



# GEF-6 PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: Medium-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

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## PART I: PROJECT INFORMATION

Project Title:	Conservation and sustainable use of biodiversity in coastal marine production landscapes		
Country(ies):	Panama	GEF Project ID: <sup>1</sup>	TBD
GEF Agency(ies):	UNDP	GEF Agency Project ID:	5750
Other Executing Partner(s):	Ministry of Environment (MiAmbiente)	Submission Date:	9 March 2017
GEF Focal Area(s):	Biodiversity	Project Duration (Months)	48
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>	Corporate Program: SGP	<input type="checkbox"/>
Name of parent program:	NA	Agency Fee (\$)	169,178

### A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES<sup>2</sup>

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	(in \$)	
		GEF Project Financing	Co-financing
BD-4, Program 9	GEFTF	1,780,822	5,533,208
<b>Total Project Cost</b>		<b>1,780,822</b>	<b>5,533,208</b>

### B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: To mainstream the conservation and sustainable use of biodiversity into production land/seascapes for integrated environmental management of coastal marine areas and for the benefit of the coastal population.						
Project Components	Type <sup>3</sup>	Project Outcomes	Project Outputs	Trust Fund	(in US\$)	
					GEF Project Financing	Co-financing
1. Strengthening the regulatory and institutional frameworks	TA	Strengthened national policy and institutional framework for integrated environmental management of coastal and marine production land/seascapes, indicated by: (i) official approved (through Ministerial Resolution and/or Executive Decree) National Policy and Action Plan for Coastal and Marine Spatial Planning and the Characterization and Delimitation of Special Marine Conservation and Management Areas; (ii) Operational Environmental Advisory Committees (EACs) and Interinstitutional Environment System	1.1. Policy for coastal and marine spatial planning developed and adopted to provide an official framework for establishment and management of Coastal Marine Special Management Areas (ZEMMC) with guidelines for the implementation of coastal and marine spatial planning and the characterization and delimitation of special marine conservation or management areas. 1.2. Organizational structure and operational guidelines of the DICOMAR defined for effective integrated environmental management of the coastal marine areas, including external disclosure and reporting, and appropriate level of staff and financial resources allocated for its operation through Ministerial Decree 1.3. National-level interinstitutional agreements developed and signed in order to clarify mandates and functions of individual agencies to establish effective mechanisms for coordination	GEFTF	262,914	816,906

<sup>1</sup> Project ID number will be assigned by GEFSEC and entered in subsequent document submissions by the Agency.

<sup>2</sup> When completing Table, A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCF](#).

<sup>3</sup> Financing type can be either investment or technical assistance.

		<p>(SIA) facilitating the coordination, consultation, and implementation of initiatives among the different public agencies that oversee coastal marine resources management.</p> <p>Increase by 50% of government funding in place for the integrated environmental management of the coastal marine areas</p> <p>Increased capacity of the Office of Coastal Marine Affairs (DICOMAR) of the Ministry of the Environment's (MiAmbiente) and EAC members (technical staff an decision makers, including women) to effectively address threats to coastal marine biodiversity and oversee the conservation and sustainable use of coastal marine biodiversity indicated by UNDP Capacity Development Scorecard</p> <p><i>Indicators will be confirmed and baseline and targets will be determined during the PPG.</i></p>	<p>and information exchange between DICOMAR /MiAmbiente and public sector institutions such as the SIA (Office of Aquatic Resources – ARAP, Panamanian Maritime Authority – AMP, Panamanian Tourism Authority – ATP, Ministry of Agricultural Development – MIDA, Ministry of Housing and Land Development – MIVIOT, etc.).</p> <p>1.4. Public, private, and civil society resources mobilized for the sustainability of the integrated environmental management of the three (3) existing ZEMMC.</p> <p>1.5. Training program established within the DICOMAR on planning, management, and monitoring and control of integrated environmental management of coastal marine areas and at least 200 staff trained by the project's completion.</p> <p>1.6. Information and communication strategy implemented raises awareness among public and private decision-makers of the importance of conservation and sustainable use of coastal marine biodiversity.</p>			
2. Integrated environmental management of the target ZEMMC in the southern part of the Azuero Peninsula	TA	<p>Improved management of 292,970 hectares of land/seascape in the ZEMMC in the southern part of the Azuero Peninsula, indicated by: (i) stable populations of sea turtle species (olive ridley, green and hawksbill) due to increased protection of XX ha of nesting beaches in La Marinera and Isla de Cañas; (ii) stable coverage of mangroves (6,072.3 ha); and (iii) stable catch rates and sizes of selected fish species of commercial importance</p>	<p>2.1. Four local (4) interinstitutional agreements developed and signed for cooperation among public (DICOMAR/ MiAmbiente, ARAP, and municipalities) and private environmental agencies and the fishing, tourism, urban development, and agricultural sectors for implementation of an integrated management plan for the target ZEMMC.</p> <p>2.2. Fishery sector practices improved through:</p> <p>a) Stricter regulations (including ARAP Resolution) of size of the traditional fishing fleet and the type of traditional fishing methods allowed for the extraction of species of fish of commercial and local importance.</p> <p>b) Development of communal fishing</p>	GEFTF	1,056,015	3,281,166

		<p>(grouper [<i>Epinephelus spp.</i>] and snapper [<i>Lutjanus spp.</i>]) due to implementation of fishing best practices</p> <p>Production sectors committed to reducing threats to coastal marine biodiversity indicated by: (i) 20% of traditional fishermen's cooperatives implementing sustainable and biodiversity-friendly fishing practices; (ii) increase in average income of traditional fishermen who adopt sustainable and biodiversity-friendly fishing practices; (iii) Five micro-, small-, and medium-sized businesses (MiPyME) associated with sustainable tourism along the coastal marine area with sustainable management plans (iv) Three agreements among the Pocrí, Pedasí, and Tonosí districts and the urban development sector for the prevention, reduction, and control of land-based contamination and management of trash and other solid waste; (v) Increased number of agricultural farms and ranches with sustainable production certified by the Ministry of the Environment or other competent authority.</p> <p><i>Indicators will be confirmed and baseline and targets will be determined during the PPG.</i></p>	<p>concession areas and sustainable management plans with participation of traditional fishing cooperatives and environmental and fisheries officials, informed by economic analysis to determine the catch per unit effort (CPUE) and optimal efforts for the sustainability of the fish species of commercial importance and to determine options for the greatest economic benefit for traditional fishermen.</p> <p>c) Support provided for strengthening of the traditional fishing sectors, including cooperatives.</p> <p>2.3. Local regulatory framework improved and aligned with the Land Use Development Plans regulates:</p> <p>a) Construction activities in areas of high ecological sensitivity (mangroves, sea turtle nesting beaches, dunes, coastal wetlands, and coral reefs) in the ZEMMC of the southern part of the Azuero Peninsula.</p> <p>b) Trash and solid waste management in the districts (municipalities), the coastal communities, and by the private sectors (tourism, urban development, and agriculture) avoiding contamination of waterbodies and degradation of mangroves.</p> <p>c) Tariff systems for collection and disposal of trash and other solid wastes.</p> <p>2.6. Participatory zoning, protection, and management of the ZEMMC implemented, contributing to the preservation (5,547.6 ha), rehabilitation (30 ha), and sustainable use (494.7 ha) of mangroves, and participatory monitoring program establishes changes in populations of fish species of commercial and local importance, the quality of the coastal waters and adjacent waterways, and the health of key ecosystems (sea turtle nesting beaches, mangroves, coral reefs, etc.).</p> <p>2.6. Mechanisms established for incentivizing the use of biodiversity-friendly production practices available including:</p> <p>a) Lines of credit available for MiPyME that participate in sustainable tourism and biodiversity-friendly fishing.</p> <p>b) National and international publicity campaign to promote sustainable tourism in the ZEMMC of the southern part of the Azuero Peninsula.</p> <p>c) Ecological certification accredited by</p>			
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			<p>MiAmbiente for the reduced use of agrochemicals and the sustainable management of agricultural farms and cattle ranches.</p> <p>d) Public information campaign increases awareness and local support for the implementation of best production practices to reduce threats to coastal marine biodiversity, including coastal cleanup activities carried out with participation from the hotel sector, the municipalities, and the local population.</p> <p>e) Training program (formal and non-formal education) implemented at the local level increases the knowledge of 300 people regarding biodiversity conservation and its sustainable use: biodiversity-friendly fishing methods; contamination reduction and garbage and solid waste management; and protection of beaches, mangroves, wetlands, and coral reefs.</p>			
3. Gender Mainstreaming, Knowledge Management and Learning	TA	<p>Gender fully mainstreamed in project implementation indicated by gender-based indicators</p> <p>Improved information management and monitoring system on coastal marine biodiversity facilitating decision-making for its conservation, ecological monitoring, and sector operation and regulation.</p> <p>Best practices and lessons are accessed and applied in other ZEMMCs in the country and internationally.</p> <p><i>Indicators will be confirmed and baseline and targets will be determined during the PPG.</i></p>	<p>3.1 Gender mainstreaming plan implemented and its results monitored and reported.</p> <p>3.2. Information management and monitoring system improved through:</p> <p>a) Information management platform established on coastal marine biodiversity (including biodiversity health indicators and protocols for data gathering), with guidelines for biodiversity-friendly practices and ecosystem protection made available to the different production sectors: fishing, tourism, urban development, and farming/ranching</p> <p>b) Web-based coordination platform to facilitate interinstitutional information sharing, joint programming, and mutual understanding to avoid duplication and redundancy</p> <p>3.3. Experiences, best practices, and lessons learned about the integrated environmental management of the ZEMMC of the southern part of the Azuero Peninsula systematized and made available for use in other ZEMMC in the country for replication</p>	GEFTF	300,000	932,136
Subtotal					1,618,929	5,030,208
Project Management Cost (PMC)* <sup>4</sup>				GEFTF	161,893	503,020
<b>Total Project Cost</b>					<b>1,780,822</b>	<b>5,533,228</b>

\* This would include any Direct Project Costs if the GoP requests direct project services from UNDP in support to NIM execution t.b.d in the PPG.

<sup>4</sup> For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

**C. INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE**

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
Recipient Government	MiAmbiente	Grants	3,678,270
Recipient Government	MiAmbiente	In-kind	1,200,000
GEF Agency	UNDP	Grants	654,938
<b>Total Co-financing</b>			<b>5,533,208</b>

**D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS <sup>a)</sup>**

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee (b) <sup>b)</sup>	Total (c)=a+b
UNDP	GEFTF	Panama	Biodiversity		1,780,822	169,178	1,950,000
<b>Total GEF Resources</b>					<b>1,780,822</b>	<b>169,178</b>	<b>1,950,000</b>

a) Refer to the [Fee Policy for GEF Partner Agencies](#).

**E. PROJECT PREPARATION GRANT (PPG)<sup>5</sup>**

Is Project Preparation Grant requested? Yes  No  If no, skip item E.

**PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS**

Project Preparation Grant amount requested: \$45,662 USD					PPG Agency Fee: \$4,338 USD		
GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in USD)		
					PPG (a)	Agency Fee <sup>6</sup> (b)	Total c = a + b
UNDP	GEFTF	Panama	Biodiversity		45,662	4,338	50,000
<b>Total PPG Amount</b>					<b>45,662</b>	<b>4,338</b>	<b>50,000</b>

**F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS<sup>7</sup>**

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	292,970 Hectares

**PART II: PROJECT JUSTIFICATION**

**II.1. Project Description**

II.1.1. The global environmental and/or adaptation problems, root causes, and barriers that need to be addressed.

*Background*

<sup>5</sup> PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to \$50k for PF up to \$2m (for MSP); up to \$100k for PF up to \$3m; \$150k for PF up to \$6m; \$200k for PF up to \$10m; and \$300k for PF above \$10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

<sup>6</sup> PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

<sup>7</sup> Provide those indicator values in this table to the extent applicable to your proposed project. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the [GEF-6 Programming Directions](#), will be aggregated and reported during mid-term and at the conclusion of the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and/or SDCF.

1. The country of Panamá, with 2,988 kilometers (km) of coastline and 66,405 square kilometers (km<sup>2</sup>) of coastal areas, features high levels of biological and geographical diversity associated with three distinct water bodies: the Caribbean Sea and the Gulfs of Chiriquí and Panamá in the Pacific Ocean. The Pacific coast extends for 1,700 km, is irregular, and the continental shelf is quite large (an average depth of 200 meters) with a gradual slope. In contrast, the Caribbean coast extends 1,288 km, is more regular, and has a narrow continental shelf (535 km). The Panamanian ocean territory (12 miles) has an approximate surface area of 320,000 km<sup>2</sup>.<sup>8</sup>

2. Panamá has extensive areas of globally important coastal marine ecosystems. It is currently estimated that the country's mangroves represent 5.2% of the total forest cover (2.3% of the country's total surface area). The mangroves are most abundant in the Pacific coast (96.6%) where they cover an approximate area of 170,000 ha, plus more than 18,700 ha of dwarf mangrove populations in areas of high salinity.<sup>9</sup> With 11 species of mangroves, Panamá has the largest diversity of all of the countries on the American continent.<sup>10</sup> In addition, Panamá has approximately 754 km<sup>2</sup> of coral reefs in the Caribbean Sea, primarily fringing reefs, with around 70 species of hard coral. In the Pacific, these species cover approximately 2,024 ha among coral reefs and coral communities.<sup>11</sup> Although there is no available information about the coverage of other ecosystems, there are five species of sea grasses, which are found principally in Colón in the Caribbean Sea and in the Gulf of Chiriquí in the Pacific. Approximately 150 rivers drain into the Caribbean and 350 discharge into the Pacific. This provides the source for numerous estuaries present in the river outfalls, which are areas of high biological productivity. In addition, there are numerous rocky, muddy, and sandy beaches. Among the more than 1,518 islands, islets, and keys present in Panamá, especially notable are the oceanic and continental islands of the Panamanian Cove (Ensenada de Panamá) and its surrounding waters that comprise one of the most dynamic and productive marine ecoregions of the southeastern Pacific. Of the eight sea turtle species in existence, five lay their eggs in the beaches of Panamá: leatherback (*Dermochelys coriacea*), loggerhead (*Caretta caretta*), green (*Chelonia mydas agassizii*), hawksbill (*Eretmochelys imbricata*), and olive ridley (*Lepidochelys olivacea*). The coastal marine area also provides habitat for numerous other species of global and national importance, such as the whale shark (*Rhincodon typus*), the tiger shark (*Galeocerdo cuvier*), the manta ray (*Manta birostris*), the humpback whale (*Megaptera novaeangliae*), the orca (*Orcinus orca*), the pantropical spotted dolphin (*Stenella attenuate*), the common bottlenose dolphin (*Tursiops truncatus*), the West Indian manatee (*Trichechus manatus*), the Caribbean spiny lobster (*Panulirus argus*), and hundreds of other fish, echinoderm, mollusk, and crustacean species. Highlighted among the marine plant species present in Panamá are mangroves (e.g., *Rhizophora mangle*, *R. harrisoni*, *Avicenia germinans*, *Laguncularia racemosa*, and *Pelliciera rhizophorae*) and sea grasses (e.g., *Thalassia testudinum*, *Syringodium*, *Halodule wrightii*, and *Halophila decipiens*).

3. Currently, Panamá has 105 protected areas that form part of the National System of Protected Areas (SINAP) that covers 38.66% of the country's territory. This includes terrestrial areas comprising 35.85% of the total area, and protected marine areas covering 2.81%.<sup>12</sup> Additionally the country has three (3) Coastal Marine Special Management Areas (ZEMMC) with presence of fragile coastal marine ecosystems, nesting or rearing sites of globally important species, marshes, wetlands, coral reefs, and reproduction and rearing areas that, because of their ecosystem characteristics, require integrated coastal management. More specifically, in these areas coordinated strategies for the distribution of environmental, socioeconomic, and institutional resources must be developed and carried out, with the goal of achieving the conservation and sustained management of the coastal marine area. The ZEMMC include the Special Coastal Marine Management Area of the southern part of the Azuero Peninsula (292,970 ha), which was established through Resolution ADM/ARAP No. 095 on August 18, 2010, and is located on the Pacific coast between the Pocrí, Pedasí, and Tonosí districts in the Los Santos province. The objective of this ZEMMC is to protect coastal marine resources, increase their productivity, and maintain biodiversity of its ecosystems, with the goal of improving the quality of life for the communities living in the area. It includes approximately 83,387.79 ha of marine protected areas, Important Bird Areas (IBA), and Key Biodiversity Areas

<sup>8</sup> Datos generales e históricos de la Republica de Panamá. Available at: <https://www.contraloria.gob.pa>.

<sup>9</sup> Rodríguez, J. y Windevoxhel, N. 1998. Análisis regional de la situación de la zona marina costera centroamericana. Estudio preparado para el Banco Interamericano de Desarrollo, No. ENV-121. 103 pp.

<sup>10</sup> ANAM-ARAP. 2013. Manglares de Panamá: importancia, mejores prácticas y regulaciones vigentes. Panamá: Editora Novo Art, S.A. 73 pp.

<sup>11</sup> Garcés, H. 2013. Seminario-taller Zonas Costeras y Gestión Integrada de Recursos Hídricos. Estado Actual de los Ecosistemas Marino-costeros en Panamá.

<sup>12</sup> Quinto Informe Nacional de Biodiversidad de Panamá. 2014. 114 pp.

(KBA): Island of Frailes del Sur, Isla Cañas Wildlife Refuge, Playa la Marinera Biological Reserve, and Isla Iguana Wildlife Refuge.

#### *Threats to Coastal and Marine Biodiversity*

4. Compared with the terrestrial area, historically the coastal marine area of Panamá has received very little attention despite the high levels of biodiversity present, and despite the fact that a large part of the economic activity as well as the population is concentrated within the coastal strip of Panamá. The coastal marine area is subject to numerous territorial and land use conflicts which brings about a negative impact on the biodiversity and coastal marine resources. The largest problems stem from an intensive use of the land that is not suitable for agricultural use as well as the expansion of the urban footprint. The change in land use from forest to agricultural and ranching activities has resulted in the loss of natural forest along the coastal strip, including mangroves. It is estimated that during the past 50 years more than half of existing mangroves have been cut down, from 360,000 ha in 1969 to around 170,000 ha in 2007.<sup>13</sup> The loss of mangrove forests is also due to the development of unsustainable production practices related to the development of shrimp farms, production of charcoal, extraction of bark for tanning processes, extraction of wood for varied uses, and development of the coastal areas.

5. *Pollution:* The urban, industry, and tourism development sectors in the coastal areas, in addition to contributing to deforestation, are also the main sources of contamination through continuous runoff of wastewater to coastal waters and estuaries and the dumping of solid waste and trash directly into ecologically sensitive areas such as sea turtle nesting areas and mangroves. Contamination also affects coral reefs, such as those in the Bocas del Toro province and those surrounding the Comarca de Kuna Yala islands in the Caribbean Sea. In addition, these activities contribute to the degradation of beaches through the use of sand and gravel for construction activities. Agricultural development also contributes to contamination through the widespread use of agrochemicals (fertilizers and pesticides), which flow to coastal and marine waters through runoff, as well as sedimentation from high erosion—a product of unsustainable agricultural and ranching practices.

6. *Overexploitation of Marine Resources:* Activities within the fishing sector play an important role in the country's gross domestic product (0.6% in 2105). Nonetheless, industrial fishing using trawl nets in the Pacific for catching shrimp, anchovies, and herring, carries with it the capture of large quantities of immature individuals from multiple species that have little or no commercial value; this affects the reproductive potential of these species<sup>14</sup> and alters the ecological balance of the coastal marine ecosystems. Traditional fishing for commercial purposes, which primarily uses gillnets and other nets, also brings about negative effects as it impacts these and other species by capturing very different and uneven sizes from juveniles to adults. This is one of the principal threats in the ZEMMC in the southern part of the Azuero Peninsula, where minimum catch sizes are not respected, thereby threatening the sustainability of snapper (*Lutjanus spp.*) and grouper (*Epinephelus spp.*) populations, both of which are economically important to the local community.<sup>15</sup> In the same regard, the pressure from unregulated fishing also represents a threat to fish populations in the ZEMMC of the Las Perlas Archipelago, as well as to the spiny lobster population in the ZEMMC of Bocas del Toro.

7. *Climate Change:* Last, coastal marine biodiversity is being affected by climate change. According to the First National Communication on Climate Change<sup>16</sup>, the coastal marine biodiversity that would be most affected are those that are exposed to the gradual and later permanent flooding resulting from sea level rise, particularly wetlands and beaches, as well as the biodiversity that is affected by increased erosion in the coastal areas. The loss of biodiversity due to climate change will mean a decrease of potential resources for national economic development, a decrease in the coastal communities' livelihoods, and the deterioration of ecosystem services. The changes that this threat carries with it have already begun to affect the coastal populations of the Bocas del Toro and Colón provinces, as well as Comarca Kuna Yala.

<sup>13</sup> ANAM-ARAP. 2013. Manglares de Panamá: importancia, mejores prácticas y regulaciones vigentes. Panamá: Editora Novo Art, S.A. 73 pp.

<sup>14</sup> IV Informe Nacional de Biodiversidad. 2010. 110 pp.

<sup>15</sup> Arden & Price Inc. 2011. Plan de Manejo Marino Costero Integrado de la Zona Sur de la Península de Azuero. Autoridad de los Recursos Acuáticos (ARAP). 393 pp.

<sup>16</sup> Autoridad Nacional del Ambiente - ANAM. 2000. Primera Comunicación Nacional sobre Cambio Climático. 126 pp.

8. The **long-term solution** for safeguarding coastal and marine ecosystems in Panama is to incorporate the conservation and sustainable use of biodiversity into production landscapes and seascapes for the integrated environmental management of the coastal marine areas and for the benefit of the country's population.

II.1.2. The baseline scenario or any associated baseline projects.

9. For safeguarding coastal and marine ecosystems in Panama, the government has established the Ministry of Environment (MiAmbiente) in 2015 (Law 8 of 2015), which adopted the competencies, powers, functions, and references related to coastal marine integrated management. The Law also modified provisions of the Panamanian Office of Aquatic Resources (ARAP) and provided the guidelines for the establishment of EACs, as local-based advisory bodies to MiAmbiente. Nevertheless, MiAmbiente must be strengthened to create a political and institutional environment so that the necessary technical and political tools may be developed through the Office of Coastal Marine Affairs (DICOMAR) to effectively manage the coastal marine environment, in coordination with the relevant national and local institutions (districts). In addition, the Government of Panamá recognizes that the incorporation of biodiversity conservation objectives into various sectors is a central aspect for the implementation of the National Biodiversity Strategy and Action Plan (NBSAP), and to honor its commitments within the framework of the Convention on Biological Diversity (CDB). To achieve this goal, territorial management and the integrated management of the coastal marine areas of the country have been identified as tools that will allow the conservation of biodiversity in production landscapes<sup>17</sup>, and coastal marine integrated management plans have been developed for a number of the ZEMMC. Nevertheless, there has been little progress made in implementing the management plans because of weak national and local institutional capacities and the limited availability of financial resources.

10. The problem that the baseline activities attempt to address is preventing the degradation and loss of biodiversity in the coastal marine areas of Panamá. Through the project *Improving capacities through a Wetlands Comprehensive Plan in the Republic of Panama*, MiAmbiente/Regional Center for the Western Hemisphere (CREHO) will invest \$757,806 USD. This 5-year investment (2015-2020) will improve capacities for the assessment, management, and communication about the environmental health of wetlands in Panamá, following the guidelines established by the Ramsar Convention and the National Wetland Policy. In addition, through the project *Development of Sustainable Economic Alternatives as Sea Turtle Conservation Strategy in coastal areas of the Pacific and Caribbean in Panama*, MiAmbiente will invest \$175,000 USD for the conservation of sea turtles that nest on the beaches of Panamá and use coastal marine waters as feeding areas.

11. UNDP will invest \$654,938 USD to support the modernization of environmental management in Panamá. MiAmbiente leads this process in collaboration with various non-governmental and governmental organizations, in order to develop strategies such as the National Water Security Plan, National Wetland Policy, the update of the Panama Wetlands Inventory, the Million of Hectares Reforested project, among others, and to build capacities around these subjects. As part of this effort, MiAmbiente will invest \$852,036 USD from government funds. Finally, MiAmbiente will invest through its recurrent budget approximately \$3,093,428 USD for KBA management (Isla Iguana Wildlife Refuge, Isla Cañas Wildlife Refuge, and Pablo Arturo Barrios Wildlife Refuge) over the next four years. In the Azuero Peninsula and in particular for the ZEMMC, additional funding is being seek for the period 2016-2019 for sea turtle conservation (Isla de Cañas Wildlife Refuge), mangrove reforestation, and coastal management including addressing sanitation issues.

12. Despite the significant efforts, there are currently barriers that prevent the achievement of this goal:

<p>Limited tools and training for the integrated management of ZEMMC</p>	<ul style="list-style-type: none"> <li>• There is no public policy specific to integrated coastal management; the existing regulatory framework is complex and overlaps with other frameworks, and the principal regulatory instruments originate from the Panamanian National Environmental Authority (ANAM), which was the agency charged with natural resource and environmental management in Panamá until 2015 when MiAmbiente replaced it.</li> <li>• Given that MiAmbiente was so recently established, its institutional structure for the integrated management of the ZEMMC is weak; DICOMAR does not have the operational guidelines and tools for effectively allocating human and financial resources for the conservation and sustainable use of coastal marine biodiversity outside of protected areas.</li> </ul>
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<sup>17</sup> IV Informe Nacional de Biodiversidad. 2010. 110 pp.

	<ul style="list-style-type: none"> <li>• There is little interinstitutional coordination in the public sector for integrated environmental management in coastal marine production landscapes; there are numerous public institutions with different levels of responsibility for coastal marine management, which creates confusion as to jurisdiction, the allocation of efforts, and limits the exchange of information and knowledge.</li> <li>• The existing EACs are not yet operational and have limited financial, technical, and organizational capacity to lead integrated coastal marine management at the local level and to advise MiAmbiente regarding the development of environmental policies and strategies that are meaningful at the district level.</li> <li>• There is limited capacity in MiAmbiente and in other national public institutions for monitoring the status of coastal marine biodiversity.</li> <li>• If indeed many of the country's ZEMMC have integrated management plans, they lack the financial resources to implement and sustain them.</li> </ul>
<p>Barriers to the implementation of the ZEMMC integrated management plans, including the lack of incentives for development of biodiversity-friendly production systems</p>	<ul style="list-style-type: none"> <li>• The local environmental officials (districts) have limited knowledge and few regulatory and technical instruments to plan and develop landscape-level initiatives with the private sector and civil society to effectively reduce threats to coastal marine biodiversity that result from unsustainable production practices.</li> <li>• There is a lack of incentives for the different production sectors (fishing, tourism, coastal development, and agriculture/cattle-ranching) to adopt production practices that are friendly to coastal marine biodiversity.</li> <li>• The participation of civil society in the management and sustainable use of coastal marine biodiversity is not permanent nor structured, due to the fact that there is little awareness of the value of biodiversity and ecosystem services.</li> <li>• Given that there is no permanent environmental monitoring of the ZEMMC the population dynamics of species of fish that are commercially and locally important are unknown, as are the quality of the coastal waters and the adjacent waterways, and the health of ecosystems that provide numerous services to the populations settled in the coastal areas.</li> </ul>
<p>Barriers to Gender Mainstreaming, Knowledge Management and Learning</p>	<ul style="list-style-type: none"> <li>• Limited participation of women in the design, implementation, and monitoring and evaluation of coastal marine biodiversity initiatives.</li> <li>• Women have limited knowledge and skills to promote coastal marine biodiversity conservation and its sustainable use, or when they are trained, this does not necessarily translate into equality in decision-making or distribution of benefits.</li> <li>• Limited opportunities and funding for women interested in adopting coastal marine biodiversity-friendly production practices, including limited access to credit, technical support, and other incentives.</li> <li>• There is no centralized information about the status of marine and coastal biodiversity and natural resources that would support decision-making for their conservation and sustainable use.</li> <li>• Lack of a mechanism for knowledge sharing and knowledge forums that will allow documenting and systematizing best practices and lessons learned regarding efforts for coastal marine biodiversity conservation and sustainable use in production land/seascapes limits opportunities for replication and scaling up.</li> </ul>

II.1.3. The proposed alternative scenario, GEF focal area<sup>18</sup> strategies, with a brief description of expected outcomes and components of the project.

13. The GEF alternative scenario will mainstream conservation and sustainable use of biodiversity into production landscapes for the integrated environmental management of coastal marine areas and for the benefit of the coastal populations. It is framed within the GEF biodiversity focal area strategy, more specifically Objective 4 (BD-4): *Mainstream biodiversity conservation and sustainable use into production landscapes/seascapes and sectors*; Program 9: *Managing the Human-Biodiversity Interface*.

14. The project will also contribute to achieving the Aichi Targets, particularly Target 1: By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably; Target 4: By 2020, at the latest, governments, businesses, and stakeholders at all levels have taken steps to achieve or have

<sup>18</sup> For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives and programs, please also describe which [Aichi Target\(s\)](#) the project will directly contribute to achieving.

implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits; Target 6: By 2020, at the latest, all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally, and through applying ecosystem-based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species, and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits; Target 8: By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity; and Target 12: By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.

15. The proposed GEF alternative scenario consists of two interrelated components, which are described below.

*Component 1. Strengthening the regulatory and institutional frameworks for the integrated environmental management of coastal marine production landscapes*

16. This component of the project will develop an enabling policy environment for the integrated environmental management of coastal marine production landscapes. For this, the project will develop a National Policy and Action Plan for Coastal and Marine Spatial Planning and the Characterization and Delimitation of ZEMMC (to be approved through Ministerial Resolution and/or Executive Decree) for guiding management of coastal marine areas in the country in coordination with relevant institutions, the traditional authorities of indigenous territories (*Comarcas*) and the indigenous populations, and civil society. In addition, the project will strengthen the institutional framework through the development of the organizational structure, operational guidelines, and the issuing of a Ministerial Decree, supported by a needs assessment, that will allow DICOMAR to allocate personnel and increase government financial resources by 50% for the integrated environmental management of the coastal marine areas. The strengthening of the institutional framework will also include the establishment of national-level interinstitutional agreements to clarify competencies and include mechanisms for the effective coordination and exchange of information between MiAmbiente and public sector institutions that comprise the SIA; these include ARAP, AMP, ATP, MIDA, MIVIOT, among others public agencies, with responsibility in the management of coastal marine areas. A training program, directed to 200 technical staff and decision-makers, including women, in the national institutions and EACs that oversee the conservation and sustainable use of coastal marine biodiversity, will increase national and local institutional capacity for the integrated environmental management of the coastal marine areas. The impact of the training program will be assessed through the GEF/UNDP capacity development scorecard (the baseline and target will be established during the PPG).

17. To further consolidate the necessary institutional support for the integrated environmental management of coastal marine production landscapes, an informational strategy to raise awareness among public and private decision-makers about the importance of conservation and sustainable use of biodiversity in the coastal marine production landscapes will be developed. In addition, the project will design financial strategies for the sustainability of the integrated environmental management of at least three (3) ZEMMC. The financial strategies will be developed together with the private sector and civil society so that these sectors can become active participants in the implementation of the actions needed for the sustainable funding of coastal marine management, which currently for the most part relies on short-term specific projects. This strategy will help to overcome the existing financial barriers that prevent the management plans for the ZEMMC from being regularly updated and implemented.

18. Finally, technical tools will be made available to support coastal marine management. Through the project, protocols for the implementation of biodiversity-friendly practices and for ecosystem protection will be made available to the different production sectors: fishing, tourism, urban development, and farming/ranching.

*Component 2. Integrated environmental management of the ZEMMC in the southern part of the Azuero Peninsula contributes to the conservation and sustainable use of coastal marine biodiversity and generates lessons learned and knowledge for scaling-up.*

19. This project component will facilitate the conservation and sustainable use of coastal marine biodiversity of global importance and the ecosystems good and services provided to society through the integrated environmental management of the ZEMMC in the southern part of the Azuero Peninsula (292,970 ha). This component will help to reduce threats to coastal marine biodiversity and will be aligned with the management plan for the ZEMMC. To this end, the project will establish four (4) local interinstitutional cooperation agreements among environmental agencies

(DICOMAR/Ministry of the Environment, ARAP, and municipalities) and the fishing, tourism, urban development, and agricultural sectors for implementation of an integrated management plan for the ZEMMC, including forming management committees to effectively oversee coastal marine biodiversity conservation.

20. The project will work closely with the production sectors of the ZEMMC to reduce threats to coastal marine biodiversity and will contribute to the conservation of species and ecosystems of global, national, and local importance. To improve fishery sector practices, stricter regulations (including an ARAP Resolution) regarding the size of the traditional fishing fleet and the types of traditional fishing methods allowed for the extraction of fish species of commercial and local importance will be supported and approved through a participatory process. Concessions for communal fishing areas with management plans, defined with the participation of traditional fishing cooperatives and environmental and fisheries officials, will be granted and informed through an economic analysis of the fishing sector to determine the catch per unit of effort (CPUE) and to establish the optimal effort for the sustainability of the fish species of commercial importance that will provide the greatest economic benefit for traditional fishermen. This will serve to better organize the traditional fishing sector, and a 10% increase in the average income of traditional fishermen who adopt sustainable and biodiversity-friendly fishing practices is expected, and the populations of species of local importance will remain stable (e.g., groupers [*Epinephelus spp.*] and snappers [*Lutjanus spp.*]). In addition, By project's end, 20% of traditional fishermen's cooperatives in the ZEMMC will have adopted sustainable and biodiversity-friendly fishing practices.

21. A local regulatory framework that is aligned with the Land Use Development Plans will be agreed upon with the urban development sector and the municipal authorities of the ZEMMC in the southern part of the Azuero Peninsula to regulate construction activities in areas of high ecological sensitivity (mangroves, sea turtle nesting beaches, dunes, coastal wetlands, and coral reefs). It will also allow regulating the prevention, reduction, and control of land-based contamination and the management of trash and solid waste at the municipal level, and among the coastal communities and the private sector (tourism, urban development, and agriculture), avoiding contamination of water bodies and degradation of mangroves. By project's completion, specific sites for the disposal of wastes will have been established together with recycling activities to reduce the contamination of water bodies and the degradation of coastal ecosystems, in particular mangroves and beaches. To ensure the long-term sustainability of these actions and the associated biodiversity conservation benefits, tariff systems for collection and disposal of trash and other solid wastes will be agreed upon with the local population, the private sector, and municipal officials.

22. The project will further contribute to the conservation of mangroves through participatory zoning, protection, and management for their preservation (5,547.6 ha), rehabilitation (30 ha), and sustainable use (494.7 ha). This strategy will establish a balance between the socioeconomic needs of the local communities that use mangrove and the ecosystem health of mangrove forests, avoiding loss in their coverage and preserving their structure. In addition, a participatory monitoring program will be established to assess changes in populations of fish species of commercial and local importance, the quality of the coastal waters and adjacent waterways, and the health of key ecosystems (for example, sea turtle nesting beaches, mangroves, coral reefs, etc.). The monitoring information derived will be systematized and analyzed and made available through the national information system on coastal marine biodiversity (see Component 3) and through printed media to support decision-making for reducing threats to the marine and coastal biodiversity of the ZEMMC.

23. The project will make available mechanisms and technical support to incentivize the different sectors to adopt biodiversity-friendly production practices, including lines of credit available for MiPyME, with special consideration given to MiPyME led by women, that participate in sustainable tourism and biodiversity-friendly fishing. This will be achieved with the participation of national and private banks and state agencies related to tourism and fisheries development the country. Additionally, a national and international advertising campaign will be carried out to promote the ZEMMC of the southern part of the Azuero Peninsula as a destination in Panamá where tourism with low environmental impact and local social benefits can be practiced. The advertising campaign is aimed principally at promoting the image of tourism-related MiPyMEs and will include coastal cleanup activities together with local hotel staff, the municipalities, and the local population. Through ecological certification, MiAmbiente (or other competent authority) will recognize agricultural farms and cattle ranches that adopt sustainable production practices to reduce their use of agrochemicals and contribute to control erosion. Ecological certification will contribute to strengthening the corporate image and will give a competitive advantage and differentiation in the market to farm owners who adopt biodiversity-friendly production practices. A public information campaign will

increase awareness and local support for accessing the incentives proposed by the project and for the implementation of best practices to reduce threats to coastal marine biodiversity.

24. Finally, to facilitate the integrated environmental management of the ZEMMC in the southern part of the Azuero Peninsula, the project will train 300 people at the local level (local community members, traditional fishermen, owners of MiPyMEs including women, owners of agricultural farms and cattle ranches, municipal authorities, among others) in sustainable and biodiversity-friendly practices, including sustainable fishing, pollution reduction and garbage and solid waste management techniques, and protection of beaches, mangroves, wetlands, and coral reefs, and as a strategy to promote the participation of women.

*Component 3. Gender Mainstreaming, Knowledge Management and Learning*

25. This component will allow systematizing best practices and lessons learned about coastal marine biodiversity conservation and its sustainable use in production landscapes and seascapes of the ZEMMC of the southern part of the Azuero Peninsula and to ensure that these are made available for use in other production landscapes and seascapes in Panama. It will also support adaptive management so that the project integrates experiences that result during implementation of the activities in the new programmatic cycles of the project.

26. Also, through this component a national information system on coastal marine biodiversity will be developed that will allow the country to have, for the first time, a centralized and systematized information about status and knowledge of coastal marine biodiversity. The information system will be a key tool for decision-making regarding conservation and ecological monitoring and will be developed with the participation of public institutions, the private sector (agriculture, tourism, urban development, and fishing), members of academia, and civil society, who will become the main users. The national information system on coastal marine biodiversity will include indicators and protocols for data gathering, as well as an equipped office (information platform, software, hardware, etc.) for its operation.

27. The project results as outlined in the project results framework will be monitored annually and evaluated periodically during project implementation to ensure the project effectively achieves these results. The gender-mainstreaming plan, which will take into account the needs of women and outline activities that address gender-differentiated needs and impacts related to coastal marine biodiversity conservation and its sustainable use, will also be monitored through this project component. Finally, project-level monitoring and evaluation (M&E) will be undertaken in compliance with UNDP requirements as outlined in the UNDP Programme and Operations Policies and Procedures and UNDP Evaluation Policy.

II.1.4. [Incremental/additional cost reasoning](#) and global environmental benefits.

28. The project will add value to existing baseline investments through a land/seascape management approach to reduce threats to coastal marine biodiversity with emphasis on production lands. The comparison of baseline and alternative scenarios and global environmental benefits of the project is summarized below:

<b>Current practice (baseline)</b>	<b>Alternative to be put in place by the project</b>	<b>Global Environmental Benefits</b>
The conservation of coastal marine biodiversity in production land/seascapes relies on a regulatory framework with overlapping functions and jurisdictions, limiting opportunities for interinstitutional programming	Strengthened national policy and institutional framework for integrated environmental management of coastal and marine production land/seascapes	1. The populations of the selected fish species of commercial importance (snapper [Lutjanus spp.] and grouper [Epinephelus spp.]) remain stable by project's end as a result of the use of fishing best practices. 2. The coverage (ha) of sea turtle nesting beaches remains stable. 3. The number of Olive Ridley (Lepidochelys olivacea), green
The recently established DICOMAR does not have the operational guidelines and tools for effectively allocating human and financial resources for the conservation and sustainable use of coastal marine biodiversity outside of protected areas	Organizational structure, operational guidelines, and funding mechanisms of the DICOMAR defined for effective coastal marine biodiversity conservation and sustainable use in production land/seascapes	
Efforts for monitoring the status and threats of coastal marine biodiversity are few, limiting effective decision-making	Information management platform on coastal marine biodiversity, including biodiversity health indicators and protocols	

regarding biodiversity conservation in production land/seascapes and integrated coastal management	for data gathering, support decision-making.	( <i>Chelonia mydas</i> ), and hawksbill ( <i>Eretmochelys imbricata</i> ) sea turtles that nest in the beaches of the southern area of the Azuero Peninsula (La Marinera and the Isla de Cañas) remains stable.
Lack of incentives for the different production sectors (fishing, tourism, coastal development, and agriculture/cattle-ranching) limits their ability to adopt production practices that are friendly to coastal marine biodiversity	Lines of credit available for MiPyME that participate in sustainable tourism and biodiversity-friendly fishing, national and international publicity campaign to promote sustainable tourism, and ecological certification accredited by MiAmbiente for the reduced use of agrochemicals and the sustainable management of agricultural farms and cattle ranches, promotes the adoption of production practices that are friendly to coastal marine biodiversity	4. The coverage of mangroves (6,072.3 ha) in the southern area of the Azuero Peninsula is stable. 5. Habitat is improved for aquatic species in the southern area of the Azuero Peninsula as a result of reduced contamination (trash, solid waste, and agrochemicals) and sedimentation (erosion control). The species include: the leatherback sea turtle
Few legal and technical tools at the local level to plan and develop land/seascape initiatives to reduce threats to coastal marine biodiversity that result from unsustainable production practices in the ZEMMC in the southern part of the Azuero Peninsula	Local regulatory framework improved and aligned with municipal Land Use Development Plans regulates construction activities in high ecological sensitivity areas and allows for effective trash and solid waste management in the municipalities, coastal communities, and by the private sector	( <i>Dermochelys coriacea</i> ), the fin whale ( <i>Balaenoptera physalus</i> ), and the sperm whale ( <i>Physeter macrocephalus</i> ), which are species that use the ocean waters adjacent to the Azuero Peninsula as a migratory route; the common bottlenose dolphin ( <i>Tursiops truncatus</i> ) and the spotted dolphin ( <i>Stenella</i> spp.); and others.
Limited number of initiatives to promote the participation of civil society and the private sector in the management and sustainable use of coastal marine biodiversity	Participatory zoning, protection, and management of the ZEMMC in the southern part of the Azuero Peninsula promotes the conservation, rehabilitation, and sustainable use of mangroves; and coastal cleanup campaigns carried out with participation from the hotel/tourism sector and local communities	
Limited participation of women in coastal marine biodiversity conservation initiatives	Gender mainstreamed into coastal marine biodiversity conservation activities in the ZEMMC in the southern part of the Azuero Peninsula	

#### II.1.5. GEF Increment to Generate Global Benefits

29. The project strategy will contribute to the global environmental benefits presented in the table above, including the conservation and sustainable use of coastal marine biodiversity of global importance in production land/seascapes in the ZEMMC in the southern part of the Azuero Peninsula, which includes IBAs and KBAs such as the Island of Frailes del Sur, Isla Cañas Wildlife Refuge, Playa la Marinera Biological Reserve, and Isla Iguana Wildlife Refuge. These areas are home to a rich coastal and marine diversity, and provide key ecosystem services to local communities including rich brackish and marine fish stocks of local importance and recreational areas key for ecotourism. In addition, coastal mangroves contribute to building ecosystem resilience to climate change and protection from storms.

#### II.1.6. Innovation, sustainability and potential for scaling up.

30. In the context of Panamá, the project is innovative in that it proposes that the integrated environmental management of the ZEMMC in the southern part of the Azuero Peninsula and the reduction of threats to biodiversity by the production sectors is based on the use of incentives (credit lines, promotion of sustainable tourism, ecological certification) to facilitate the adoption of biodiversity-friendly production practices. One of the reasons why the integrated environmental management of the ZEMMC has not advanced is that the implementation of the ZEMMC management plans has been subject to the approval of specific projects that depend on external funding, which are uncertain and do not guarantee the sustainability of conservation actions. It is anticipated that through the use of incentives, together with inter-sectorial commitments (government-private sector-civil society), as well as technical support and building skills for the implementation of production best practices, the conservation and sustainable use

of biodiversity will be made sustainable in the ZEMMC, and the equitable participation of women will be promoted. The use of incentives will also depend on the capacity of the DICOMAR /MiAmbiente to monitor actions, provide technical assistance to facilitate its implementation, and promote their use; to achieve this, the project will strengthen regulatory and institutional mechanisms (Component 1) in a way that DICOMAR MiAmbiente can continue to fulfill these functions after the end of the project. The results of this strategy will be documented during project implementation and presented to the government institutions, the district officials (municipalities), the private sector, and civil society to disseminate best practices and lessons learned with the goal that they will be replicated in at least three other ZEMMCs in the Pacific coast and the Caribbean Sea of Panamá.

31. The basis for the ecological sustainability of the project resides in the effective incorporation of conservation objectives as part of the production activities in the ZEMMCs and the ability of the government to monitor their status and threats. The socioeconomic sustainability of the project will be achieved through the participation of local communities (with special consideration given to the participation of women), the private sector, and local governments (districts) in the planning and execution of activities to reduce the pressure on coastal marine biodiversity in the ZEMMC in the southern area of the Azuero Peninsula. The benefits for traditional fishermen, the owners of the MiPyMEs associated with tourism (with special consideration given to women-led MiPyMEs), and the farmers and cattle ranchers, among others, will be obtained through incentives for the conservation of coastal marine biodiversity, as well as from adopting certified environmentally friendly production practices that will offer them a competitive advantage (market differentiation) over unsustainable alternatives. Last, the basis for the project's institutional sustainability comes from strengthening the capacity of the national and local officials, the private sector, and civil society in the coordinated planning and integrated sustainable management of the coastal marine landscapes. At the national level, the project will strengthen the DICOMAR/MiAmbiente with regard to the regulatory and institutional aspects, and it will establish interinstitutional agreements to promote the cooperation, exchange of information, and clarify the responsibilities relative to conservation and sustainable use of coastal marine biodiversity and aquatic resources. In addition, through the project decision-makers and technical staff will be trained in the monitoring and follow-up of threats to coastal marine biodiversity (with special consideration given to the participation of women), and they will have access to an information system to facilitate the decision-making and ecological monitoring. Within the ZEMMC of the southern part of the Azuero Peninsula, the capacities of the local officials, private sector (fishing, tourism, urban development, and farming/cattle-ranching) and civil society groups will be strengthened in the integrated management of the ZEMMC, to access and use incentives to reduce threats to biodiversity, and for the implementation and follow-up of biodiversity-friendly production practices.

**II.2. Stakeholders.** Will project design include the participation of relevant stakeholders from [civil society organizations](#) (yes /no ) and [indigenous peoples](#) (yes  /no )? If yes, identify key stakeholders and briefly describe how they will be engaged in project preparation.

Stakeholder	Role in the Project
Ministry of the Environment (MiAmbiente)/ Office of Coastal Marine Affairs (DICOMAR)	The Ministry of the Environment (Law 8, March 25, 2015) is the state institution that governs the protection, conservation, preservation, and restoration of the environment as well as the sustainable use of natural resources to ensure compliance and application of the laws, regulations, and the National Environmental Policy. Through DICOMAR, the MiAmbiente is responsible for creating conservation plans for marine and coastal resources and overseeing compliance in achieving their conservation, restoration, and sustainable use. The MiAmbiente will define the guidelines for designing the project and will be responsible for project execution with the participation of other national (including ARAP) and local (districts) institutions, the private sector, and civil society.
Office of Aquatic Resources of Panamá (ARAP)	ARAP is responsible for managing, promoting, developing, mapping out, and applying the policies, strategies, laws and regulations, plans, and programs for fishing activities, aquaculture, coastal marine management, and related activities; and ensuring the production, conservation, monitoring, management, promotion, research, and responsible and sustainable use of aquatic resources. ARAP will coordinate the activities with MiAmbiente for the integrated management of the coastal marine areas, including aquatic resources.
Office of Protected Areas and Wildlife/MiAmbiente	The Office of Protected Areas and Wildlife has the objective to define, develop, and implement policies and regulations for the management and conservation of protected areas, wildlife, biodiversity, natural and cultural patrimony, and environmental services to guaranteed the reasonable use of natural resources and sustainable development, as well as to comply with international commitments through the protection, integration, conservation, and use of biodiversity within the framework of economic

	development, social and environmental priorities. In addition, the Office is responsible for managing the SINAP. It will form part of the SIRAP and will be a key stakeholder for the integrated environmental management of the ZEMMC in the southern area of the Azuero Peninsula where there are protected areas (Isla Cañas Wildlife Refuge and Isla Iguana Wildlife Refuge).
Districts (municipalities)	The districts are responsible for land use planning and environmental management within their jurisdictions, including planning for the development and management of solid wastes and wastewater. The Pedasí, Tonosí, and Pocrí districts will lead those actions proposed by the project that are geared towards reduction of contamination (solid waste management and reduced agrochemical use). They will support and participate in the development of regulations complementary to the Land Use Plans to regulate construction activities in highly sensitive ecological areas. The capacity of the districts will be strengthened for the integrated management of the ZEMMC in the southern area of the Azuero Peninsula.
Private sector	The private sector (fishing, tourism, urban development, and farming) will be relevant to complying with environmental regulations for the integrated management of the ZEMMC in the southern area of the Azuero Peninsula, as well as participation in the project's proposed actions to reduce contamination in the coastal marine waters and to prevent ecosystem degradation through the adoption of sound production practices. The private sector will benefit from training that will be provided through the project and from incentives for implementing biodiversity-friendly production practices.
Environmental Advisory Committees (EACs)	The EACs are made up of civil society and government representatives to analyze environmental issues and make comments, recommendations, and proposals regarding environmental management in the regional directorates of the MiAmbiente. The EACs will oversee the implementation of the management plan of the ZEMMC in the southern area of the Azuero Peninsula.
Local communities and community organizations	Local communities and community organizations (traditional fishermen, small farmers, MiPyME owners, etc.) will participate in the implementation of the Coastal Marine Integrated Management Plan for the ZEMMC in the southern area of the Azuero Peninsula. They will be beneficiaries of the training that is provided through the project and will be key stakeholders for the reduction of threats to coastal marine biodiversity and incentives for implementing biodiversity-friendly production practices.
Non-governmental organizations (NGOs)	Numerous NGOs are working in the conservation and sustainable use of coastal marine biodiversity, such as PROMAR, CREHO, ANCON, MARVIVA, Fundación Natura, and Sociedad Audo. These NGOs will provide information and experiences in conservation of coastal marine biodiversity to guide the effective implementation of the project and facilitate coordination with beneficiary groups such as traditional fishermen, MiPyME related to tourism, and farmers and cattle-ranchers. As members of civil society they will benefit from training activities that will be developed through the project.
UNDP	UNDP is the Implementing Agency of the GEF that will provide guidance, institutional support, and technical and administrative assistance, as well as theoretical and practical knowledge at the national level for the effective execution of the project.

**II.3. Gender Equality and Women's Empowerment.** Are issues on [gender equality](#) and women's empowerment taken into account? (yes  /no ). If yes, briefly describe how it will be mainstreamed into project preparation (e.g. gender analysis), taking into account the differences, needs, roles and priorities of women and men.

32. A central aspect in the development of the project is the consideration of gender. Women will play a central role during project development; as generators of goods and services they will benefit from incentives, such as credit lines for owners of MiPyME associated with tourism, for the development biodiversity-friendly production practices. In addition, the project's benefits will contribute to food security for the women and their families; for example, through sustainable fishing and improved income derived from sustainable tourism, which provides a more favorable environment to develop activities related to their households. Women will play a central role in the development of their communities; during the process of project development, they will be given opportunities equal to those given to men so that their vision for the development of coastal marine management and biodiversity conservation plans is expressed equally, considering the role and priorities of both men and women, granting them the opportunity to express themselves as members of government institutions, the private sector, and civil society organizations. To ensure that gender considerations are duly incorporated into the final project design, during the PPG phase staff specializing in gender issues from the UNDP office in Panamá will provide the necessary support and guidance. In addition, a thorough gender assessment will be conducted and a project-specific gender-mainstreaming plan will be

developed during the PPG phase. Finally, the final design of the project will adopt and report on the GEF6 indicators for gender.

**II.4. Risks.** Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design (table format acceptable).

Risk	Level*	Risk mitigation strategy
Lack of willingness to cooperate among the different institutions with responsibility for the conservation of coastal marine resources and the private sector	L/M	The project will involve national and local (districts) government stakeholders, private sector representatives, and representatives of civil society beginning in the design phase to ensure their support and participation in the project. In addition, the project will promote the use of incentives so that the private sector adopts biodiversity-friendly production practices, which is expected to motivate the different production groups present in the ZEMMC of the southern area of the Azuero Peninsula (traditional fishermen, MiPyME, farmers, etc.) to participate in the project. Representatives from the government, the private sector, and the civil society will be invited to participate in the Project Board to facilitate cooperation and project follow-up.
Lack of follow-through on commitments to reduce threats to coastal marine biodiversity	M	The project will develop and make available protocols for coastal marine-biodiversity-friendly practices and ecosystem protection, which will help to verify and monitor compliance or follow-through on the commitments made by the production sectors (fishing, tourism, urban development, and agriculture) to reduce threats to coastal marine biodiversity. Through the establishment of interinstitutional agreements of cooperation among environmental officials (DICOMAR/MiAmbiente, ARAP, municipalities) and the fishing, tourism, urban development and farming sectors for implementing the integrated management plan for the ZEMMC in the southern area of the Azuero Peninsula, follow-up will be performed of the commitments of the different project stakeholders. In addition, the project will train and provide technical support for the local officials and private sector group representatives to facilitate implementation of best practices.
The incentives schemes to be developed by the project are not sustainable in the long term	M	During the PPG phase, a feasibility analysis of the incentives will be performed, as well as an analysis of the interest of the potential users to adopt coastal marine-biodiversity-friendly production practices. In addition, the project will invest in the development of national, municipal, and local-level training and provide technical support to ensure that there the necessary knowledge and tools exist to facilitate the adoption of the incentives by the stakeholders, contributing the to their long-term sustainability.
Climate change affects coastal marine ecosystems and natural resources, which are essential to the sustainability of the production landscapes	L	The actions of the project directed towards reducing threats to coastal marine biodiversity will result in ecosystems and species populations that are more resilient to climate change and variability. The zoning, protection, management, and participatory sustainable use of the mangroves in the southern area of the Azuero Peninsula will help to prevent flooding and erosion in the different coastal areas, benefiting the biodiversity present there, as well as the human settlements and production systems in the coastal areas.

**II.5. Coordination.** Outline the coordination with other relevant GEF-financed and other initiatives.

33. The project proposed herein will coordinate actions with the GEF project *Sustainable Production Systems and Conservation of Biodiversity* (GEF Project ID 5546). This 5-year project (2014-2019), executed by the National Environmental Authority (ANAM) with the support of the World Bank, seeks to conserve globally significant biodiversity through improved management effectiveness of the project’s protected areas and biodiversity mainstreaming in their buffer zones. Lessons learned and knowledge regarding the implementation of biodiversity-friendly subprojects in landscapes surrounding protected areas, and the training and technical assistance provided to producer organizations and municipal authorities, will considered in the final project design and during its implementation.

34. Lessons learned from the implementation of the GEF project *Mainstreaming biodiversity conservation through low-impact ecotourism in the SINAP* (GEF Project ID 3889) will also be considered, particularly the participation of the local communities and the local private sector in ecotourism businesses that contribute to the

conservation and sustainable use of biodiversity and the implementation of best production practices and the development of incentives through environmental certification. This project is being implemented by ANAM and the Panamanian Tourism Institute (IPAT) with support from the Inter-American Development Bank.

35. Finally, lessons learned and best practices from implementation of the GEF project *Mainstreaming biodiversity conservation into the operation of the tourism and fisheries sectors in Las Perlas Archipelago* (GEF Project ID 3021) will be considered. This project had a strong component for the development of incentives and improved investment opportunities for biodiversity-friendly tourism and fisheries. This project was implemented by UNDP in coordination with ARAP.

**II.6. Consistency with National Priorities.** Is the project consistent with the National strategies and plans or reports and assessments under relevant conventions? (yes  /no  ). If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, etc.

36. Panamá signed the CBD on June 13, 1992, and it was ratified through Law No. 2 of January 17, 1995. The first NBSAP of Panamá was completed in 2000. The project is consistent with the NBSAP, particularly with Strategic Objective No. 1: Promote change in the production systems to change practices that are destructive to biodiversity; Strategic Objective No. 5: Increase the participation of local and indigenous communities in the management, planning, administration, and sustainable use of biodiversity; Strategic Objective No. 7: Prevent, control, and minimize the adverse impacts of activities that bring environmental contamination and/or alter ecological processes in natural systems and decrease biodiversity; and Strategic Objective No. 12: Contribute to the conservation of global biodiversity.

37. The project is also consistent with the National Biodiversity Policy of Panamá (2008), which has the objective of implementing the National Biodiversity Policy as the main tool of a national strategy to articulate biodiversity sustainability with economic and social development processes in order to improve the country's competitiveness, the quality of life, eradicate poverty, subsistence, the integration of the populations, and sustainable development. The 4<sup>th</sup> and 5<sup>th</sup> National Biodiversity Reports to the CBD emphasize conservation of biodiversity and integrated management of the country's coastal marine areas; the project is aligned with these objectives and will contribute to their realization.

38. The project is also consistent with General Law 41 of the Environment (1998), which in its Article No. 2 defines the concept of national environmental territorial management as: "the process of planning, evaluation, and control directed to identifying and programming human activities that are compatible with the use and management of natural resources in the national territory, respecting the carrying capacity of the natural environment to preserve and restore ecological balance and protect the environment, as well as ensure the well-being of the population." The Indicative Plan of Territorial Management (PIGOT) of Panamá has the objective of guiding the settlement of the population, the economic activities, and infrastructure development in a harmonized way, considering criteria for economic growth, social development, security, defense, and environmental conservation, based on the knowledge of their ecological, social, and cultural aptitudes, their carrying capacities, and the inventory of renewable and non-renewable natural resources. Through its actions for the integrated management of the coastal marine areas, the project will contribute to environmental territorial management according to that established by the PIGOT.

### **II.7. Knowledge Management.**

39. Knowledge-management activities will be included as part of the project's Component 3. Gender Mainstreaming, Knowledge Management and Learning. Results from the project will be disseminated within and beyond the project intervention area through a number of existing information sharing networks and forums. In addition, the project will participate, as is relevant and appropriate, in UNDP-GEF sponsored networks that are organized for senior staff working on projects that share common characteristics. The UNDP-GEF Regional Coordination Unit (RCU) has established an electronic platform for sharing lessons learned among the project managers. The project will identify and participate, as is relevant and appropriate, in scientific, policy-based, and/or any other networks that may be of benefit to project implementation. The project will identify, analyze, and share lessons learned that might be beneficial for the design and implementation of similar future projects. Identifying and analyzing lessons learned is an ongoing process, and the need to communicate such lessons as one of the project's central contributions is a requirement to be delivered no less frequently than once every 12 months. The UNDP-GEF

shall provide a format for this exchange and will assist the project team in categorizing, documenting, and reporting the lessons learned. Specifically, the project will ensure coordination in terms of avoiding overlap, sharing best practices, and generating knowledge products of best practices in the area of biodiversity conservation with the current projects of Panama's portfolio. Knowledge-management activities will be included as part of the project's Monitoring & Evaluation Plan and will be properly budgeted.

**PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)**

**A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):**  
 (Please attach the [Operational Focal Point endorsement letter](#)(s) with this template. For SGP, use this [SGP OFP endorsement letter](#)).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Elba Cortés	Director, International Affairs Office	MINISTRY OF THE ENVIRONMENT	FEBRUARY 23 <sup>RD</sup> , 2017

**B. GEF AGENCY(IES) CERTIFICATION**

<b>This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for project identification and preparation under GEF-6.</b>
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Agency Coordinator, Agency name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email
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