojects; (iii) operational and financial framework of the endowment fund. This Manual was prepared by the PIU and a draft was reviewed by the WB during appraisal (final version available prior to negotiations) Similarly, the operation of the endowment fund will be based on its Bylaws and Manual of Procurement Procedures, which should be also approved by the Bank during the first year of project implementation and prior to disbursement of initial capitalization.

19. General flow of funds and information. The primary disbursement methods for the Project will be: (i) advance to a segregated Designated Account (DA) in US\$ for financing of non-endowment funds; and (ii) direct payment of WB contributions to the endowment fund subject to compliance with the disbursement condition stated in the GA. The Project may also occasionally use the reimbursement and direct payment methods for financing of those expenditures pre-financed from the local counterpart funds and/or for requesting payments directly to project’s consultants, providers and final beneficiaries. The Project funds will be administered in two ways: (i) through ANAM (US\$8.09 million) for financing of non-endowment expenditures, such as small works, goods, subprojects, consultants’ and non-consultant services, training, and operating costs, and (ii) through an asset manager (US\$1.50 million) for creation of the endowment fund.

20. The description of the flow of funds is presented in the following diagram, where the solid lines represent the flow of money and the dotted lines represent the flow of information:



Notes: Fideicomiso is the endowment fund

- (1) The Bank advances the authorized amount into the Project DA, administered by ANAM or Fiduciary Agent, and processes direct payment to the asset manager (*endowment fund*), once all associated disbursement conditions are met.
- (2) As expenditures are incurred, ANAM will process payments from the DA to the Project consultants, providers, and beneficiaries of the subprojects.
- (3) Those eligible expenditures will be aggregated and summarized by ANAM in SOEs to be formally submitted, together with a grant withdrawal application, to the Bank in order to document the advance and/or to request

DA's replenishment, whatever the case may be.

(4) The Bank will replenish the documented amount to the DA.

21. Disbursement arrangements. The proposed grant disbursement arrangements<sup>10</sup>, are summarized below:

Disbursement method	<ol style="list-style-type: none"> <li>1. Advance to a segregated Designated Account in US\$ in financial institution acceptable to the Bank to be confirmed prior to negotiations for financing of non-endowment funds.</li> <li>2. Direct payment of eligible expenditures (pre-financed from the counterpart funds, and for transfers to the endowment fund).</li> <li>3. Reimbursement for financing of those expenditures pre-financed from the local counterpart funds</li> </ol>
DA and timing of documentation	The proposed DA ceiling is US\$1.5 million. The funds advanced to the DA would be documented on quarterly basis.
Supporting documentation	<ol style="list-style-type: none"> <li>1. SOEs<sup>11</sup>.</li> <li>2. Confirmation of compliance with disbursement conditions stated in the GA</li> </ol>
Limits	The recommended minimum value of applications for reimbursements and direct payments is US\$100,000.
Retroactive expenditures	<p>The retroactive financing would be up to US\$1.9 million (20% of the total of non-endowment funds) and will fulfill the following conditions:</p> <ul style="list-style-type: none"> <li>✓ Eligible Expenditures incurred and paid by ANAM within one year prior to the signing of the grant agreement.</li> <li>✓ Be subject to the same systems, controls, and eligibility filters described in this annex. These expenditures will also be subject to the regular project external audit.</li> </ul>

### Disbursement Table

Category	Amount of the Financing Allocated (US\$)	Percentage of Expenditures to be Financed (inclusive Taxes)
(1)		
(a) Goods, works, consultants' services, Non-Consultant Services, Training/workshop, for Components 1, 2, 3 and 4	6,379,000	100%
(b) Biodiversity-friendly subprojects under Component 2	1,500,000	100% of ANAM's share
(c) Municipal subprojects under Component 2	210,000	100% of ANAM's share
(2)Capitalization of endowment fund under Component 1	1,500,000	100%
<b>TOTAL AMOUNT</b>	<b>9,589,000</b>	100%

22. Financial reporting and external audit. ANAM, through the PIU, will prepare semi-annual unaudited project Interim Financial Reports (IFRs). These reports, as well as the annual financial statements, will be prepared in US\$.

23. ANAM, through the PIU, will be also responsible for compliance of the following external audit arrangements: (i) annual audits of the Project financial statements and eligibility of expenditures; (ii) annual audits of the endowment fund. Both audits should be conducted by an

<sup>10</sup> For details, see the Disbursement Handbook for World Bank Clients.

<sup>11</sup> All SOE supporting documentation would be available for review by external auditors and Bank staff at all times during Project implementation, until at least the later of: (i) one year after the Bank has received the audited Financial Statements covering the period during which the last withdrawal from the Grant Account was made; and (ii) two years after the Closing Date. The Borrower and the Project Implementing Entity shall allow the Bank's representatives to examine these records.

independent audit firm acceptable to the Bank and also based on the TORs acceptable to the Bank. It is also worth mentioning that the non-acceptance or the lack of compliance on the endowment fund's audit requirement would allow the Bank to withhold or suspend disbursements under respective component (1B). The draft TORs on auditing would be also agreed by project negotiations. The audit reports will be also subject to the World Bank policy on Access to Information. After grant effectiveness, the following financial reports will be presented to the World Bank:

Report	Periodicity	Due date
Unaudited Interim Financial Reports (IFRs)	Semi-annual	February 15 and August 15
Audited project financial statements	Annual	June 30, or six months after the end of audit period
Audits on operation of endowment fund	Annual	June 30, or six months after the end of audit period

24. Supervision strategy. The scope of project supervision will review the implementation of FM arrangements and performance, identify corrective actions if necessary, and monitor fiduciary risks. It will take place on a semi-annual basis and include: (i) desk review of project IFRs and audit reports, following-up on any issues raised by auditors, as appropriate; (ii) participation in project supervisions at least twice a year, which will look into the operation of the control systems and arrangements described in this assessment; (iii) updating the FM rating in the FM Implementation Support and Status Report (FMISSR), as needed.

25. Risk assessment. On the basis of the Bank's Project FM assessment, the overall FM residual risk is considered Substantial, as summarized in the following table:

FM Risk Table			
Risk type <sup>12</sup>	Risk Rating	Comments/risk mitigating measures incorporated into project design	Residual Risk Rating
Inherent risk	S		S
Country level	M		M
Entity	S	The Project execution will be: (i) carried out by ANAM, based on its many years of experience with implementation of Bank financed projects; and (ii) supervised by the MEF. The PIU will be responsible for the most project FM-related tasks, including budgeting, accounting, financial reporting, and disbursements. However, it should be noted that the FM ISR rating for the ongoing operations has been deemed as Moderately Unsatisfactory, due to existence of several significant shortcomings in FM, such as: (i) inconsistencies in the DA reconciliations; (ii) systematic delays in submission of the Project IFRs; (iii) slow rate of implementation of subproject, which could have negative impacts in terms of FM, such as refund of unused funds, among others.	S

<sup>12</sup> The inherent FM risk is that which arises from the environment in which the project is situated. The FM control risk is the risk that the project's FM system is inadequate to ensure that project funds are used economically and efficiently and for the intended purpose. The overall FM risk is the combination of the inherent and control risks as mitigated by the client control frameworks. The residual FM risk is the overall FM risk as mitigated by the Bank supervision effort.

Project	S	From operational perspective the Project design is relatively complex, mainly due to financing of ample set of expenditures, such as works, goods, creation of endowment fund, and subprojects, through processing of payments to multiple beneficiaries, among other. The creation of the endowment fund also represents additional risk in terms of financial sustainability (credit, market, and operational risks), and monitoring once the grant is closed. However, the Project will be implemented by experienced technical and administrative team and based the FM arrangements adopted by the CBMAP II.	S
<b>Control risk</b>	<b>S</b>		<b>S</b>
Budgeting	S	The Project will be registered in the SINIP and all project funds will be allocated into the ANAM's annual budget, and subject to provisions of an ample set legal framework.	S
Accounting	M	The PIU will use the accounting framework applicable to public sector, including the standardized chart of accounts. It is expected that by the end of the first implementation year a new Integrated System for Project Management and Monitoring (SIAMP) will be implemented and fully operational.	M
Internal Control	S	The Project internal control system and procedures will be documented in the Project Operational Manual, which would be approved by the Bank prior to negotiations. The operation of the endowment fund will be based on its Bylaw and Manual of Procurement Procedures, which should be also approved by the Bank by the end of the first year of implementation.	S
Funds Flow	S	Primary disbursement methods for this project will be: (i) advance to a segregated Designated Account in US\$ for financing of non-endowment funds; and (ii) reimbursement of WB contribution to the endowment fund. Mitigating controls for the flow of funds include: WA's approval by MEF, monitoring of payments and subprojects implementation through SIAMP system.	S
Financial Reporting	M	ANAM, through the PIU, will prepare semi-annual unaudited project IFRs, based on the formats agreed prior to negotiations.	M
Auditing	S	The annual audits of project financial statements and expenditure eligibility will be conducted by eligible independent audit firm and based on the acceptable TORs. Moreover, the operation and financial statements of the endowment fund will be also subject to annual audits by auditors acceptable to the Bank.	S
<b>Overall risk</b>	<b>S</b>		<b>S</b>

H: High; S: Substantial; M: Moderate; L: Low

### ***Procurement***

26. Procurement. Procurement for the Project would be carried out in accordance with the World Bank's "Guidelines: Procurement under IBRD Loans and IDA Credits" dated January 2011 and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated January 2011, and the provisions stipulated in the Grant Agreement. The general description of various items under different expenditure category is described below. For each contract to be financed by the Grant the different procurement methods or consultant selection methods, the need for prequalification, estimated costs, prior review requirements, and time frame are agreed between the Borrower and the Bank in the Procurement Plan. The Procurement Plan would be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity. Contracts financed 100 percent by the government or other donors will follow their own procedures

27. Procurement of Civil Works: It is envisioned that the Project will finance minor works as proposed in the individual subprojects and some minor rehabilitation of the ANAM regional units, as well as cottages for park guards and visitors. The methods of procurement that may be used are National Competitive Bidding with the special provisions included in the Financial Agreement, Shopping as well as Direct Contracting with the proper justification and in agreement with the Bank.

28. Procurement of Goods and Non-Consulting Services: The proposed project would finance computer infrastructure, such as servers and computer network equipment, desktops, office equipment, software packages and printing services, as well as, audio visual and related services required for the awareness campaign. The procurement would be done using Bank's standard bidding documents (SBD) for International Competitive Bidding for contracts above US\$300,000 Other methods of procurement expected are National Competitive Bidding, with the special provisions stated in the Grant Agreement and shopping for contracts below US\$50,000.

29. Direct Contracting: May be used for items that are specific for maintaining biodiversity. Early identification should be done to provide the justification and consideration by the Bank.

30. Framework Agreements. ANAM as an institution is using Panama Compras, for government procurement. The Project will use Panama Compras for general advertising and posting of contract award. It may also be used in procuring for logistics and off the shelf items, depending on catalog availability

31. Additional Provisions for National Competitive Bidding. Goods and works shall be procured under contracts awarded on the basis of National Competitive Bidding subject to the following additional procedures:

- (a) foreign bidders shall not be required to be registered with local authorities as a prerequisite for bidding;
- (b) the invitation to bid shall not establish, for purposes of acceptance of bids, minimum or maximum amounts for contract prices;
- (c) the invitation to bid shall not require mandatory attendance to a pre-bid meeting as a condition to bid;
- (d) bids may be submitted before bid opening, either by mail or courier or in person;
- (e) no bids or proposals shall be rejected, and no provisional awards shall be made at the time of bid opening;
- (f) no minimum number of bids or proposals shall be required as a condition to award a contract; and
- (g) contracts shall be awarded to the bidder whose bid has been evaluated as the lowest responsive bid, in accordance with criteria clearly set forth in the standard bidding documents.

#### Selection of Consultants

32. Firms (packages to be identified): Selection Methods envisioned are: Quality Based Selection, Fixed Budget Selection, Consultant Qualifications, Least Cost Selection as well as

Sole Source if justification for it is in agreement with the Bank. Assignments will consist of the elaboration of investment plans as well as related consultancies in relation to the endowment fund. Individual Consultants: selected as per Section V of the Consultants Guidelines, including para. 5.6

33. Community Participation: Subprojects will be selected as per the criteria stated in the Subprojects chapter of the Operational Manual. Subprojects implemented by the municipalities will also be addressed in the Subprojects chapter of the Operational Manual.

34. Training: A specific periodic training plan will be prepared by the implementing agency.

35. Operating Costs. As defined in the Grant Agreement.

### **Assessment of Agency Capacity to Implement Procurement**

36. ANAM is an autonomous entity funded by its own resources as well as government budget allocation. ANAM has the overall responsibility for project implementation. The entity is headed by the General Administrator of the Environment. The existing PIU was established by the ongoing CBMAP II (TF056628, LN-7439-PAN). As the existing project is slowing down, the fiduciary staff has been reduced, and it is envisioned that the staff will transfer to the new project. The unit is currently staffed with a Procurement Officer. Up to now, the majority of the procurement activities processes have been shopping or selection of individual consultants.

37. At the government level, public procurement is carried out according to Law 22 of 2006. The Operational Manual states the processes to follow for decision making and approvals for the Project. The Project manager reports directly to the General Administrator of ANAM. The unit prepares an operation plan, which is translated to a Procurement Plan. However the plans up to now have been more of an itemized list. The main challenge relates to the coordination between the Procurement Officer in the PIU and the technical team for planning purposes. There are special arrangements for some of the training, memoranda of understanding, etc. It is suggested that a lawyer is kept on retainer to review such agreements.

### **Overall Risk Assessment**

38. The Project is a stand-alone operation and the final PIU has yet to be fully staffed. Based on the findings of the Assessment of Agency Capacity to Implement Procurement, the variety of procurement methods, and the incorporation of new PIU fiduciary staff, the risk is considered high. An Action Plan to mitigate the fiduciary risk has been agreed during preparation along the following elements:

#### **Action Plan:**

1. Retain procurement officer and provide training before project effectiveness.
2. Hire legal support on retainer for the different agreements.
3. Make arrangements with World Bank Implementation support staff for periodic training.
4. Appoint successful farmers as trainers for other similar associations.
5. Reduce administrative burden to PIU and charges from the Fiduciary Entity by providing subgrants of higher values. (US\$50,000 to US\$100,000).

6. Include provision of utilities and access roads to parcels to achieve subprojects full objectives.
7. Adopt contract/agreements for subprojects with clear responsibilities, timelines and deliverables.
8. Adopt a more effective system to track implementation of subprojects financial as well as physical.
9. Allow for early re-structure of subprojects if initial design is faulty.

**Environmental and Social (including safeguards)**

39. The following environmental safeguards are triggered: Environmental Assessment (OP/BP 4.01), Natural Habitats OP/BP 4.04, Forests OP/BP 4.36, Pest Management OP 4.09 and Physical Cultural Resources OP/BP 4.11. The proposed project builds on the experience and lessons learned from the CBMAP I and II. This, combined with the activities under the proposed project, should have a strong overall positive environmental impact and advance global biodiversity goals by (i) strengthening management of Protected Areas and natural habitats and (ii) fostering environmentally sustainable productive activities in rural areas that encourage preservation of natural resources. Potential negative environmental impacts from productive activities and small public works are expected to be minimal and are adequately addressed through a solid identification, evaluation, and mitigation framework.

40. Environmental Assessment (OP/BP 4.01). The proposed project is category B, requiring a partial assessment as it is expected to have minimal negative environmental or social impacts, and adverse impacts are considered manageable. OP/BP 4.01 is triggered to avoid and manage risks and mitigate any potential environmental impacts that may result from the investments in productive activities and construction or rehabilitation of small infrastructure. As specific sites are not known at this stage, an Environmental and Social Management Framework (ESMF) was prepared to screen, assess, and mitigate environmental impacts related to proposed projects that may involve investments in productive activities and construction or rehabilitation of small infrastructure. The ESMF outlines the process to prepare the necessary environmental and social safeguards instruments for each investment (EMP, IPP, Action Plan and/or PMP) that may be required to mitigate and manage potential environmental impacts. An Environmental Management Framework was prepared to provide specific guidelines to avoid or minimize risks and manage potential environmental impacts associated with subproject activities. Any subprojects considered as Category A will not be eligible for funding by the Project.

41. Natural Habitats (OP 4.04). The ESMF used of a range of existing sources of information and *in situ* analysis to determine the location of natural habitats in the Project area, their ecological functions, relative importance, threats, and management issues. Productive, natural resources and biodiversity subprojects that are explicitly intended to benefit natural habitats will be assessed through screening to determine what level of environmental analysis is required in each case. The Project will not finance any activity that could potentially cause significant conversion or degradation of natural habitats. The ESMF outlines the procedures and mechanisms for screening out activities that may cause degradation or contemplate any significant conversion of natural habitats. The ESMF includes provisions to assess possible impacts prior to any actions being undertaken on the ground. Monitoring activities will be



established during implementation to ensure that critical natural habitats are not adversely affected.

42. Forests (OP 4.36). The proposed project will be developed in natural forest areas of importance for biodiversity. Yet it is too early to know at this stage whether interventions could affect the rights and welfare of people dependent on forests and if this would bring changes in the management, protection, and utilization of natural forests, OP/BP 4.36 is triggered as a precautionary measure, and also to improve forest conservation. The ESMF outlines the procedures and mechanisms for screening out activities that may cause degradation or contemplate any significant conversion of natural habitats to meet the requirements of the policies on Forests and Natural Habitats.

43. Pest Management (OP 4.09). The work on a production system may involve pest management and the use of agro-chemicals in subproject activities. The ESMF includes screening procedures for pest management and pesticide use. A Pest Management Plan will be prepared for subprojects likely to procure pesticides or envisage changes in pest management practices. The ESMF adequately describes the risks associated with pesticide use and the measures proposed for managing those risks.

44. Physical Cultural Resources OP/BP 4.11. This project is not expected to have any negative impact on physical cultural resources. The policy on Physical Cultural Resources (OP 4.11) applies given the uncertainty regarding the exact locations of activities to be carried out under the Project. Some forests or landscapes concerned by the Project might be considered to have historical or cultural significance such as spirit forests, sacred valleys or other features of the natural landscape. The ESMF includes specific provisions to assess the potential impacts on areas considered to have historical or cultural significance prior to any activities being undertaken on the ground. The ESMF also includes provisions for the treatment of physical cultural resources that may be discovered during project implementation (chance finds).

### **Social Safeguards**

45. The Indigenous Peoples (OP/BP 4.10) and Involuntary Resettlement Policies (OP/BP 4.12) are triggered. ANAM conducted a Social Assessment to gather socio-economic and ethnic information from the beneficiaries of the Project. Basic baseline information from the five indigenous groups was collected to determine impacts of the operation and to prepare the Indigenous Peoples Plan (IPP). Based on the experience of the previous operation, this project will continue implementing a free, prior and informed consultation with indigenous peoples to ensure their participation. It is expected that the Project would have positive impacts on indigenous peoples' lives and as well on the poor and extremely poor rural communities' livelihoods by supporting productive subprojects, alliances and networks to strengthen their productivity and commercialization. Specific indicators have been prepared to measure the impact of the Project on indigenous peoples' livelihoods.

46. The Social Assessment and IPP include an action plan that includes provisions for preparation of subproject specific plans when needed. To ensure success, specific measures will be taken to: (a) include local customs, culture and promote inclusion of indigenous peoples, women and vulnerable groups; (b) allocate sufficient funds to participatory processes during the

life of the Project; (c) ensure a participation strategy that involve all institutional actors to reduce the risk of opposition from groups, (d) build bridges of communication between local communities and other stakeholders to fortify trust, credibility and willingness to work together, and (e) the balance between the degree and type of participation to avoid “consultation and participation fatigue.”

47. A Process Framework was prepared to ensure that procedures are in place to mitigate any potential restrictions in access to protected areas and ensure consultations with potential beneficiaries on resource management activities in and around protected areas as part of the management plans. The Process Framework was prepared to ensure that pertinent measures and protocols are taken into account when financing subprojects and consolidating alliances. The Framework also aims to provide measures to avoid the activities to restrict access to resources when financing subprojects.

48. *Private sector co-financing and transparency.* The Bank carried out an institutional analysis of the two companies providing parallel co-financing (AES Corporation and First Quantum Minerals Ltd, and its subsidiaries in Panama (AES Panama S.A., AES Changuinola S.A., and Minera Panama S.A. (MPSA)); both companies have concession agreements that legally require a compensation payment to ANAM. This analysis was informed by the International Finance Corporation (IFC) procedures for conducting integrity due diligence (IDD). The institutional analysis presents a profile of each company, including its current projects, concessions and history of operations and corporate social responsibility. Both companies are subsidiaries of international corporations with sufficient instruments to prevent, mitigate and manage the risks and impacts generated by their activities. However, the magnitude of their projects in Panama is very large and complex which gives them a high visibility and broad exposure to claims from civil society and local communities. The institutional analysis also presents detailed recommendations and best practices to strengthen the transparency, effectiveness and sustainability of the endowment fund as it is implemented under the proposed project. The Grant Agreement will include provisions with requirements for the specific rules and procedures for the operation of the endowment fund (including governance, to prevent conflict of interest situations) as well as provisions for compliance with environmental and social safeguards.

49. Information on the Project has been shared with civil society and there were public consultation workshops organized by ANAM in April and September 2014. There were 146 participants in the April workshop, and 80 in the September workshop including local government, NGOs, community members, indigenous community representatives and ANAM/project staff and consultants. In April, ANAM and community members presented the achievements of CBMAP II and the new project design was presented. Overall, the community organizations expressed support for the Project and emphasized the need for a new phase focused on marketing and commercialization. The environmental NGOs had some reservations about the endowment fund and this forum offered an opportunity for ANAM to explain the concept and the process that will be used for establishing this type of public-private fund to support the PAs system. The proposed grievance redress mechanism (a formal system for tracking requests for information and/or complaints, comments and opinions provided, the efficiency of responses, and the quality/satisfaction of the responses) was presented and discussed and the final version

has been incorporated in the OM. When necessary, GRM committees for all subprojects and alliances will be constituted. If this mechanism fails, the issue escalates to higher authorities. To ensure transparency, hearings on complaints will remain open to the public. All cases will be recorded and documented indicating complaints and the reasons that lead to acceptance or rejection. Following the elections in May, the new ANAM authorities convened the September consultation session to clarify project implementing arrangements, answer questions from civil society organizations, and explain opportunities for collaboration during implementation. Continuing open dialogue and feedback during implementation will foster community and civil society engagement with the GOP on these issues.

### **Monitoring & Evaluation**

50. The monitoring and evaluation strategy consists of three pillars: (i) progress M&E of the outcome of the Project; (ii) monitoring of the biodiversity in the selected PAs and in the Buffer Zones; and (iii) measure of the progress and effectiveness in managing the Project PAs.

51. Monitoring will focus on: (i) monitoring the indicators in the results framework and the impact of the Project – some of the indicators will be monitored on a periodic basis, while others will be assessed at the mid-term and at the end of the activities; and (ii) monitoring the biodiversity in the productive areas of the Project and in the selected Protected Areas. In the case of the productive areas, the Project will carry out periodic assessments of the ecological patterns of the species defined as representative of the biodiversity, while in the Protected Areas, monitoring will be carried out by ongoing observation of the permanent monitoring plots established in each PA, as well as by establishing a baseline of the representative species. For monitoring the management of the Project PAs, the METT will be used. Biodiversity and other biological data will be integrated in the biodiversity monitoring system (SNIMDB).

52. In order to ensure consistency between the Project monitoring system, the SNIMDB requirements, and the overall M&E framework, an integrated system called SIAMP (*Sistema Integrado de Administración y Monitoreo de Proyectos*) developed under the CBMAP II. This Project Monitoring and Evaluation Module is based on the results framework indicators and will allow: (i) monitoring and updating subproject information on a daily basis; (ii) generation of updated information on the activities that contribute to achievement of the PDO and intermediate indicators, and; (iii) monitoring the financial and economic information of the productive activities for producers' groups supported by the Project to evaluate impact and the financial sustainability of the interventions.

53. Evaluation. The Project will be evaluated with an evaluation at the mid-term and an impact evaluation at the end of the Project. These evaluations will include quantitative and qualitative evaluations of the progress towards reaching the Project outcomes. Reports will contain relevant information about the results, safeguards and lessons learned.

### **Role of Partners**

54. Private sector co-financing. AES Changuinola and MPSA<sup>13</sup> have formalized parallel co-financing support for PAs management, in fulfillment of existing concession agreements near

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<sup>13</sup> AES-Changuinola is the company operating the Changuinola I hydroelectric plant and Minera Panamá S.A. (MPSA) is a Panamanian subsidiary of a Canadian mining company.

PAs. AES Changuinola will provide US\$1.0 million (US\$200,000/year) to ANAM as part of its existing concession contract to support and strengthen the management of Protected Areas that are part of the La Amistad Biosphere Reserve, with emphasis on Palo Seco. AES will also provide a joint co-financing contribution to capitalize the endowment fund of US\$1.5 million. The MPSA will provide US\$6.0 million (US\$1.2 million/year) for activities in the Annual Operating Plans of the Omar Torrijos and Santa Fe Protected Areas. In both cases, the companies will finance parallel activities for the implementation of PAs operations plans, and biological monitoring activities of SNIMDB (under component 1); training activities (under components 1, and 3 of the proposed project); knowledge management and communication (under component 3) and financial management of PAs (under component 4) as per table below.

Table 2: Private sector co-financing by component

Financier	Component/Activity	Year 1	Year 2	Year 3	Year 4	Year 5	Subtotal (million)	Total (million)
AES	<b>1. Sustainable Management of Pas</b>	<b>1.60</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>2.00</b>	<b>2.00</b>
	- Seed capital for endowment fund	1.50	0.00	0.00	0.00	0.00	1.50	
	- Implementation of management plans	0.10	0.10	0.10	0.10	0.10	0.50	
	<b>3. Knowledge Management and Communications</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.30</b>	<b>0.30</b>
	<b>4. Project Management</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.20</b>	<b>0.20</b>
<b>TOTAL AES</b>		<b>1.70</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>2.50</b>	<b>2.50</b>
MPSA	<b>1. Sustainable Management of PAs</b>	<b>0.84</b>	<b>0.84</b>	<b>0.84</b>	<b>0.84</b>	<b>0.84</b>	<b>4.20</b>	<b>4.20</b>
	- Seed capital for endowment fund	0.00	0.00	0.00	0.00	0.00	0.00	
	- Implementation of management plans	0.84	0.84	0.84	0.84	0.84	4.20	
	<b>3. Knowledge Management and Communications</b>	<b>0.30</b>	<b>0.30</b>	<b>0.30</b>	<b>0.30</b>	<b>0.30</b>	<b>1.50</b>	<b>1.50</b>
	<b>4. Project Management</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.30</b>	<b>0.30</b>
<b>TOTAL MPSA</b>		<b>1.20</b>	<b>1.20</b>	<b>1.20</b>	<b>1.20</b>	<b>1.20</b>	<b>6.00</b>	<b>6.00</b>
<b>CO-FINANCING GRAND TOTAL</b>		<b>2.90</b>	<b>1.40</b>	<b>1.40</b>	<b>1.40</b>	<b>1.40</b>	<b>8.50</b>	<b>8.50</b>

**Annex 4: Operational Risk Assessment Framework (ORAF)**  
**Panama: Sustainable Production Systems and Conservation of Biodiversity (P145621)**

**Risks**

**Project Stakeholder Risks**

<b>Stakeholder Risk</b>	Rating	Substantial
<p><b>Risk Description:</b></p> <p><i>Election in 2014</i> and launch of project with new officials.</p> <p><i>Private sector co-financing</i> from two companies involved in mining and hydroelectric sectors.</p> <p><b>Stakeholders:</b> Support from indigenous communities: Although CBMAP II has broad support</p>	<p><b>Risk Management:</b></p> <p>For over 15 years, ANAM and its partners have shown a strong commitment to continue working with the WB MBC program and support new activities that will scale-up CBMAP II and strengthen the NPAS. To help with the transition, the WB has re-engaged with new authorities to prepare for project launch. At the local level, municipal environmental plans were developed by the on-going project in a participatory way and ANAM will sign implementation agreements with municipalities.</p> <p>The two companies (AES and MPSA) have concession agreements with ANAM that legally require a compensation payment to ANAM. The Bank carried out an institutional analysis of the companies with identification of best practices to strengthen the transparency, effectiveness and sustainability of the endowment fund. The analysis was informed by the International Finance Corporation (IFC) procedures for conducting integrity due diligence (IDD) and details the companies' current operations and corporate social responsibility policies. The Grant Agreement will include provisions to prevent conflict of interest situations and compliance with environmental and social safeguards. The communication strategies financed under the Project will support activities to promote a culture of transparency and dialogue, including conflict resolution, and the grievance and redress mechanism.</p> <p>Under CBMAP II agreements with indigenous communities were signed that allowed the Project to implement activities in indigenous territories and comarcas. These agreements will be renewed for the proposed project. An IPP was prepared and it will be complemented by a Communication Strategy.</p>	

from indigenous communities, the new project could find it difficult to meet expectations. Even though there is full participation of local communities, this may not ensure adequate safeguarding of peoples' livelihood and assets.

Other stakeholders. In early 2014, a Panamanian environmental advocacy NGO (CIAM) wrote to the WBG President expressing concerns about the role of the new public-private foundation established by ANAM, the endowment fund and the private sector co-financing planned for project. Other two letters were received in April 2014 from a two civil society coalitions raising the same issues and questioning the consultation process.

Robust communication campaigns and participation will contribute to broad participation of various stakeholders on a continuing and systematic basis. A GRM was presented during the open consultation in April 2014 and the final version will be included in the OM. This mechanism will track inquiries and complaints and the responses (see Annex 3).

The WB and ANAM have proactively engaged with civil society as part of preparation. The WB met with CIAM during appraisal and provided information about the institutional and co-financing arrangements. The WB has provided guidance on the planned co-financing and the institutional and governance arrangements for the endowment fund to provide a framework for transparency and openness. The communications strategy will also help support this effort. These arrangements are detailed in the PAD. In addition, ANAM organized two other public consultation workshops in April and September 2014 to explain better the project, clarify project implementing arrangements, answer questions from civil society organizations, and explain opportunities for collaboration during implementation. In the September workshop, the new ANAM authorities informed that this foundation was dissolved.

Resp: Client	Status: In Progress	Stage: Both	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency Yearly
Resp: Client	Status: In Progress	Stage: Implementation	Recurrent:	Due Date:	Frequency

**Implementing Agency (IA) Risks (including Fiduciary Risks)**

<b>Capacity</b>	Rating	Substantial
Risk Description: Description: ANAM lacks market-related experience.	<b>Risk Management:</b> To mitigate this risk the Project has identified partner institutions with experience in market-related issues that will be supporting project activities related with marketing and commercialization. Such institutions include: the private sector, Ministry of Commerce and Industry, the Authority for Small and Medium Enterprise (AMPYME in Spanish) and the Ministry of Agricultural Development, among others.	

<p>Weak communication between central and regional offices and local office capacity to respond to beneficiaries.</p> <p>Staff turn-over: According to the World Bank-IFC Country Partnership Strategy FY1014, there is a shortage of qualified labor in Panama in both in the public and private sector. As experienced in CBMAP II, high staff turn-over may affect the efficient implementation of the Project.</p> <p>Financial management performance in CBMAP II due to: (i) inconsistencies in the DA reconciliations; (ii) systematic delays in submission of the Project IFRs; (iii) slow rate of implementation of subprojects.</p>	<p>To mitigate this risk, the Project will organize workshops for ANAM staff to clarify the role of the regional offices in project implementation, and will ensure that they have the appropriate means to communicate effectively with the central office. Training activities for the local staff to respond to beneficiaries' needs will be identified. This will help planning the schedule for the activities as well as identifying experts to be hired for fulfilling the needs.</p> <p>Staff turn-over: To mitigate this risk, there is a possibility of increasing current consultant fees to make job offers more competitive.</p> <p>ANAM's institutional capacity in terms of fiduciary compliance has been weak, but is improving. ANAM will hire a fiduciary agent for the Project, which would be responsible for administration, control, and payment made from the Project Designated Account (DA).</p> <table border="1" data-bbox="716 776 1940 976"> <tr> <td data-bbox="716 776 890 976">Resp: Client</td> <td data-bbox="890 776 1100 976">Status: In Progress</td> <td data-bbox="1100 776 1274 976">Stage: Both</td> <td data-bbox="1274 776 1470 976">Recurrent:</td> <td data-bbox="1470 776 1732 976">Due Date:</td> <td data-bbox="1732 776 1940 976">Frequency:</td> </tr> </table>						Resp: Client	Status: In Progress	Stage: Both	Recurrent:	Due Date:	Frequency:
Resp: Client	Status: In Progress	Stage: Both	Recurrent:	Due Date:	Frequency:							
<p><b>Governance</b></p>	<p>Rating</p>	<p>Moderate</p>										
<p><b>Risk Description:</b></p> <p>Implementation delays due to involvement of multiple agencies and differing capacity of participating organizations.</p>	<p><b>Risk Management:</b></p> <p>ANAM has previous experience as an implementing agency with WB projects, and has shown ownership and commitment to CBMAP II. For new producer groups, indigenous communities, municipalities, private institutions, and project staff, the Project will provide training on good practices in financial and procurement management. Special focus will be given to Bank procedures.</p> <table border="1" data-bbox="716 1224 1940 1338"> <tr> <td data-bbox="716 1224 890 1338">Resp: Client</td> <td data-bbox="890 1224 1100 1338">Status: Not Yet Due</td> <td data-bbox="1100 1224 1274 1338">Stage: Implementation</td> <td data-bbox="1274 1224 1470 1338">Recurrent:</td> <td data-bbox="1470 1224 1732 1338">Due Date:</td> <td data-bbox="1732 1224 1940 1338">Frequency:</td> </tr> </table>						Resp: Client	Status: Not Yet Due	Stage: Implementation	Recurrent:	Due Date:	Frequency:
Resp: Client	Status: Not Yet Due	Stage: Implementation	Recurrent:	Due Date:	Frequency:							
<p>Project Risks</p>												

<b>Design</b>	Rating	Substantial				
<p><b>Risk Description:</b> Endowment fund establishment, capitalization, financial sustainability (credit, market, and operational risks), and monitoring once the grant is closed.</p> <p>Biodiversity-friendly production is not attractive for producers.</p> <p>Weak technical capacity of municipalities:</p> <p>Implementation of the subprojects requires continuous monitoring and processing of payments to multiple beneficiaries.</p>	<b>Risk Management:</b>					
	<p>The creation of endowment fund is informed by WB and global best practices. GEF resources will be leveraged to attract additional investment from government and other donors. The endowment fund will be administered by an acceptable asset manager to be selected based on WB competitive selection procedures. The specific institutional framework for the endowment fund, requirements, and special considerations are detailed in Annex 3.</p>					
	<p>The ongoing project CBMAP II has been successful in supporting bio-diversity friendly production. The proposed project will select beneficiaries that show some degree of biodiversity friendly practices and that are interested in producing products with financial potential according to the economic and financial analysis done. In addition, the South-South cooperation considered in the Project will provide international experiences.</p>					
	<p>Component 2 of the Project includes technical assistance and training activities to strengthen the capacity of municipalities especially in topics that will help them with the establishment and operation of <i>Unidades Ambientales Municipales</i> and/or <i>Comisiones Consultivas Distritales</i>.</p>					
<p>All payments to the beneficiaries will be centrally made by ANAM, while the monitoring of subprojects will be carried out through the Integrated System for Project Management and Monitoring (SIAMP), which is being designed specifically for the needs of the Bank-financed projects, and will include a specific module for subprojects' management and monitoring.</p>						
	Resp: Client	Status: Not Yet Due	Stage: Implementation	Recurrent:	Due Date:	Frequency:
<b>Social and Environmental</b>	Rating	Moderate				
<p><b>Risk Description:</b> Social: Diverse beneficiary groups, including indigenous peoples.</p>	<b>Risk Management:</b>					
<p>Social: To mitigate this risk, a Social Assessment and an Indigenous Peoples Plan (IPP) was prepared as part of the Project to evaluate the Project's potential impact on indigenous peoples. Free, prior and informed consultation will take place to establish community support. The Project also developed a</p>						



<p>Environmental: The overall environmental impacts from the implementation of subprojects are expected to be largely positive. Any activities that would result in adverse impacts on natural habitats and forested areas will be avoided.</p>	<p>communication strategy that considers local situations and different beneficiaries and will plan activities accordingly (different languages, different dissemination methods).</p> <p>Environmental: An Environmental and Social Management Framework has been developed to evaluate the potential environmental impacts and will include measures to avoid, minimize or mitigate any adverse impacts as needed. The Project won't support activities that could have a negative environmental impact or that would affect local biodiversity. Subprojects have to comply with environmental safeguards of the Bank and country environmental regulations; they will be reviewed by ANAM before receiving approval.</p>					
	Resp: Both	Status: In Progress	Stage: Both	Recurrent:	Due Date:	Frequency:
<b>Program and Donor</b>	Rating	Moderate				
<p>Risk Description: Expected co-financing is provided; endowment fund is capitalized as planned.</p>	<p><b>Risk Management:</b> Counterpart funding for the Project is committed from the GOP. The two companies providing co-financing will sign an addendum to their existing contracts with ANAM to establish the co-financing arrangements for the Project, and in the case of AES also for the endowment fund. The WB and ANAM have met with both companies to agree on this proposed co-financing. There are also several other organizations, including donors, NGOs, and the private sector that have expressed strong interest in contributing with new resources or redirecting existing resources to the endowment fund. To build interest and support for the fund, in the unlikely event that the private sector contribution to the endowment fund does not materialize, a fundraising campaign for the endowment fund will be financed under the Project that will allow ANAM capture other resources for the fund.</p>					
	Resp:	Status:	Stage:	Recurrent:	Due Date:	Frequency:
<b>Delivery Monitoring and Sustainability</b>	Rating	Moderate				
<p>Risk Description: Difficulty in designing and monitoring biodiversity: direct measurement of biodiversity conservation as a result of project activities is costly and time</p>	<p><b>Risk Management:</b> ANAM has been working on the improvement of a monitoring system for biodiversity. Monitoring of biodiversity in subprojects will be based in specific ecologic assessments for each productive system. The assessment will include the monitoring of population of selected species of global importance and will be done in participation with local communities which will be trained for this purpose. Biodiversity</p>					

<p>consuming; The development of a monitoring system for biodiversity that is sustainable in the future is a challenge.</p>	<p>monitoring of PA will be done by permanent plots that will record information of plant and animal species.</p>					
<p>Long-term sustainability of project actions in the MBC.</p>	<p>Like the earlier project, this project will promote participation and ownership at every level—government institutions, communities and beneficiaries. Project beneficiaries will play a key role in decision making, implementation, and cost sharing, thus increasing sustainability. The creation of business and market linkages will provide added sustainability to the productive activities in the buffer areas. The Project also includes support for a communications and fundraising strategy/campaign for the new endowment fund for PAs. Finally, knowledge management and dissemination will raise awareness, promote behavior change, and increase the needed political and financial support.</p>					
<p>Sustainability of PAs system</p>	<p>The endowment fund to be created under the Project will provide more permanent and predictable financing.</p>					
	<p>Resp: Client</p>	<p>Status: In Progress</p>	<p>Stage: Implementation</p>	<p>Recurrent:</p>	<p>Due Date:</p>	<p>Frequency:</p>

**Overall Risk**

**Overall Risk: Substantial**

**Risk Description:**  
 The main risks include: (a) co-financing from the private sector; (b) capitalization of the endowment fund; (c) support for project from stakeholders and beneficiaries, including indigenous communities; (d) implementing agency capacity (fiduciary, staffing, monitoring of payments to subproject beneficiaries, subproject implementation and compliance with the OM); (e) weak capacity of producers and indigenous communities for implementation of subprojects, and (f) incipient market for biodiversity-friendly products and inexperience of ANAM in market-related issues.

## **Annex 5: Implementation Support Plan**

### **PANAMA: Sustainable Production Systems and Conservation of Biodiversity**

#### **Strategy and Approach for Implementation Support**

1. The strategy for Project Implementation Support (IS) by the Bank reflects the nature of the Project and its risk profile. The strategy seeks to make IS to the client more efficient while remaining focused on implementation of the risk mitigation measures identified in the ORAF. The strategy is also an indicative and flexible instrument which will be revisited during project implementation and as part of the Implementation Status and Results Report (ISR) reviews and adjusted based on emerging project challenges and field conditions. Overall project management. Project supervision will support the following areas: (a) fiduciary capacity to promote the establishment of adequate internal control systems and overall governance; (b) implementation of subprojects in the Project area, particularly in the context of promoting sustainable biodiversity-friendly practices and their monitoring; (c) mitigation of potential political interference to maintain strong technical capacity, alignment with project objectives, and due diligence; (d) free, prior, and informed consultations with indigenous peoples throughout project implementation to ensure that they receive benefits that are culturally compatible; (e) management of environmental and social factors in Protected Areas and critical natural habitats to contribute to conservation without compromising the wellbeing of the local population; (f) communication campaign to maintain stakeholders informed and engaged; and (g) monitoring of project implementation, including results indicators and biodiversity monitoring.

2. Fiduciary aspects. The Bank will: (a) provide implementation support and training as necessary; (b) follow up on the Project's financial management system and its adherence to the Operational Manual, including but not limited to accounting, reporting and internal controls; (c) provide guidance on the Bank's Procurement Guidelines to the PCU and co-executing agencies; (b) review procurement documents and provide timely feedback to the PCU; and (c) help monitor procurement progress against the Procurement Plan. Environmental and Social Aspects. The Bank will emphasize opportunities for social development and environmental sustainability provided by the Project, as well adequate attention to gender equity issues. Within this framework, the Bank will help to monitor the implementation of activities and of safeguard instruments. Bank social and environmental specialists will be available to provide timely guidance to ANAM and will participate in field visits on a regular basis to maintain a good and ongoing understanding of the situation on the ground.

3. Information and Communication. A Communication Strategy will support the implementation of the Project in its different areas of intervention. The strategy will also seek to support implementation of consultative and accountability processes, including the grievance redress mechanism.

#### **Implementation Support Plan**

4. Task team leadership, as well as safeguards, procurement, financial management, and technical aspects will be managed from the Bank's office in Washington. International and

national consultants will be hired to provide advisory services in specialized issues. Formal supervision and field visits will be carried out semi-annually or as needed to help promote satisfactory Project implementation. A mid-term review will determine needs for restructuring and other changes in the Project design and/or implementation arrangements.

5. The main focus of implementation support is summarized below.

**Table 2: Detailed Implementation Support required**

<i>Time</i>	<i>Focus</i>	<i>Skills Needed</i>	<i>Resource Estimate</i>
<i>First twelve months</i>	Establishment of implementation capacity	Procurement and FM	4 SWs
	Social Development- Supervision and training	Social Specialist	4 SWs
	Environmental management	Environmental Specialist	4 SWs
	Project Management and Communication	Task Team Leader Operations Analyst Communication Specialist	8 SWs 4 SWs 3 SWs
<i>12-48 months</i>	Procurement Implementation support	Procurement specialist	8 SWs
	FM implementation support	FM specialist	8 SWs
	Environmental sustainability and safeguards supervision	Environmental Specialist	6 SWs
	Social Development and community engagement	Social development specialist	8 SWs
	Sustainable financing of PA and economic studies to valuation of biodiversity	Environmental Economist	3 SWs
	Marketing aspects	Marketing-value chain specialist	3 SWs
	Biodiversity aspects	Biodiversity specialist	8 SWs
	Project Management and Communication	Task Team Leader Operations Analyst Communication Specialist	32 SWs 16 SWs 12 SWs

**Table 3: Skills Mix Required**

<b>Skills Needed</b>	<b>Number of Staff Weeks</b>	<b>Number of Trips</b>
Environmental specialist	3 SWs annually	Field trips as required
Social specialist	3 SWs annually	Field trips as required
Environmental Economist	2 SWs annually	Field trips as required
Marketing specialist	2 SWs annually	Field trips as required
Communication specialist	2 SWs annually	Field trips as required
Biodiversity specialist	2 SWs annually	Field trips as required
Procurement specialist	4 SWs annually	Minimum two field trips
Financial management specialist	4 SWs annually	Minimum two field trips
Operations Analyst	4 SWs annually	Field trips as required
Task Team Leader	8 SWs annually	Minimum two field trips

## **Annex 6: Economic Analysis**

### **PANAMA: Sustainable Production Systems and Conservation of Biodiversity**

1. Biodiversity is a public good with invaluable ecosystem functions and services. GEF financing for this Project will provide a significant contribution to maintaining biodiversity, ensuring the livelihoods of people in the surrounding areas, and creating a positive influence on the overall integrity and effectiveness of the MBC across the Central America isthmus. Due to its global experience, involvement in the previous GEF projects and its role as an impartial broker, the World Bank can play an effective role in enhancing the participation of civil society, the private sector and local government, forge alliances, and increase commitment and financial support to the sustainability of the PAs. The WB also has a comparative advantage in the design and implementation of trust funds for biodiversity conservation. As an implementing agency of the GEF, the Bank has played an important role in establishing the basis for biodiversity conservation and PA management in Panama. The Bank will draw on its considerable expertise in the environmental and agricultural sectors, particularly related to land use and sustainability, production systems and productive alliances, environmental services, long-term financial mechanisms and strategic adaptation responses to the potential impacts of climate change in new investments.

2. An important development impact of the proposed Project is to support beneficiary producer organizations to implement production systems that are economically and environmentally sustainable. Conservation will only be possible if the standard of living of the key players is improved. This improvement is associated with the incorporation of environmentally and biodiversity-friendly production practices, which would allow production increase and diversification as a strategy for access and permanence in markets, while favoring conservation of natural resources.

3. The proposed project components will produce both tangible and intangible economic benefits. The Project-related support to promote environmentally-friendly productive systems will induce the introduction of significant changes in the selected PAs and Buffer Zone landscapes. The parallel conservation activities in PAs—including public-private benefit sharing and co-management models for the areas—will complement the attainment of the Project’s global and local goals, including poverty alleviation among indigenous peoples and other vulnerable groups living in the targeted areas and by extension, reducing the pressure on the PAs as these groups have access to new and better income generating opportunities.

4. Based on the preliminary NPAS financing gap study, the entire system (104 areas) requires at least US\$11.4 million for basic coverage, but receives just US\$6.2 million, and for the management of only 39 PAs.<sup>14</sup> Since the government budget only covers about 16 percent of this amount (approximately 1.0 million), financing is highly dependent on external funding. However, external funding is subject to fluctuations and is typically location specific. In component 1, the establishment of an endowment fund for the NPAS will potentially produce a significant impact on existing financial gap of SINAP (US\$5.2 million for covering basic needs

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<sup>14</sup> Revenues generated in PAs are centralized. Basic coverage is a per hectare cost covering administrative programs and control and surveillance costs based on the size of the PA. Optimal coverage is a higher per hectare cost.

and US\$12.5 million for covering optimal needs). In particular, the financial gap of the 12 prioritized Protected Areas is US\$1.5 million for 2013. Assuming an initial capital of US\$5 million, the endowment fund will reduce the financial gap for the 12 Protected Areas by 20 percent (considering as financial resources only the interest generated at a rate of 5 percent); increasing the capital to US\$15 million will reduce the financial gap up to 60 percent, and reaching an endowment fund of US\$25 million will cover all basic needs of the 12 prioritized Protected Areas. In order to guarantee this capital, different financial mechanisms will be developed, among which the most significant are: private sector contribution, fee collection from Protected Areas, other fees collected by ANAM, and concessions of services inside Protected Areas. Most of the services suitable for concessions in Protected Areas are related to low impact ecotourism activities that will also involve and benefit local communities.

5. A cost benefit analysis of the types of subprojects supported in component 2 is challenging since it would involve among other things, estimating the value of preserving ecosystems and of the goods and/or services they generate to future generations, and also the values arising from knowledge of the continued existence of endangered habitats and species. The activities under the second component involving the development of socially viable and biodiversity-friendly production systems would offer the most tangible (direct) Project benefits. Hence, the economic benefits would be derived mainly from the support to the Community Demand Driven (CDD) livelihood proposals and environmentally friendly activities to be supported, and from the improvement of the market access of the environmentally and/or biodiversity-friendly production systems in the Project's PAs and their Buffer Zones. Primary beneficiaries of these CDD subprojects are expected to benefit in terms of income gains due to increased value addition through sustainable production and sale of biodiversity-friendly goods and services along with the broader social and environmental benefits of adopting the sustainable production systems.

6. The proposed Project will also scale up successful biodiversity-friendly practices by producers involved in CBMAP's projects to transition to greater and better market access and improve their business and marketing skills, and attain enhanced economic sustainability. GEF's funding for subsidizing the start-up of these activities is essential due to the limited access to financial resources that these producers and indigenous communities have in Panama and given the public nature of the environmental benefits involved. The financial returns from mainstreaming biodiversity into agricultural landscapes are difficult to measure as investments are demand driven and diversified across livelihood and productive practices. There are important positive co-benefits of such investments that accrue to the environmental services that improve watershed management, enhance carbon sequestration and groundwater aquifer recharge, and protection of biodiversity.

7. The activities most likely to be supported under the Project would be similar to CBMAP II, including agroforestry production systems, ecotourism and handicraft production initiatives (see Box 1). As part of the Project preparation, a sample of 140 subprojects implemented was assessed. The average amount invested per group was B./ 20,153, of which about 15 percent was covered by the beneficiaries mostly in kind. The survey confirmed that the supported activities are contributing significantly to the family income, varying between 33 and 67 percent. In about 81 percent of the analyzed cases, the Net Present Value (NPV) of the environmentally friendly

activities is positive when valuing both commercialized and self-consumed production. If externalities (CO<sub>2</sub> sequestration and recharge capacity of aquifers stemming mainly from reforestation schemes) are added into the equation, then 100 percent of the sampled cases show positive NPVs. The preliminary study prepared during the Project preparation confirmed the financial feasibility of the most likely activities to be supported and that the approach is effective. The cases of four permanent crops that could be the base for most of the production systems in the Project area were analyzed, as well as for several annual crops that have good potential for the different targeted regions. The main permanent crops are banana, coffee, cacao, and orange. The prefeasibility analysis was done based on the average yields, the prices and the cost of production revealed by the same sample of 140 subprojects.

**Box 1: Agroforestry projects supported by CBMAP II**

These agroforestry projects applied most of the ten promoted conservation practices (no burning, green barriers, agroforestry, contour lines, windbreaks, crop rotation, diversification of production, use of organic fertilizers, zero-tillage and residue treatment).

*In Chiriquí, an organization developed an agroforestry system with bananas and coffee, contributing 25 percent to member family income. They also provide environmental services through carbon sequestration and enhancing infiltration of water into aquifers. The banana area (7.5 ha) yields about 48,000 units of which 94 percent is sold (at 0.18 cents per unit) with a marginal cost of 0.01 cents. A similar proportion of the 60 quintals of coffee produced on 1 ha is sold at 22 Balboas (marginal cost 9.16 Balboas). Net income per farmer is about 315 Balboas.. The association sells to the local and international market through intermediaries. The NPV of the investment is 3,730 Balboas, while the IRR is 9.5 percent which guarantees repayment of the investment (discount rate 5 percent). The payback period of the investment was less than four years.*

*A cooperative in Ngäbe-Buglé produces organic cocoa combined with banana and coffee, contributing 30 percent to member family income. Banana occupies 10 ha yielding 17,500 units per ha, of which 70 percent is sold at 0.18 cents with 0.05 cents as marginal cost. There is 1 ha with coffee producing 18 quintals of which 80 percent is sold at 130 Balboas costing only 40 Balboas. The 11.5 ha with cocoa produces 14 quintals, 65 percent of which is sold mainly to cooperatives at 110 Balboas per quintal, with its cost 92 Balboas. They grow other crops for consumption, selling some surplus to middlemen and supermarkets. They also provide carbon fixation and enhanced aquifers recharge with an estimated 3,156 and 3,450 Balboas as annual economic value per year, respectively. The NPV for a period of five years was 21,236 Balboas and the IRR 26 percent, with an investment payback period of 1.4 years.*

8. Banana is probably the most important crop in the Project areas, and is grown by 84 percent of the analyzed sample. Two thirds of the banana production of the sampled beneficiaries is being marketed, 23 percent is self-consumed by family members and 9 percent is wasted or lost. In the Comarca Ngäbe, 77 percent of the sampled banana producers and a 100 percent in the other six sampled regions show positive results. Prices vary from B./0.11 to B./0.18 per unit while the marginal costs, vary from B./0.02 to B./ 0.06, which leaves certain margin of utility. Most of the banana producers sell their products individually making it difficult to improve and standardize quality and obtain better prices. Opportunities to improved livelihoods can be found through supporting production improvements (e.g. quality improvements through the adoption of good agricultural practices and sustainable certifications for specific markets), and market linkages.

9. Coffee is also an important product in the Project area livelihood economy. Chiriquí is the most important region for production and exportation of coffee, with 58 percent of the national cultivated area. About 38 percent of the sampled poor farmers grow coffee, with 55

percent of their production being marketed, 19 percent self-consumed and 26 percent wasted. Average prices vary from B./22 to B./98 per quintal, and average marginal costs vary from B./18 to B./53, which leaves certain margin of utility. Currently, the sector across Latin America, including Panamá, is facing several challenges as a result of the declining price trends and the effects of the leaf rust disease, which has affected an important percentage of the coffee areas, and particularly those crops produced by small-scale producers.<sup>15</sup> Furthermore, the lack of collective action for marketing (all of the farmers sampled sell directly to local markets or through middlemen), further limit the possibilities of better prices are results of the lack of farmer's bargaining power. The cost of entry into quality-based schemes and certification programs can be high, particularly those associated with integrating the more distant and arguably less prepared producers, whose sustainability may be even more vital given their proximity to areas of higher biodiversity value and the likelihood of greater poverty. Therefore, programs that support farmers on those efforts (including options for income diversification besides coffee) are becoming increasingly relevant. Promoting the links between producer groups/associations with potential opportunities in national<sup>16</sup> and international markets (including an active role of buyers on supply-chain improvements), as well as supporting the diversification of incomes in coffee regions (for example, through ecotourism activities) are critical activities.

10. Cocoa production is also important for Panama and for the targeted areas. In the Project areas where marginalized farmers are located, about 33 percent of the sample is growing cocoa. From their production 55 percent is marketed, 25 percent is self-consumed and the rest is wasted. Only 25 to 30 percent of these farmers obtain positive NPVs mainly because they produce low quality cacao and they sell individually and through middlemen who homogenize the product and get the biggest share of the final price. Average prices vary from B./63 to B./107 per quintal, and average marginal costs vary from B./45 to B./116, which in some cases leaves certain margin of utility, and in others, generates lost. There is an ample range of support activities for improving the livelihood of the farmers in the Project areas based on strengthening their organization for producing, transforming and marketing cacao—there are already emerging positive experiences in the country in relation to collective action for marketing of organic and fair trade cacao, and for the production of artisan chocolate by indigenous communities and linked to touristic activities. Developing and/or strengthening marketing linkages with private firms/buyers (nationally and overseas—regionally and internationally) offers a way forward based on social responsibility, fair trade and the use of environmentally-friendly production practices and other green initiatives (for example, sustainability certifications).

11. Orange fruit production is another important activity that can provide a base for developing livelihoods while reducing the encroachment of PAs and Buffer Zones. Panama imports about half of the consumed volume of orange and exports less than 1 percent of its production of orange mainly as juice and other products. In spite of the existence of a huge domestic market, local farmers and especially those targeted by the Project have no or very little

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<sup>15</sup> Approximately 32 percent of the 19,490 hectares of coffee planted in the country were affected by the disease. In Panama, about 82 percent of the area planted is under disease susceptible varieties and nearly 42 percent of the plantations are older than 20 years, which increases disease susceptibility. The losses resulting from the disease were estimated by MIDA in US\$5.8 million, with about 3,000 hectares requiring to be replanted. Up to October 2013, there was not yet a disease early alert system in place.

<sup>16</sup> For example, domestic processing (local roasters) providing quality coffee for the domestic market.



participation in the production, marketing and value addition, or in the share of the final value that consumer pays for the fruit products. Of the sampled farmers, about 33 percent produce orange fruit mainly in Coclé and Santa Fe. From their production about 64 percent is marketed, 12 percent is consumed by them, and 24 percent is lost or wasted because limited access to markets. Average prices vary from B./0.01 to B./0.03 per unit, and average marginal costs vary from B./0.02 to B./0.07, which in most cases leaves certain margin of utility, and in few ones, generates lost. About half of these farmers show positive NPVs mainly due to the lack of adequate production techniques and varieties, and because they sell individually through middlemen at low prices. Therefore, improving production techniques through the implementation of good agricultural practices that result in better quality product and better yields, while at the same time providing benefits for the environment are important opportunities to be supported through the Project. Strengthening the links between organized producers and formalized buyers are also areas to be supported by the Project.

12. Many other agricultural and non-agricultural products offer good potential. The introduction of high value crops (produced under environmentally-friendly systems) and different livelihood activities could facilitate a more environmentally friendly interaction with natural resources and could also alleviate poverty among the indigenous and marginalized people. Among the non-agricultural alternatives, potential opportunities are found in the production of compost, vermi-compost, boil, bocachi and other organic inputs for agriculture. The production of handicrafts and provision of tourism services are also alternatives that can contribute to the sustainable management of the PAs, their Buffer Zones.

## **Annex 7: Incremental Cost Analysis**

### **PANAMA: Sustainable Production Systems and Conservation of Biodiversity**

1. The baseline costs are estimated on the relevant activities promoted by ANAM and associated with the components of the proposed Project. Estimations are based on information available on ANAM's annual budget over the five years of the Project. The Project costs of the GEF alternative represent the sum of the baseline and incremental costs associated with proposed additional actions required to achieve the Project biodiversity conservation objective, including the costs for both the Project and government interventions. The total incremental cost for achieving the global environmental benefits of the Project is the amount beyond the baseline.

#### **BASELINE SCENARIO**

2. The baseline scenario is based on the proposed Project components without GEF funding. Component 1. Sustainable Management of Protected Areas. The activities considered are those financed by ANAM with local and external funds for the management of the 12 selected PAs to be supported by the Project. The total amount of the component is US\$7,766,245 (US\$1,553,249 for five years). Component 2. Biodiversity and Sustainable Productive Landscapes. The annual operating costs of 30 subprojects for the new Project are considered. It is assumed an average of US\$4,000 annually for operating costs, equivalent to US\$20,000 per productive association over a five-year period. The total of this component is US\$600,000. Environmental subprojects developed by municipalities are also included over a five-year period (US\$100,000). Component 3. Knowledge Management and Communications. Activities implemented by the Environmental Management Directorate of ANAM are considered: (i) promotion of environmental culture, US\$700,000; and (ii) environmental economics, US\$130,000 (equivalent to US\$4,150,000 over a five-year period). Component 4. Project Management. Under the baseline scenario, there are no financial resources for project management being allocated by ANAM. Total investments considered in the baseline are estimated at US\$12.6 million over the next five years.

#### **GEF ALTERNATIVE SCENARIO**

3. Under the GEF alternative scenario, the Project consists of four components as described in Annex 2. The total costs of the GEF alternative scenario is estimated at US\$16.35million.

#### **Incremental Benefits of the GEF Alternative**

4. The overall incremental benefits of the Project, which add to the baseline scenario, will continue far beyond the duration of the Project. The establishment of an endowment fund for the NPAS, which aims to advance financial sustainability for Protected Areas management and improve management effectiveness, is a milestone for Panama. Following other examples in Latin America, funds from different sources will be captured to help decrease financial gaps for effective protected area management, and therefore benefit the protection of corridors and biodiversity of global importance. Also, the proposed GEF project will provide ANAM the opportunity and means to involve multiple public and private partners in the management of Protected Areas. This will help to build the experience needed to replicate these efforts in all Protected Areas of the system. Valuable information will be generated by the environmental economic studies that will facilitate demonstrating the economic value of biodiversity to policy makers in Panama. Finally, the productive subprojects in Buffer Zones will improve communities' livelihood, which consequently will reduce the pressure on the Protected Areas.

The products of these agricultural practices will reach new markets and better prices, and ultimately will raise consciousness in the final consumer on the importance of the consumption of healthier and biodiversity friendly products.

## INCREMENTAL COSTS

5. The total incremental cost for achieving global environmental benefits is the amount beyond the baseline that would be guaranteed to be spent under the GEF alternative scenario. The following matrix summarizes the incremental costs and benefits over the five-year period.

*Incremental Cost Matrix*

Category	Cost	Domestic Benefit	Global Benefit
<b>Component 1. Sustainable Management of Protected Areas</b>			
Baseline	7,766,245	Activities to manage NPAS continue to receive limited funding from ANAM and the basic financial gap is maintained at US\$ 1.55 million per year.	Effective management of PAs cannot be improved, and biodiversity of global importance in PAs are kept at risk.
GEF Alternative	15,159,350	New public and private actors become involved in management of Protected Areas. New financial mechanisms are promoted for conservation of Protected Areas. Financial gap is reduced due to new available funding. A CTF for the entire NPAS is established for the first time in Panama. A biodiversity monitoring system is implemented at a national level.	The establishment of different financial mechanisms and a CTF will allow channeling funds from public and private sources to conserve biodiversity of global importance in the Project area, improving management effectiveness of the selected Protected Areas, and reducing financial gap to achieve long-term financial sustainability.
<b>Incremental</b>	<b>7,393,105</b>		
<b>Component 2. Biodiversity and Sustainable Productive Landscapes</b>			
Baseline	700,000	The subprojects have no funding from the government or financial institutions. Some subprojects can raise funds for eco-tourism, or some can have limited funds to reinvest. None could reach the phase of better market access.	None
GEF Alternative	6,814,925	Under this scenario, producer groups and associations receive funding for implementation of subprojects to apply biodiversity friendly production practices, for capacity building activities, and promotion of associations and networks. Quality of products is improved and production volume is increased. Reduction of human pressure on flora and fauna of Protected Areas, and improved biodiversity conservation.	Certification could be achieved and better access to national and international markets. Reduction of human pressure on flora and fauna of Protected Areas, and improved conservation of biodiversity of global importance.
<b>Incremental</b>	<b>6,114,925</b>		
<b>Component 3. Knowledge Management and Communications</b>			
Baseline	4,150,000	ANAM's promotion of environmental culture activities at local and national level.	None

<b>Category</b>	<b>Cost</b>	<b>Domestic Benefit</b>	<b>Global Benefit</b>
GEF Alternative	5,166,480	<p>Knowledge gained on economic value of biodiversity, and the financial gap for management of Protected Areas that could be shared with policy makers to increase resources allocated to biodiversity conservation of Panama.</p> <p>Information generated to educate consumers on conservation of Protected Areas and consumption of biodiversity friendly products.</p> <p>Lead South-South cooperation with institutions in other countries, e.g. Mexico, Peru, Nicaragua, and join efforts to work together in the promotion of the Mesoamerican Biological Corridor.</p> <p>Partnerships with universities, NGOs, and private sector to promote sustainable production systems in the country.</p> <p>Fundraising campaign to capitalize the CTF.</p>	Learning generated by the program considered in the programming or planning of related investments worldwide.
<b><i>Incremental</i></b>	<b><i>1,016,480</i></b>		
<b>Component 4. Project Management</b>			
Baseline		None	None
GEF Alternative	<b>1,828,568</b>	Effective coordination and implementation of the Project.	Coordination with similar initiatives in the region.
<b><i>Incremental</i></b>	<b><i>1,828,568</i></b>		
<b>Total Baseline</b>	<b>12,616,245</b>		
<b>Total GEF Alternative</b>	<b>28,969,323</b>		
<b>Total Incremental Cost</b>	<b>16,353,078</b>		

6. Of the total, incremental costs (US\$16.35million), US\$9.59 million are requested from the GEF.

## Annex 8: Project Protected Areas Indicators

### PANAMA: Sustainable Production Systems and Conservation of Biodiversity

Specific Indicators for Project Protected Areas	Unit of Measure	Baseline	Cumulative Target Values					Frequency	Data Source/ Methodology	Responsibility for Data Collection	Description (indicator definition etc.)
			YR 1	YR 2	YR3	YR 4	YR5				
Increase in the management effectiveness of at least 12 PAs as measured by METT scores	Score METT	<ul style="list-style-type: none"> <li>• PN Volcán Barú = 72.5%<sup>17</sup></li> <li>• HII San San Pond Sak = 69.6%</li> <li>• HII Damani Guariviara = 61.7%</li> <li>• PI La Amistad = 66.7%</li> <li>• PN Campana = 76.5%</li> <li>• PNGD Omar Torrijos = 88.2%</li> <li>• PN Santa Fe = 69.6%</li> <li>• PN Cerro Hoya = 60.8%</li> <li>• BP Palo Seco = 66.7%</li> <li>• RF Fortuna = 63.7%</li> <li>• PN Isla Bastimentos = 78.4%</li> <li>• AS Narganá = 75.5%</li> </ul>					<ul style="list-style-type: none"> <li>• PN Volcán Barú = 80%</li> <li>• HII San San Pond Sak = 75%</li> <li>• HII Damani Guariviara = 80%</li> <li>• PI La Amistad = 75%</li> <li>• PN Campana = 82%</li> <li>• PNGD Omar Torrijos = 95%</li> <li>• PN Santa Fe = 75%</li> <li>• PN Cerro Hoya = 75%</li> <li>• BP Palo Seco = 75%</li> <li>• RF Fortuna = 75%</li> <li>• PN Isla Bastimentos = 83%</li> <li>• AS Narganá = 83%</li> </ul>	Year 5	METT score cards	PA management team (director of PA, DAPVS and PIU)	
Decrease the financing gap to	Number of	financial gap in \$ for the Projects PAs:					financial gap in \$ for the Projects	Year 5	Progress Report,	PA management	Achieve at least basic

<sup>17</sup> PN: National Park; HII: Internationally Important Wetland; PI: International Park; BP: Protector Forest; RF: Forest Reserve; AS: Wildlife Refuge

Specific Indicators for Project Protected Areas	Unit of Measure	Baseline	Cumulative Target Values					Frequency	Data Source/ Methodology	Responsibility for Data Collection	Description (indicator definition etc.)
			YR 1	YR 2	YR3	YR 4	YR5				
achieve basic coverage in 10 targeted PAs through the use of alternative financing methods	Protected Areas with Basic Coverage <sup>18</sup>	<ul style="list-style-type: none"> <li>• HII San San Pond Sak = 3.38</li> <li>• HII Damani Guariviara = 0.26</li> <li>• PI La Amistad = 1.48</li> <li>• PN Campana = 1.69</li> <li>• PNGD Omar Torrijos = 2.37</li> <li>• PN Santa Fe = 0.63</li> <li>• PN Cerro Hoya = 1.32</li> <li>• BP Palo Seco = 1.51</li> <li>• RF Fortuna = 7.64</li> <li>• AS Narganá = 1.85</li> </ul>					PAs: <ul style="list-style-type: none"> <li>• HII San San Pond Sak = 0</li> <li>• HII Damani Guariviara = 0</li> <li>• PI La Amistad = 0</li> <li>• PN Campana = 0</li> <li>• PNGD Omar Torrijos = 0</li> <li>• PN Santa Fe = 0</li> <li>• PN Cerro Hoya = 0</li> <li>• BP Palo Seco = 0</li> <li>• RF Fortuna = 0</li> <li>• AS Narganá = 0</li> </ul>		Economic evaluations following the model established during Project design	team (director of PA, DAPVS and PIU)	coverage, which is defined as covering: (i) administrative programs and (ii) control and surveillance costs

<sup>18</sup> Basic coverage is defined as at least 8.15\$/ha for mid-size PAs and 2.63\$/ha for large PAs and optimal coverage as 11.15US\$/ha for mid-size PAs and US\$4.23US\$/ha for large PAs. Inadequate coverage is financing below the basic coverage levels. Two of the projects PAs (PN Volcán Barú and PNM Isla Bastimentos) already meet this basic coverage and (10) need to achieve this target.

## Annex 9: Key Documents in the Project Files

### PANAMA: Sustainable Production Systems and Conservation of Biodiversity

<i>Document name</i>	<i>Date</i>
Institutional Analysis (FAO)	April 2014
Economic and Financial Analysis (FAO)	December 2013
Cost Tables	December 2013
Indigenous people support letters	2013/2014
Environmental Analysis	November 2013
Social Analysis	November 2013
Communication Strategy	November 2013
Operational Manual	October 2014
Selection of Project Area	August 2014
Public Consultation Proceedings	Various - 2014
Environmental and Social Management Framework	September - 2014

## Annex 10: Map of Project Protected Areas

