

GEF-8 REQUEST FOR CEO ENDORSEMENT/APPROVAL

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General Project Information

Project Title

Strengthening ecological connectivity in natural and productive landscapes between the Amistad and Darien biomes

Region

Panama

GEF Project ID

11209

Country(ies)

Panama

Type of Project

FSP

GEF Agency(ies):

UNDP

GEF Agency Project ID

9653

Project Executing Entity(s)

Ministry of Environment

Project Executing Type

Government

GEF Focal Area (s)

Multi Focal Area

Submission Date

6/12/2024

Type of Trust Fund

GET

Project Duration (Months)

72

GEF Project Grant: (a)

6,585,388.00

GEF Project Non-Grant: (b)

0.00

Agency Fee(s) Grant: (c)

625,612.00

Agency Fee(s) Non-Grant (d)

0.00

Total GEF Financing: (a+b+c+d)

7,211,000.00

Total Co-financing

42,850,000.00

PPG Amount: (e)

200,000.00

PPG Agency Fee(s): (f)

19,000.00

Total GEF Resources: (a+b+c+d+e+f)

7,430,000.00

Project Tags

CBIT: No NGL: No SGP: No Innovation: No

Project Sector (CCM Only)

Taxonomy

Climate Change, Focal Areas, Influencing models, Demonstrate innovative approaches, Strengthen institutional capacity and decision-making, Convene multi-stakeholder alliances, Transform policy and regulatory environments, Stakeholders, Civil Society, Non-Governmental Organization, Community Based Organization, Type of Engagement, Partnership, Information Dissemination, Consultation, Participation, Private Sector, SMEs, Indigenous Peoples, Local Communities, Communications, Awareness Raising, Behavior change, Beneficiaries, Forest and Landscape Restoration, Forest, Land Degradation, Sustainable Land Management, Income Generating Activities, Sustainable Agriculture, Sustainable Forest, Ecosystem Approach, Sustainable Livelihoods, Improved Soil and Water Management Techniques, Sustainable Pasture Management, Biomes, International Waters, Biodiversity, Protected Areas and Landscapes, Terrestrial Protected Areas, Community Based Natural Resource Mngt, Productive Landscapes, Tropical Rain Forests, Mainstreaming, Forestry - Including HCVF and REDD+, Tourism, Agriculture and agrobiodiversity, Climate Change Mitigation, Climate Change Adaptation, Gender Equality, Gender Mainstreaming, Gender-sensitive indicators, Women groups, Gender results areas, Capacity Development, Access and control over natural resources, Participation and leadership, Capacity, Knowledge and Research, Knowledge Generation, Innovation, Learning, Theory of change, Indicators to measure change, Adaptive management, Knowledge Exchange

Rio Markers

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
Significant Objective 1	Significant Objective 1	Principal Objective 2	Significant Objective 1

Project Summary

Provide a brief summary description of the project, including: (i) what is the problem and issues to be addressed? (ii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? (iii), how will this be achieved (approach to deliver on objectives), and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. The purpose of the summary is to provide a short, coherent summary for readers. (max. 250 words, approximately 1/2 page)

The project targets the preservation and sustainable management of natural resources in Panama's central area to improve connectivity between critical biomes (La Amistad and Darien Gap forests). Addressing unsustainable land use and governance deficiencies, it focuses on preventing biodiversity loss and landscape fragmentation that hinder ecological connectivity, undermining ecosystems' health and species' diversity. Firstly, it aims to bolster policies, regulations, and institutional capabilities through participatory decision-making, enhancing sustainable land management and conservation efforts in key sectors (forestry, agroforestry, and tourism). Secondly, it will focus on managing and restoring ecological corridors with site-specific plans integrating circular economy principles, ensuring an effective administration and alignment with sustainable land management practices. Lastly, the project seeks to foster partnerships and support biodiversity-friendly businesses to stimulate the adoption of circular economy principles in enterprises compatible with biodiversity conservation, creating economic opportunities for IPLCs. The project will work with local stakeholders to improve the management of at least 56,160 hectares of protected areas, restore 1,800 ha, help improve the management of nearly 488,465 hectares of productive landscapes and reduce emissions by 20,099,199 tCO₂e. It aims to benefit 12,542 community members, marking a significant step towards sustainable environmental stewardship and biodiversity conservation in Panama.

Project Description Overview

Project Objective

Improved and sustained ecological connectivity between the Amistad and Darien biomes by strengthening biodiversity conservation, improving sustainable land use, and promoting circular economy initiatives

Project Components

1. Improved strategies, plans, and institutions to align with Panama's laws and regulations, promote Sustainable Landscape Management (SLM), conserve biodiversity, and integrate CE principles with a multi-ethnic, multi-cultural and gender-sensitive approach.

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
1,254,359.00	2,560,000.00

Outcome:

1.1. Effective coordination, regulatory and institutional framework for planning, management, monitoring, enforcement, and decision making for SLM and biodiversity conservation/sustainable use, utilizing CE principles that incorporate biodiversity conservation in target sectors (i.e., forestry, agro-forestry, and tourism).

Indicator:

Number of sub-national and local level multi-sectoral multi-ethnic, multi-cultural and gender-sensitive governance systems (recognized and documented by the main actors) that promote connectivity, biodiversity conservation and SLM at the national level.

Target:

3 (sub-national)

6 (local)

At least 35% of total participants are women

1.2. Sectoral policies integrate biodiversity conservation, SLM, and CE principles

Indicator:

Number of updated/new sectoral policies that integrate biodiversity conservation, SLM and CE with a multi-ethnic, multi-cultural and gender-sensitive approach

Target:

3

At least 35% of total participants providing inputs and reviewing the policies are women

1.3. Strengthened institutional and local organizations' capacity to implement strategies and plans that support biodiversity conservation and SLM principles.

Indicator:

Increase in institutional capacity to implement NFS, MPST, and Agrotourism Law as measured by a 15% increase in the gender-sensitive UNDP Capacity Development Scorecard of baseline values of:

-Ministry of Environment

-Ministry of Agriculture,

-Ministry of Tourism

-Canal Authority

Target:

MiAMBIENTE: 50.31 %

ACP: 64.69 %

MIDA: 33.54 %

ATP: 55.10 %

Output:

1.1.1 Functional governance and coordination mechanisms established at the sub-national (3) and local levels (6).

1.2.1 Biodiversity conservation measures, SLM, and CE principles mainstreamed into the National Forest Strategy and Master Plan for Sustainable Tourism.

1.2.2. Development of the Strategy and Financing Plan for Agrotourism Law.

1.3.1 Training program for national, regional, and local government to strengthen their capacity to understand and implement the National Forest Strategy, Master Plan for Sustainable Tourism and Agrotourism developed and implemented.

1.3.2: Awareness raising program on supported policies designed and implemented.

2. Improved management and restoration of ecological connectivity corridors.

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
1,881,540.00	25,260,000.00

Outcome:

2.1. Improved site-level planning, regulatory, monitoring, and implementation framework for demonstration of CE principles for biodiversity-friendly businesses that support SLM and management of pilot biodiversity corridors between the Amistad and Darien forests.

Indicator 2.1a:

Average increase by at least 20 % in METT from current PA baselines covering 56,160 ha from current baselines of:

(a) *Parque Natural Metropolitano*

Protected Landscape (232 ha)

(b) *Cerro Gaital Natural Monument (512 ha)*

(c) *Camino de Cruces National Park (4,791 ha):*

(d) *Altos de Campana National Park (4,921 ha):*

(e) *Cerro Guacamaya Water Reserve (5,118 ha);*

(f) *Bahía de Chame Multiple Use Area (8,897 ha);*

(g) *San Lorenzo Protected Forest and Landscape (12,145 ha); and*

(h) *Soberania National Park (19,544 ha)*

Target:

(a) *Parque Natural Metropolitano Protected Landscape: 92%*

(b) *Cerro Gaital Natural Monument: 48%*

(c) *Camino de Cruces National Park: 41%*

(iv) *Altos de Campana National Park: 71%*

(d) *Cerro Guacamaya Water Reserve: 36%;*

(e) *Bahía de Chame Multiple Use Area: 41%;*

(f) *San Lorenzo Protected Forest and Landscape: 56%;*

(g) *Soberania National Park: 71%*

(At least 35% of total participants are women)

-

Indicator 2.1b:

Number of site-level plans developed, updated, or revised, and implemented that incorporate CE principles and biodiversity-friendly business practices, through a multi-ethnic, multi-cultural and gender-sensitive approach.

Target:

(a) *Site-specific integrated cluster conservation plans (CCPs): 5*

(b) *PA management plans: 6*

(c) *Conservation Plans (i.e., for private reserves and/or conservation set-asides, and IPLC conservation areas): 5*

Indicator 2.1c:

Number of Provincial Restoration Plans implemented, covering 1,800 has.

Target:

3

(35% women participants)

Output:

- 2.1.1. Site-specific integrated cluster conservation plans for Key Biodiversity Areas designed.
- 2.1.2. Improved management effectiveness of existing eight PAs within the area between the Amistad and Darien Forest.
- 2.1.3. Network of potential Other Effective Area-based Conservation Measures (OECM) identified.
- 2.1.4 Local biodiversity-friendly businesses, regional governments, private stakeholders, and IPLCs have tools, practices, procedures, and policies to support the creation/strengthening of biological corridors and restoration of degraded areas.
- 2.1.5 A multistakeholder collaborative Ecosystem Restoration Program implemented.

3. Community-based sustainable use and management systems developed through introduction of CE principles integrating multi-ethnic, multi-cultural and gender-sensitive considerations in biodiversity-friendly enterprises and livelihood initiatives.

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
1,881,540.00	10,920,000.00

Outcome:

- 3.1. Biodiversity-friendly businesses improve livelihoods and embrace CE principles to avoid biodiversity loss and lead to nature positive outcomes.

Indicator 3.1a:

Area (hectares) with improved management by biodiversity friendly businesses.

Target:

6,000 hectares

Indicator 3.1b:

Number of Biodiversity-friendly value chains that consider biodiversity, SLM and/or CE principles supported

Target:

8

Indicator 3.1c:

Number of households directly benefiting from biodiversity friendly businesses and sustainable livelihood improvement approaches with an increase up to or more than 15% in average annual income

Target:

3000 (1,500 women, 1,500 men)

Output:

3.1.1. Mapping of existing and potential biodiversity-friendly businesses in the project landscape.

3.1.2: Strategic alliances with NGOs/CSOs, private natural reserves, IPLCs, producers, including public and private partnership arrangements to strengthen biodiversity friendly value chains within the project landscape.

3.1.3: Comprehensive market analysis to identify potential buyers, both locally and internationally, for biodiversity-friendly products and support the development of financial projections and business plans of selected value chains that include biodiversity, SLM, and CE principles.

3.1.4: Provision of community level LVGs for co-investment in biodiversity-friendly IPLC led MSMEs and support for partnerships with lending institutions for financing small businesses to deserving producer groups.

4. Knowledge sharing, innovation, and management platform for gender mainstreaming, and dissemination of lessons learned.

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
1,066,206.00	1,850,000.00

Outcome:

4.1. Awareness and collaborative decision-making on biodiversity conservation, SLM and CE enhanced through effective knowledge management, social and environmental safeguards, and gender mainstreaming.

Indicator 4.1a:

Percentage of the people who inhabit the landscape aware of biodiversity conservation, SLM and CE measures, conservation threats, and impacts of unplanned developments, demonstrating behavior change for positive biodiversity outcomes.

Target:

20%

Indicator 4.1b:

dashboards/monitoring tools developed, implemented and maintained for monitoring BD benefits (and CC/LD co-benefits) with a multi-ethnic, multi-cultural and gender-sensitive approach within the MiAMBIENTE and in alignment with national government systems

Target:

1

Indicator 4.1c:

Number of good practices, tools, communication and KM products related to connectivity, conservation, sustainable resource management and circularity codified, adapted, and disseminated nationally and internationally.

(Number of tools (e.g., manuals, guides) for gender mainstreaming)

Number of communication and KM products developed and published (i.e., PANORAMA solutions and EXPOSURE photo-stories)

Target:

20

(18 tools)

(2 communication products and 1 PANORAMA solutions)

(At least 35% female)

Output:

4.1.1 Knowledge Management and Communications implemented.

4.1.2. Harmonized information management system and spatial information system for integrating lessons from biological corridors, conservation efforts, CE and SLM policy implementation.

4.1.3. Gender mainstreaming and social and environmental safeguards strategies developed and implemented.

M&E

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
188,153.00	216,665.00

Outcome:

5.1 M&E mechanism established by the project for adaptive management measured by:

(i) All annual reports submitted (PIRs)

(ii) Gender and social and environmental safeguards are fully integrated in project outcomes and outputs and complied with during implementation

(iii) Mid-term Review and Terminal Evaluation completed

Output:

5.1.1 Project M&E plan implemented, and results reported through Project Board and annual reports (PIRs). MTR and TE conducted, and reports shared with UNDP and GEF IEOs.

Component Balances

Project Components	GEF Project Financing (\$)	Co-financing (\$)
1. Improved strategies, plans, and institutions to align with Panama's laws and regulations, promote Sustainable Landscape Management (SLM), conserve biodiversity, and integrate CE principles with a multi-ethnic, multi-cultural and gender-sensitive approach.	1,254,359.00	2,560,000.00
2. Improved management and restoration of ecological connectivity corridors.	1,881,540.00	25,260,000.00
3. Community-based sustainable use and management systems developed through introduction of CE principles integrating multi-ethnic, multi-cultural and gender-sensitive considerations in biodiversity-friendly enterprises and livelihood initiatives.	1,881,540.00	10,920,000.00
4. Knowledge sharing, innovation, and management platform for gender mainstreaming, and dissemination of lessons learned.	1,066,206.00	1,850,000.00
M&E	188,153.00	216,665.00
Subtotal	6,271,798.00	40,806,665.00
Project Management Cost	313,590.00	2,043,335.00
Total Project Cost (\$)	6,585,388.00	42,850,000.00

Please provide Justification

PROJECT OUTLINE

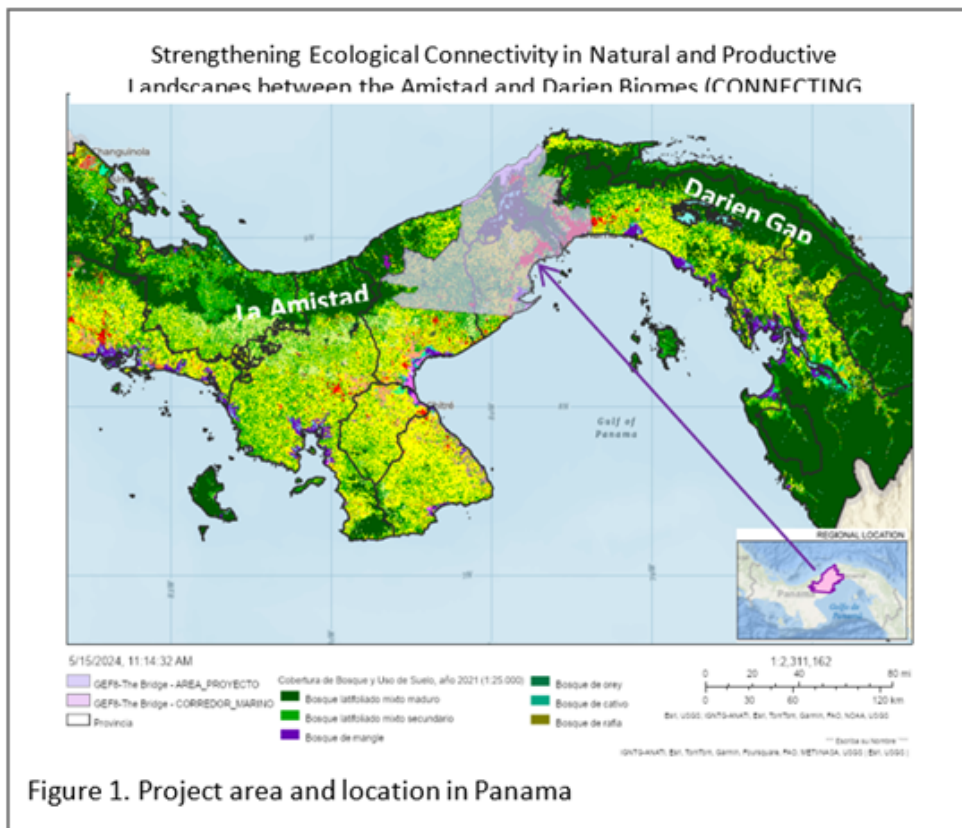
A. PROJECT RATIONALE

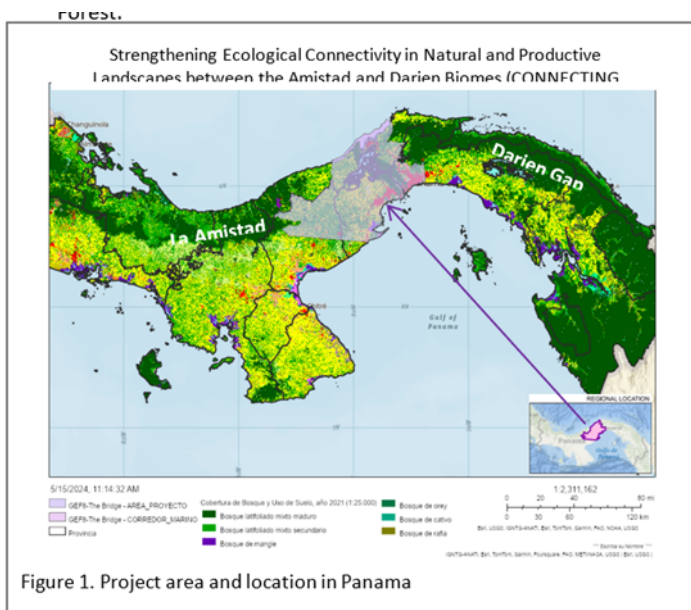
Describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

1. According to the United Nations Convention on Biodiversity (UNCBD), Panama is in one of the world's most biodiverse regions.^[1] Panama has 4,925,789 hectares of forests, representing 65.4% of the national territory. This positions Panama among the countries with the highest percentage of forest cover worldwide. It is estimated that two-thirds of Panama's forest coverage is Indigenous Peoples' (IP) traditional territories. Nearly one million hectares of the indigenous territories have dual tenure, meaning they are simultaneously both indigenous territory (comarcas or claimed lands) and protected areas (PAs). Panama's distinctive geographical position is crucial for global conservation efforts. Its forests serve as key migratory corridors between Central and South America, making preserving these natural pathways vital for biodiversity and highlighting the country's strategic importance in conservation planning at the national level as well as at the regional and regional levels. Given its regional importance, seven Central American countries have

collectively created the Mesoamerican Biological Corridor. This initiative aims to maintain a pristine area of forest biomes, facing vulnerability to habitat destruction and compounded by the impacts of climate change. This project is located within the Mesoamerican Biological Corridor in Panama, covering a forested 'Bridge' containing biodiversity of global importance.

2. The “Bridge” area (see Figure 1) lies between La Amistad (Costa Rica and Panama) and Darien (southern Panama to the border of Colombia), which are part of the ‘Five Great Forests’ considered biodiversity hotspots and covering over eight countries across Mesoamerica. It covers 752,148 ha and includes four provinces (Colón, Coclé, Panamá Oeste and Panamá), connecting protected and unprotected forests and productive landscapes, including an essential part of the Panama Canal Watershed (CHCP). Starting from the limits of Omar Torrijos Natural Park and Donoso Multiple Use Area, where La Amistad Forest ends until it reaches the Portobelo and Chagres National Parks, where it resumes the forest-covered corridor towards the Darien Gap Forest.





3. The Bridge is an area of great importance not only for connectivity and biodiversity at the regional level but also for the livelihoods of the population that inhabit the land and use it as a source of income, given the importance of the Panama Canal and its basin for the local and world economy. The four provinces within the scope of the project encompass 44.8% of the total (450,199 people) multidimensionally poor in the country, 20.7% (163,671 people) in the province of Panama, 12% (94,918 people) in Panama West, 6.3% (50,054 people) in Coclé and 5.8% (45,952 people) in Colón. The area provides critical environmental services, and the conservation of its biodiversity and natural resources plays a significant role in economic growth and reduction of poverty and inequality, which is of central importance to the national economy and water security as it covers most of the watershed and reserve of the Panama Canal. The Panama Canal contributed 3.1% (US\$2 billion)³ of Panama's gross domestic product. By the end of 2024, the sector is expected to contribute \$11.8 billion, up 8.3% from 2019.

4. Water management is fundamental for the canal operations and the supply of approximately 2.5 million inhabitants in Panama, Colon, and Panama Oeste. In 2023, the CHCP registered the driest period since 1898, resulting in a significant water crisis. This water shortage has caused a projected decrease in transits and total tonnage in 2024 [2] with a reduction of 29% in the number of ships passing through in March 2024, compared to the same period in 2023 [3]. The Panama Canal and tourism are essential to the Panamanian and regional economies, which depend on biodiversity conservation.

5. Panama's travel and tourism sector has significantly grown, with its GDP contribution increasing by 78.3% in 2022, reaching \$11 billion or 15.8% of the national economy [4]. From January to February 2024, Panama saw an 11.8% increase in international visitor arrivals and a 5.6% rise in tourism revenues, totaling \$1 billion [5] There is significant eco-tourism potential within the CHCP that already contributes substantially to the local economy, Parque Nacional Soberanía, and Monumento Natural Barro Colorado, with around 50,000 and 12,000 visitors each year, however there is a need for improved infrastructure to support sustainable tourism growth [6].

6. The Bridge initiative has prioritized seven national key biodiversity areas (KBA) (Metropolitano Natural Park, Cerro Gaital Natural Monument, Camino de Cruces National Park, Altos de Campana National Park, Bahía de Chame Multiple Use Area, San Lorenzo Protected Forest and Landscape, Soberanía National Park) and

one subnational (Cerro Guacamaya Water Reserve) PA under the System of Nationally Protected Areas (SINAP). Eleven (11) of the 57 KBAs [7] of the country are in the project landscape, six of which are part of the project's prioritized PAs. Additionally, two crucial KBAs in the project scope, Panama Canal West Bank and Santa Rita, have no protection category.

7. The CHCP is a critical habitat for migratory birds and other wildlife, contributing to global biodiversity conservation efforts. In the CHCP, there are 211,285 ha of forests, including stubble and shrub vegetation (61% of the watershed), and PAs occupy 134,746 ha (39% of the watershed); between 2012 and 2021, there were net gains of 11,011 ha (3% of the watershed)². The region's biodiversity is notable, the Panama Canal West Bank with the broader Canal Watershed being home to a significant portion of Panama's fauna, including 160 mammal species (59% of Panama's total), 650 bird species (67%), 93 amphibian and 98 reptile species, 329 fish species. 150 species are protected due to their risk of being threatened⁷.

8. The critical biodiversity contained in Panama's SINAP has long been threatened by habitat fragmentation due to pressures on their buffer zones from productive activities described below. Habitat fragmentation from such activities also threatens the broader efforts in the Mesoamerican Biological Corridor to maintain connectivity along cross-border biological corridors.

9. Environmental problems, root causes and threats: The "bridge" faces many environmental issues, some of which are significant global environmental challenges. Key drivers for the resulting environmental problems include socioeconomic conditions, climate change and climate variability, and governance conditions. These include: (i) Forest degradation: driven by agriculture, logging, mining, and urban development leading to reduced forest cover, resulting in **biodiversity loss, habitat loss and fragmentation**, affecting carbon sequestration capabilities, soil erosion, and reduced water quality and availability; (ii) Land degradation: caused by unsustainable land use practices, such as slash-and-burn agriculture and overgrazing and traditional livestock and leading to **reduced** productivity and **ecosystem services**, such as soil fertility, water regulation, and carbon sequestration; and (iii) Soil and water pollution: In areas adjacent to PAs, including soil, river and sea waters, is caused by poorly managed domestic, municipal and industrial waste, as well as agrochemical run-off [8]. In addition, pollution and habitat fragmentation are compounded by regulated and unregulated mining, hydroelectric dam construction, and infrastructure expansion. See Figure 2 below for details on underlying system drivers, root causes, threats, and resulting problems.

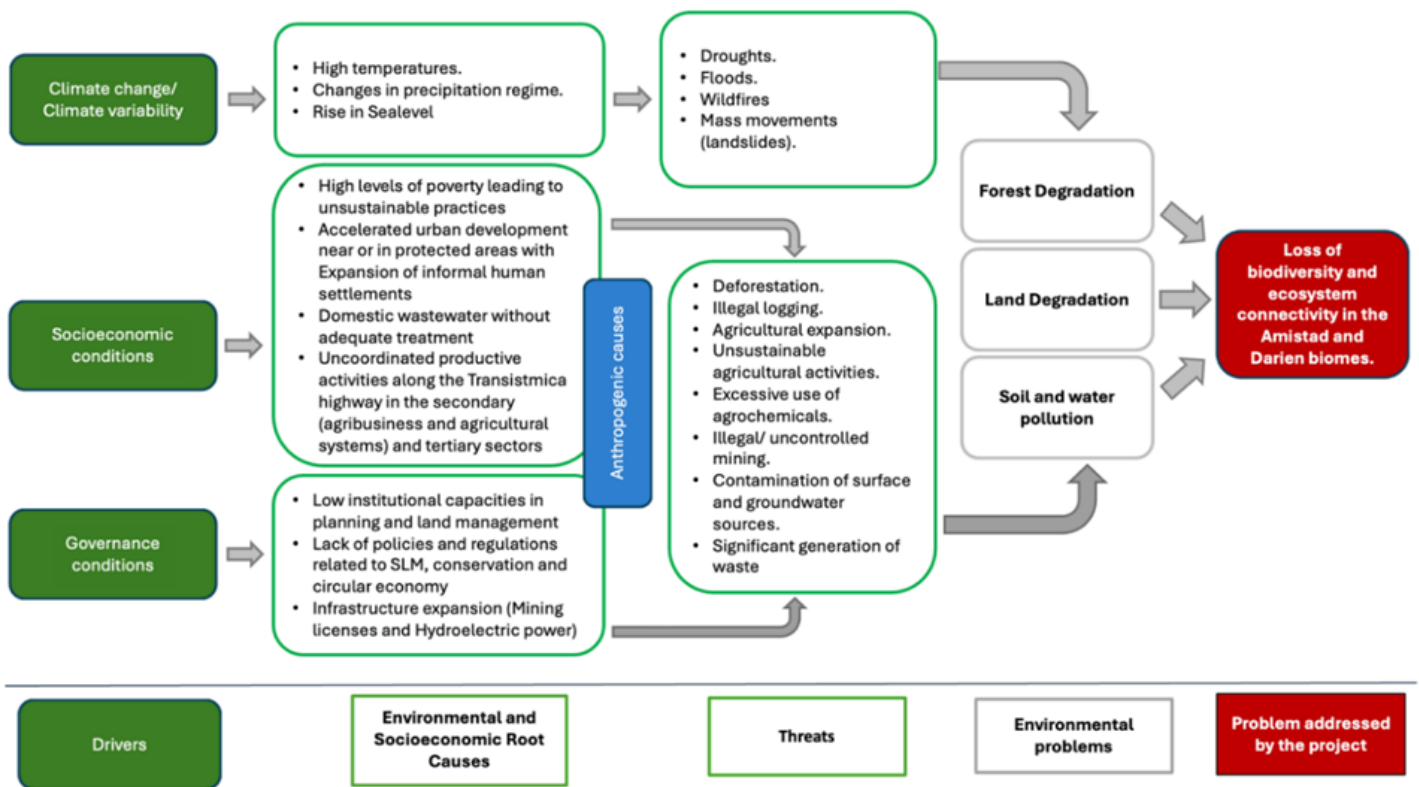


Figure 2: Underlying system drivers, root causes, threats and resulting problems.

10. **Socioeconomic conditions.** The provinces of Panamá, Panamá Oeste, Colón, and Coclé each showcase distinct socioeconomic profiles. Panamá Province, the economic hub with a GDP per capita of \$13,000, boasts advanced infrastructure and high development levels, including widespread access to electricity (99.7%), water (95%), and sanitation (88%), but struggles with urban challenges like air pollution and waste management. Panamá Oeste, experiencing rapid urban expansion with a GDP per capita of \$10,500, faces deforestation and biodiversity loss, while offering robust access to utilities and a slightly higher poverty rate at 18.3%. Colón, with important economic zones but a high poverty rate of 39.2% and the lowest utility access among the provinces, grapples with industrial pollution and environmental issues. In contrast, the rural and agricultural Coclé, with a GDP of \$7,600 and higher environmental challenges, has 97.5% electricity access and faces issues like land degradation and river pollution, highlighting the diverse challenges and development needs across these regions [9]

11. **Gender and ethnic inequalities** underscore significant socio-economic issues in Panama. 50% of rural women do not have their income, in contrast to 20% of rural men. The 2018 Poverty Femininity Index highlights the severity of this inequality, with figures standing at 128.1 for extreme poverty and 122.5 for general poverty among rural women. These disparities manifest across various domains, including education, employment, housing, access to essential services, and internet connectivity. Employment data reveals that only one in four rural women are fully employed, with 61.6% facing part-time or underemployment scenarios. Furthermore, property ownership among women is notably low, with just 29,109 titles issued between 1904 and 2021, significantly impacting their autonomy and food security. Additionally, indigenous people (12.3% of the population) experience a poverty rate six times that of non-indigenous groups, with 70% living in the lowest income quintile; and, despite higher levels of education among Afro-descendant women, they face poor living conditions, a significant gender employment gap, and obstacles in accessing higher education and the labor market. Socioeconomic disparities are especially pronounced between urban and rural areas, with the latter, including indigenous regions, heavily reliant on agriculture and grappling with lower incomes, educational opportunities, and socioeconomic mobility.[10.11]

12. **Climate Change and Climate Variability.** The impact of changes in rainfall patterns, temperature increases, and sea level rise due to climate change on PAs in Panama is significant, with 72 protected zones, some of which are particularly vulnerable to climate change effects. Key areas affected include the Matusagaratí lagoon, which is heavily impacted by temperature increases, precipitation variability, and land use changes. The Chagres watershed, crucial for water circulation in the CHCP and for providing drinking water to Panama City, has suffered from temperature increases, evapotranspiration, heavy storms, and deforestation over the last decade. Additionally, due to temperature and precipitation variability, the Parque Internacional La Amistad faces substantial impacts on its marine ecosystems [12]. In addition, climate change threatens economic growth and disproportionately affects the most vulnerable. IPs in coastal regions face additional climate-related challenges; for example, members of the Guna ethnic group relocated [13] from their ancestral islands to the mainland due to rising sea levels and other climate hazards. On the other hand, the rise of sea level has generated the progressive disappearance of part of the geography of the Caribbean and Pacific regions, the salinization of aquifers, and the loss of biodiversity. Additionally, the frequency and intensity of El Niño and La Niña events are expected to change due to global warming with significant implications for Panama's climate, ecosystems, and socioeconomic conditions[14] According to the vulnerability index to Climate Change for Panama and supporting maps [15] most of the townships in the project area present medium to high vulnerability indices. Nature-based adaptation actions are vital tools to strengthen sustainable land use and address the effects of climate change, however there is limited experience in the application of said actions.
13. **Governance conditions.** Currently, no landscape-level vision considers connectivity and harmonization of conservation and production policies, laws, and regulations. Hence, there is a fundamental lack of integrated planning efforts without policies recognizing and accommodating connections and dependencies between natural and productive systems. In addition, there is limited coordination between government institutions and their investments and programmes in the Bridge area, making it challenging to align economic activities with biodiversity conservation goals effectively. Despite the enormous efforts made mainly by the national government, through the MiAMBIENTE, and international and local organizations favoring biodiversity, progress has been limited. Several weaknesses need to be addressed, including the articulation of the National Biodiversity Strategy and Action Plan (NBSAP) update (in process as this ProDoc is being drafted); improving institutional capacities for biodiversity management; generating knowledge, awareness, and appreciation of biodiversity, primarily through formal and non-formal environmental education; incorporating the different economic sectors into biodiversity planning and mainstreaming and to contribute to biodiversity efforts; and promoting the sustainable use of biodiversity[16]. Additionally, there is an Interinstitutional Commission of the Panama Canal Watershed (CICH) that encompasses different organizations and coordinates activities to ensure sustainable management and conservation of the Canal's basin resources, preventing effort duplication and managing development initiatives through national and international funding [17] and the Consultative Councils of the Panama Canal Watershed (CCC) include local leaders, environmental group representatives, NGO members, and local authorities, and work closely with Local Committees from each sub-basin to represent community needs [19]
14. **Barriers.** To tackle the before outlined development challenge, several key barriers need to be addressed, including (i) governance and institutional barriers, (ii) technical capacities barriers, and (iii) sustainable development barriers.

Governance and institutional barriers:

15. **Weak governance.** The fragmentation of institutional responsibilities and the lack of coordinated management strategies among government institutions, including the MiAMBIENTE, hinder practical conservation efforts. These governance challenges lead to inefficiencies in implementing policies and projects to preserve the watershed's ecological integrity and facilitate environmental connectivity. Furthermore, IPLC people have little opportunity to participate in current governance mechanisms.
16. **Insufficient implementation of existing laws and regulations.** Due to the government's limited financial resources, lack of inter-institutional coordination, and limited capacity, implementing and enforcing laws and regulations has been inadequate. The plans and strategies to implement these laws do not adequately integrate biodiversity conservation measures or fully embrace CE principles [20]. In addition, there is limited participation of local actors in the development and implementation of these plans and strategies due to a lack of awareness and capacity, as well as a lack of effective communication channels. The implementation and enforcement of legal and policy frameworks for conservation, ecosystem restoration and climate change in Panama, as in many other countries, face these and other obstacles.

Technical capacities barriers:

17. **Limited management capacity of protected areas.** Each protected area prioritized in the landscape has unique characteristics and management challenges, including limited budget availability, staffing shortages, infrastructure needs, and lack of -or outdated- management plans. These capacity limitations are evident in the recurrence of illegal activities, deforestation, forest fires, unregulated public use, and other challenges.

Sustainable development barriers:

18. **Lack of sustainable land management.** The Integral Diagnostic of the Panama Canal Basin[21] highlights significant concerns regarding the lack of SLM within the Panama CHCP. Two critical issues are emphasized: (i) Poor agricultural practices and low technification; (ii) Prevalence of subsistence farming.

19. Lack of sustainable alternative livelihoods for local communities. Prevailing subsistence agriculture is often practiced with little or no consideration for biodiversity and the integrity of natural ecosystems. The lack of sustainable livelihood alternatives for local communities poses a significant obstacle to implementing biodiversity conservation, restoration and climate change related policies and programs. This challenge manifests in various ways, including: (i) Dependence on unsustainable activities, (ii) Limited access to markets and capital, (iii) Gaps in training and education, (iv) Infrastructure and technology limitations.

20. Baseline scenario and associated projects. Panama has strengthened its environmental governance structure aiming to protect national resources and biodiversity of global importance. Panama is recognized for promoting the importance of biodiversity in its culture and traditions and is committed to advance towards the conservation of biodiversity and maintain a leading role in contributing with the Sustainable Development Goals (SDGs) and the Global Biodiversity Framework. In 2015, MiAMBIENTE assumed the role of the National Environment Authority [22], achieving its direct representation in the National Cabinet Council, the Inter-Agency Consultative Commission on Environment, and the Interinstitutional Environment System. The budget allocation in 2019 represented only 0.49% of the national budget, and the financial gap of PAs is close to US\$ 20 million annually, posing a significant challenge to maintaining the national biodiversity at acceptable levels. Furthermore, biodiversity constraints and management deficiencies in areas outside PA are also identified in approximately 90 percent of the country's territory and there is need to consolidate the network of PAs and improve their connectivity.

21. MiAMBIENTE, with the support of the Private Nature Reserve Network (RRNP) [23], drafted a Resolution establishing the Procedure for the identification and Registration of terrestrial or aquatic polygons within the framework of Other Effective Area-Based Conservation Measures (OECMs). The resolution introduces OECMs as in situ biodiversity conservation tools outside traditional PAs. This approach includes the involvement of indigenous communities, private properties, and other stakeholders in biodiversity conservation. The document concludes by establishing procedures for registering OECMs, including eligibility criteria and the necessary steps for registering and certifying these territories. Therefore, private nature reserves are also an important part of the PAs network and should be considered an opportunity to involve public and private partners in the conservation and management of PAs and OECMs. As laid out in Panama's National priority actions, there is opportunity to focus on PAs and OECMs management for enhancing and maintaining connectivity. Increasing connectivity increases the effectiveness of PAs and OECMs and reduces the impacts of fragmentation.

22. The associated baseline project investments upon which the project in Panama will be built are diverse and include various ongoing initiatives, projects, and commitments including to key multilateral environmental agreements such as the NBSAP, land degradation neutrality (LDN), and Nationally Determined Contributions (NDC), which will be supported through policy-level interventions and on-the-ground demonstrations. The country's commitment to the 30 by 30 initiative, which aims to designate at least 30% of all land and oceans as PAs by 2030. This initiative, led by MiAMBIENTE and supported by this project, will focus on mapping, establishing, and improving the management of PAs and OECMs. The project will coordinate closely with ongoing efforts, such as the 'Support for the Conservation and Management of Cultural and Natural Heritage' (PN-L1146) implemented by the Inter-American Development Bank (IDB), which aims to strengthen SINAP and directly support the management of seven prioritized PAs in the landscape. The proposed project will enhance Panama's PA management effectiveness and OECM establishment, thereby improving connectivity and reducing fragmentation impacts. This will contribute to the sustainability of existing and planned investments in management, conservation, and restoration.

23. Other relevant baseline investments and projects include:

- Integrated Management of the Panama Canal Watershed Project, executed by the Panama Canal Authority (ACP) with UNDP's support, this project serves as a proven model for sustainable development and contributes to the baseline investments.
- Panama Mesoamerica Forest IP Project, Critical Forests Biome of Panama - Collaborative Conservation of the Darién, to be implemented by the UN Food and Agriculture Organization (FAO) in the Darien region with GEF-8 financing and a total budget of around US\$ 30 million.
- An important partner in project implementation, the Smithsonian Tropical Research Institute (STRI) [24] project in the CHCP (700 Ha) aims to explain how different landscapes common to the rural tropics affect ecosystem services amidst population growth, ecosystem degradation, and climate change.
- UNDP Panama Accelerator Lab[25] has been working to understand how strengthening solid waste management practices in rural municipalities can help create pathways to optimize national recycling strategies and work towards a CE. Using ethnographic and collective intelligence methods, the Lab collaborates with different partners and communities, mapping rural waste value chains, identifying marine waste origins, and involving the private sector in closed-loop recycling initiatives [26].

- UNDP and MiAMBIENTE, with funding from the World Economic Forum will implement between 2024-2025 the 'National Plastic Action Platform for Panama' as part of The Global Plastic Action Partnership[27] a multi-stakeholder platform to implement actions to reduce plastic pollution and waste into concrete action.

24. **Stakeholders.** There are a wide range of stakeholders who are engaged in the BRIDGE area. The role of each of these groups and their project role is outlined in detail in the Project Description section. Each stakeholder and their role in the project is introduced below.

Table 1: Key Stakeholders and their roles and responsibilities.

Partner	Roles and responsibilities
Ministry of Environment (MiAMBIENTE)	<p>MiAMBIENTE is responsible for formulating, implementing, and monitoring national environmental policies to ensure the sustainable use of natural resources. This includes preserving PAs, forests, and endangered species. The ministry also oversees compliance with environmental laws and environmental impact assessments for projects that may affect the natural environment and promotes environmental education and public awareness.</p> <p>MiAMBIENTE is the project's executing agency and will collaborate closely with other governmental entities in its four Components. This involves establishing effective coordination mechanisms between relevant authorities and local communities, promoting their active participation in decision-making, and implementing conservation and sustainable development actions. Additionally, it focuses on facilitating the exchange of information and experiences among all parties involved. This collaborative approach aims to strengthen cooperation and optimize the project's positive impact on the community and the natural environment.</p>
Ministry of Agricultural Development (MIDA)	<p>The MIDA's main objective is to regulate, coordinate, and provide agricultural extension services to the agricultural sector and the general population. It will coordinate with MiAMBIENTE on all four project components through its regional agencies. The Environmental Unit of MIDA has additional responsibilities, including issuing regulations that govern agricultural activities, ensuring compliance through coordination with other government institutions, developing internal control systems to minimize environmental risks associated with agricultural activities, formulating specific ecological quality standards for the agricultural sector, and coordinating with other entities to ensure compliance with current environmental regulations. Moreover, it is part of the Interinstitutional Environmental System (SIA) for the country's comprehensive and coordinated environmental management.</p>
Panama Tourism Authority (ATP)	<p>The ATP leads the country's tourism industry, overseeing destination planning and management and developing and promoting tourism products at the national level.</p>
Panama Canal Authority (ACP)	<p>The ACP manages, maintains, utilizes, and conserves the water resources in the CHCP. To achieve this, the ACP will coordinate with each area's specialized governmental and non-governmental organizations. The ACP will approve strategies, policies, programs, and projects that impact the CHCP through the CICH, which it chairs. This commission will coordinate the activities of the various governmental and non-governmental organizations involved in the project's four components.</p>
ARAP (Panama Aquatic Resources Authority)	<p>ARAP is the highest state authority responsible for ensuring compliance with and enforcement of national laws and policies related to fishing and aquaculture. In addition to its regulatory function, ARAP handles complaints on environmental issues within its jurisdiction and provides guidance and advice in compliance with current environmental regulations. Furthermore, it collaborates closely with other institutions' departments, offering support and advice to promote effective and sustainable management of the country's aquatic resources.</p>
Municipalities and local governments	<p>Municipalities and Municipal Councils have diverse functions, including defending and promoting forest wealth, establishing agricultural farms or experimental fields in collaboration with the National Government, promoting small industries, and encouraging cooperative formations and other production organizations. Additionally, they collaborate with competent authorities on water management projects, such as watercourse rectification and reservoir and irrigation channel construction.</p>
The Private Natural Reserves Network (RRNP)	<p>The RRNP in Panama is an initiative to promote the conservation of biodiversity and ecosystems by protecting natural areas by private landowners. These reserves are privately owned land areas designated and managed to conserve the flora, fauna, and natural resources within them. The RRNP facilitates collaboration among landowners, environmental organizations, and the government to promote the conservation and sustainable management of natural resources throughout the country.</p>
<ul style="list-style-type: none"> • Technological University of Panama (UTP) • University of Panama (UP), Coclé, Regional • Smithsonian Tropical Research Institute (STRI) 	<p>Academic and research institutions play pivotal roles in the project's development and implementation. They offer specialized knowledge, technical proficiency, and essential resources for tackling specific challenges. Their active and dedicated engagement across various project phases greatly enhances its success and goal attainment. The insights and expertise generated will be shared with stakeholders across different regions of the country and productive sectors. This dissemination process will foster the replication and scaling of biodiversity-friendly business practices at national, regional, and global scales.</p>

<ul style="list-style-type: none"> • GEMAS [28] • Metropolitano natural Park Patronage [29] • National Association for Nature Conservation (ANCON) • Fundación Yaguará[30] • SUMARSE [31] • Foundation for Natural Resources Conservation (Natura Foundation) [32] • Afro-descendant organizations • Producer associations or organizations (e.g., coffee, cocoa) 	<p>NGOs are essential strategic allies in the project, providing a unique combination of deep local presence, specialized technical expertise, and resource mobilization capacity. Their involvement facilitates designing and implementing culturally sensitive and contextually relevant programs and pursuing innovative solutions to project challenges. Moreover, they play a key role in monitoring and evaluating progress, ensuring transparency and accountability while fostering community engagement and local ownership of initiatives.</p>
<ul style="list-style-type: none"> • Ella Drúa Emberá • Ella Purú Emberá • Organización Juventud Indígena de Panamá • CONAMUIP (National Coordinator of IPs of Panama) • Olowaigli_Kuna, CONAMUIP represents explicitly the Kuna indigenous community within CONAMUIP • COONAPIP (Coordinator of Indigenous Organizations of the Panama Canal Basin): 	<ul style="list-style-type: none"> • The Emberá communities of Emberá Ella Drúa and Ella Puru, established approximately in 1975 in the CHCP, alongside five others along the Chagres River and Lake Gatún, face challenges like resource loss, urban expansion, and economic pressures. However, they maintain a resilient bond with their natural surroundings, relying on them for sustenance, and remain dedicated to safeguarding their cultures, traditions, and ancestral territories. Despite living near urban centers, they uphold their language, music, dances, and profound reverence for nature. Transitioning from jungle habitats to protected areas has led to adjustments in their economy, with sustainable tourism emerging as a significant income source. • Panamanian Indigenous Youth Organization: This organization represents and advocates for the interests of indigenous youth in Panama. Its main goal is to promote the comprehensive development of indigenous youth and defend their rights within Panamanian society. • CONAMUIP: This organization brings together Panama's IPs to promote their collective, cultural, territorial, and environmental rights. It also works to defend indigenous territories, preserve culture, and promote sustainable development in indigenous communities. • Olowaigli_Kuna, CONAMUIP: The Kunas are one of Panama's largest and most prominent indigenous groups. This organization works to protect their rights and promote their development as a community. • COONAPIP: This organization brings together different indigenous communities in the Panama Canal Basin. It aims to defend these communities' rights in the face of environmental and social impacts arising from the construction and operation of the canal and promote their comprehensive development.

25. **Changes from PIF.** Changes made since the PIF include: (i) merging of PIF Outcome 1.4 with Outcome 1.3, and merging of PIF Outcome 4.2 with Outcome 4.1; (ii) separation of PIF Output 2.1 into two Outputs, with the new Output 2.1.5 focusing on the implementation of an Ecosystem Restoration Program; (iii) Project rationale has been reformulated to develop a problem tree that provides a connection between the several problems in the project area; (iv) The ToC diagram has been updated, it now includes a clear vertical logic between Components, Outcomes and Outputs. The Toc also states how the outputs will address the identified barriers. Finally, the assumptions have been updated to outline how they influence the logical pathway; (iv) circular economy principles have been outlined in the context of Panama’s legislation, a more detailed description of its integration with other policies, strategies and plans under Component 1, and its relevant application in the project area under Component 3; (v) Component 4 has been reformulated to address comments from STAP; (vi) The risk section has been revised and mitigation actions have been strengthened including detail about the proposed measures; (vii) A stakeholder Engagement Plan has been developed and is included as Annex; (viii) the target ambition for GEF Core Indicator 6 has been reduced from 62,861,024 to 20,099,199 tCO₂e based on a detailed analysis during the PPG phase. This reassessment considered the scope and scale of activities, covering 484,265 hectares of terrestrial area, and the specific greenhouse gas (GHG) emissions reduction potential of each activity. The initial estimates included various activities such as improved management of forests and production landscapes, and restoration of degraded land, without

fully accounting for the specific GHG reduction potential. Additionally, the change in management within protected areas does not necessarily result in significant GHG emission reductions, which was initially overestimated. The revised estimates also took into account national GHG mitigation potential estimates and commitments consulted with climate change specialists from MiAMBIENTE. This adjustment ensures that the revised figures reflect a more accurate and conservative estimation of the project's realistic GHG mitigation potential in alignment with Panama's NDC; (ix) Cofinancing has been covered 100% for now by MiAMBIENTE, given the change of government that took place as this project concept was being developed. However, additional co-financing, including from the private sector, is being mobilized. Several key stakeholders have expressed interest during PPG consultations, including the Industrial Union of Panama, the National Council of Private Enterprise, associations of shade coffee producers within the Canal Basin, and entrepreneurs in the sustainable tourism sector, including the Panamanian Association of Sustainable Tourism. We expect to receive additional co-financing letters from some of these stakeholders before the project's endorsement or at the start of implementation.

[1] CBD, Panama-Country Profile in <https://www.cbd.int/countries/profile?country=pa#facts>

<https://pancanal.com/wp-content/uploads/2021/09/Informe-2023EspFINAL.pdf>

[2] ACP, 2023, Annual Report, <https://pancanal.com/wp-content/uploads/2021/09/Informe-2023EspFINAL.pdf>

[3] La Estrella de Panamá. April 10, 2024. [Nearly 2,000 fewer ships crossing through the Panama Canal by March 2024.](#)

[4] <https://wtcc.org/news-article/contribucion-del-sector-de-viajes-y-turismo-de-panama-representara-el-2016-4-del-pib-nacional-y-continuara-superando-los-niveles-prepandemia>

[5] <https://www.atp.gob.pa/estadisticas-e-informacion-del-mercado/>

[6] ACP, 2022. Indicative Environmental Land Use Plan (PIOTA) of the CHCP

[7] Angehr, 2007, Key Biodiversity Areas in Panama: Final Report

[8] MiAMBIENTE, 2018. National Biodiversity Strategy and Action Plan 2018-2050, 134.

[9] UNDP, 2024. Panama's National Human Development Report

[10] Ministry of Economy and Finance. 2013. [Social Atlas of Panama](#)

[11] S. Cecchini, R. Holz y A. Rodríguez Mojica, 2020, "The matrix of social inequality in Panama"

[12] Cárdenas Castillero, Gustavo, Steven Paton, Rodrigo Noriega, y Adriana Calderón. 2022. «The Dynamics of Climate Change Science and Policy in Panama: A Review.»

[13] [Incremento nivel del mar amenaza a 63 poblaciones en Panamá - Diario Libre](#)

[14] Castellanos, E. et al, 2022: Central and South America. In: *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*

[15] MiAMBIENTE, 2021, *Climate Change Vulnerability Index of the Republic of Panama*

[16] MiAMBIENTE, National Biodiversity Strategy and Action Plan 2018-2050, 2018, 134.

[17] <http://www.cich.org/QueEs.html>

[18] Law 19, June 1997, On the organization of the Panama Canal Authority

[19] CICH. 2008. IMMEDIATE ACTION PLAN II for human development, production support and environmental management in the Panama Canal Watershed

[20] In Panama, Law 33 of 2018 which establishes the Zero Waste Policy, defines the circular economy as the non-linear economy, based on the principle of closing the life cycle of products, services, waste, materials, water, and energy. It is a low-carbon economy that generates new jobs.

[21] IDB, 2022, Integral Diagnostic of the Panama Canal

Watershed, http://www.cich.org/Publicaciones/01/PIOTA/Diagnostico_CHCP.pdfhttp://www.cich.org/Publicaciones/01/PIOTA/Diagnostico_CHCP.pdf

[22] Law 8, March 2015, that creates the Ministry of Environment, <https://www.miambiente.gob.pa/download/ley-8-2015-crea-ministerio-de-ambiente/><https://www.miambiente.gob.pa/download/ley-8-2015-crea-ministerio-de-ambiente/>

[23] See <https://reservasnaturalespanama.org/><https://reservasnaturalespanama.org/>

[24] See <https://stri.si.edu/es/estacion/agua-salud><https://stri.si.edu/es/estacion/agua-salud>

[25] See <https://www.undp.org/acceleratorlabs/undp-panama-accelerator-lab>

[26] See <https://geosmart.undp.org/arcgis/apps/storymaps/stories/943a0e2a54d64d74b1cbc384d6f74b39><https://geosmart.undp.org/arcgis/apps/storymaps/stories/943a0e2a54d64d74b1cbc384d6f74b39>

<https://geosmart.undp.org/arcgis/apps/storymaps/stories/943a0e2a54d64d74b1cbc384d6f74b39>

[27] See <https://www.globalplasticaction.org/home><https://www.globalplasticaction.org/home>

[28] See <https://www.gemas.org.pa/>

[29] See <https://parquemetroolitano.org/patronato/>

[30] See <https://www.yaguarapanama.org/>

[31] See <https://www.sumarse.org.pa/>

<https://www.globalplasticaction.org/home>

[32] See <https://naturapanama.org/natura/>

B. PROJECT DESCRIPTION

This section asks for a theory of change as part of a joined-up description of the project as a whole. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF’s policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the guidance document. (Approximately 3-5 pages) see guidance here

26. **Theory of change (TOC).** The GEF-supported Project Alternative responds to the development challenge by systematically addressing the barriers described above, as presented in Figure 3, the TOC of the project:

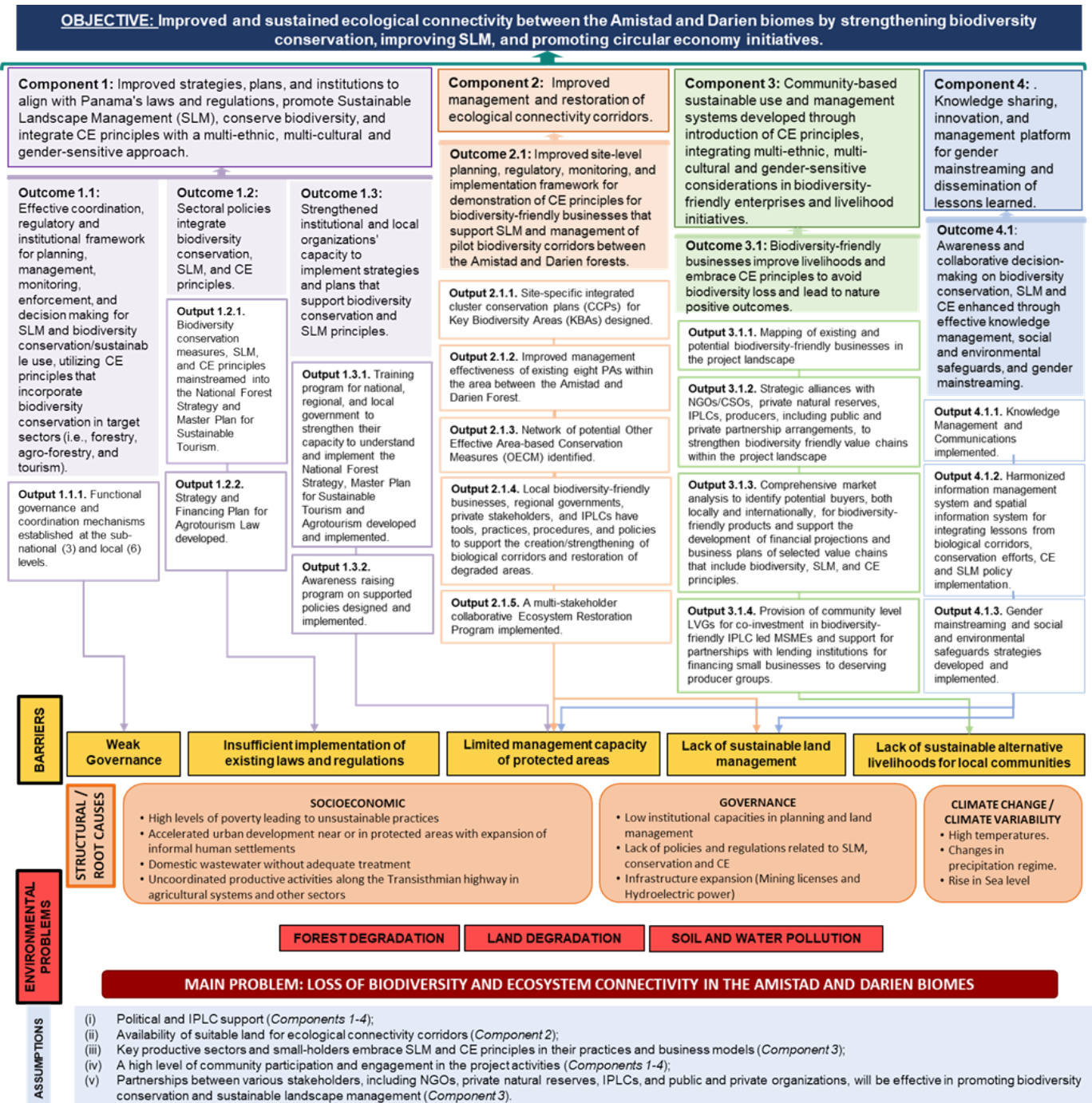


Figure 3: Theory of Change diagram.

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27. The **project objective** is to achieve improved and sustained ecological connectivity between the Amistad and Darien biomes by strengthening biodiversity conservation, improving sustainable land use, and promoting circular economy initiatives.
28. The project will establish an integrated system of conservation and sustainable management of natural resources, including biodiversity, in the region connecting the Amistad and Darien rainforests in Panama.
29. The project will adopt **four main strategies** (project components):
- I. Improving policies and regulations and strengthening the capacities of relevant institutions to promote sustainable landscape management, biodiversity conservation, and circular economy principles.
 - II. Managing and restoring ecological connectivity corridors through local planning and biodiversity-friendly practices.
 - III. Support local biodiversity-friendly enterprises, promoting sustainable land use and conservation, while actively involving IPLCs in decision-making processes.
 - IV. Knowledge sharing, innovation, and management platform for gender mainstreaming, and dissemination of lessons learned
30. The project constitutes an alternative to the current status quo under each component as follows:
31. Component 1 focuses on policy enhancement and will: (i) Improve regional and local coordination at the watershed level. (ii) Strengthen institutional capacities of key Government Entities (i.e., MiAMBIENTE, MIDA, ATP, ACP, the Municipalities^[33]² in the project area^[34]³, local environmental governance structures^[35]⁴, indigenous authorities^[36]⁵, etc.) and also, (iii) Facilitate the effective implementation and updating of crucial policies and laws such as (a) National Forestry Strategy, (b) Sustainable Tourism Master Plan and, (c) Agrotourism Law, -developing an implementation strategy and financing plan-, through mainstreaming biodiversity and including SLM and CE approaches in these policies.
32. Component 2 focuses on improving conservation, management and ecological restoration to enhance connectivity through establishing biological corridors. To achieve this, the component will work on: (i) improving the planning, regulation, and monitoring of PAs by developing cluster management and conservation plans, and (ii) supporting the formalization of OECMs through an efficient identification and registration procedure, incentivizing investments in forest conservation and restoration.
33. Component 3 focuses on working with IPLCs in the intervention areas. Strategies will be implemented to: (i) improve the management of natural resources by rural communities and (ii) promote bio-enterprises that integrate CE approaches. This component will enhance alternative biodiversity-friendly livelihoods for rural IPLCs, aiming to reduce pressure on natural resources, regenerate nature, and optimize inputs by reducing, recycling, reusing, and adding value to waste. This component complements the restoration and improved biodiversity management efforts.
34. Component 4 is a cross-cutting component, providing inputs for knowledge management, communications, gender mainstreaming, and the inclusion of social and environmental safeguards into project implementation.
35. **Assumptions.** As part of the TOC a series of assumptions have been formulated for this project, which include: (i) political and IPLC support; (ii) availability of suitable land for ecological connectivity corridors; (iii) key productive sectors and small-holders embrace SLM and CE principles in their practices and business models; (iv) a high level of community participation and engagement in the project activities; (v) partnerships between various stakeholders, including NGOs, private natural reserves, IPLCs, and public and private organizations, will be effective in promoting biodiversity conservation, restoration, and sustainable landscape management
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36. **Alignment with GEF-8 Programming Strategies and Country/Regional Priorities:** The proposed project is aligned with the GEF-8 Biodiversity and Land Degradation Focal areas as follows:
- I. **Biodiversity Focal Area (BDFA).** The project will utilize biodiversity and SLM principles to improve conservation, sustainable use and restoration of the biological corridor between the Amistad and Darien biomes (BDFA Objective 1). Specifically, the project will support effective management and ecosystem coverage of PA systems (BD 1-1), sustainable use of biodiversity (BD 1-2), and biodiversity mainstreaming into agro-forestry, forestry and tourism sectors (BD1-4) by:
 - Supporting the improvement of the forestry, agroforestry systems that are biodiversity positive;
 - Supporting the development of a stronger policy and regulatory framework that also supports CE approaches to sustainably use biodiversity, support sustainable tourism, and conserve forests;
 - Improving ecological connectivity between the Amistad and Darien forests through the development and implementation of effective biodiversity conservation measures; and
 - Creating economic opportunities for local communities through the promotion of biodiversity friendly enterprises.
 - II. **Land Degradation Focal Area (LDFA).** The project seeks to avoid, reduce, and reverse land degradation by applying SLM principles (LD-1). Specifically, the project will (i) support investments in agroforestry and forestry to support terrestrial landscapes to maximize output and support livelihoods, (ii) strengthen community based natural resources management through the principles of a CE to improve agro-ecosystem functions. SLM activities will help improve ecosystem connectivity and safeguard agro-biodiversity, improve soil health, and reduce greenhouse gas emissions by improving vegetative cover and accumulating soil organic matter.
37. In achieving the expected project outcomes, the project will also contribute to pursuit of the various SDGs and Global Biodiversity Framework (GBF) targets listed previously in section I, as well as Panama's UNDAF UNSDCF/CPD Outcomes 1.2, 2.1, 2.2, 3.2 and 3.3. It also aligns with UNDP's Nature Pledge to support countries to reach their target with the GBF.
38. **Expected Results.** This project aims to secure and enhance ecological connectivity between the Amistad and Darien biomes through strengthened biodiversity conservation, effective ecosystem restoration, enhanced SLM, and the promotion of CE initiatives. Under Component 1, the project will have established and improved functional governance and coordination mechanisms that incorporate a multi-ethnic, multi-cultural and gender-sensitive approach. For Component 2, improved management and restoration of ecological connectivity corridor would have been achieved through the comprehensive interventions of site-specific integrated cluster conservation plans, the improved management effectiveness of existing PAs (e.g., updated PAs management plans, increased staff capacity, and the integration of voluntary conservation reserves and/or conservation set asides), and OECM identification and recognition. This comprehensive set of interventions allows local governments and stakeholders to actively participate, ensuring the long-term sustainability of those interventions. The expected results of Component 3 complement those interventions under Component 2, establishing alternative livelihoods, while promoting biodiversity conservation, restoration and CE objectives through the creation/strengthening of biodiversity-friendly enterprises and associated value chains. Under Component 4, knowledge sharing, innovation, gender mainstreaming, and dissemination lessons learned will be achieved through the various knowledge products, communication events, awareness raising and local community monitoring of project interventions, which will allow for buy in of these interventions and its scale up in other parts of Panama. The improved management of landscapes and PAs a to benefit biodiversity will also have important climate adaptation and mitigation co-benefits, given the importance of Panama Canal watershed and its maintenance for local community livelihoods.
39. Agreement on intellectual property rights and use of the logo on the project's deliverables and disclosure of information. To accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper acknowledgement to the GEF. Information will be disclosed per relevant policies, notably the UNDP Disclosure Policy [37]and the GEF policy on public involvement [38]
- 40 **Global Environmental Benefits.** The project will help create or strengthen the management practices of biological corridors through the establishment and improved management of OECMs through voluntary conservation reserves and/or conservation set asides as well as IPLC conservation areas. Specifically, the project will work with local stakeholders to improve the management of at least 56,160 hectares (GEF Core Indicator 1.2) of PAs, restore 1,800 ha (GEF Core Indicator 3.2), and will help improve the management of nearly 488,465 hectares of productive landscapes

(GEF Core Indicator 4). This includes 460,328 ha of area of landscapes under improved management to benefit biodiversity (GEF Core Indicator 4.1); 22,137 ha of landscapes under SLM (GEF Core indicator 4.3); support for the development of integrated land use plans covering an area of 6,000 hectares of terrestrial OECMs supported in production systems (GEF Core Indicator 4.5). As a co-benefit of these activities, the project will avoid the emissions of 20,099,199 tons of CO₂-eq (GEF Core Indicator 6.5). Finally, the project will directly benefit 12,542 community members in the target area (GEF Core Indicator 11).

41. The project's **incremental value** lies in its comprehensive approach to addressing barriers hindering the management, conservation, and restoration of ecological connectivity between the Amistad and Darien forests. Without the project, the business-as-usual scenario would likely involve ongoing degradation of this ecological corridor due to unsustainable land use practices, inadequate conservation efforts, and limited coordination among stakeholders. This degradation would lead to further loss of biodiversity, reduced ecosystem services, and increased vulnerability to climate change.
42. In contrast, the project's sustainable land management plan and governance mechanisms aim to strengthen biodiversity conservation, promote climate change mitigation, and enhance resilience and adaptation. By mainstreaming SLM planning inside PAs and in the proposed corridors, and introducing CE principles, the project contributes to improved ecological connectivity, strengthened biodiversity conservation and restoration, and enhanced sustainable land use, all crucial for long-term conservation of biodiversity and promotion of sustainable development.
43. The project proposes to support the implementation of the Indicative Plan for Territorial and Environmental Planning (PIOTA)[39] developed by the ACP for the CHCP. This plan integrates a regional vision, ecosystems, and PAs, seeking to reforest degraded areas, enhance eight PAs, and restore ecosystems near water bodies. For ecological connectivity, the plan establishes ecological corridors and identifies critical natural elements to protect biodiversity within the CHCP.
44. Furthermore, the project will support the development of integrated strategies that include building local capacities, access to markets and financing for sustainable productive and livelihood alternatives, improving infrastructure and technology, and promoting active community participation and inclusive governance. These strategies will respect and value local communities' cultural traditions and social dynamics.
45. The project will use a multi-ethnic, multi-cultural, and gender-sensitive approach, mainstreaming these issues through engagement with partners and key actors with whom UNDP has ongoing projects. This approach aims to transform women's lives in terms of sustainable economic development by providing training, financing, and support for women's initiatives and value chains. A series of knowledge management publications and awareness events will support the achievement of these targets.
46. **Outline of project Components and Outcomes.** The GEF funding requested by the Government of Panama will be used to achieve the following Components, Outcomes and Outputs:
47. **Component 1: Improved strategies, plans, and institutions to align with Panama's laws and regulations, promote Sustainable Landscape Management (SLM), conserve biodiversity, and integrate CE principles with a multi-ethnic, multi-cultural and gender-sensitive approach.** (GEF financing: 1,254,359; Co-financing: 8,153,332)
48. **Outcome 1.1. Effective coordination, regulatory and institutional framework for planning, management, monitoring, enforcement, and decision making for SLM and biodiversity conservation/sustainable use, utilizing CE principles that incorporate biodiversity conservation in target sectors (i.e., forestry, agro-forestry, and tourism).** Based on ACP's[40] and other relevant experience, the project will support the strengthening of planning and coordination of conservation efforts at the local level through decentralization processes and water basin committees, following safeguards and gender policies under the Stakeholder Engagement Plan (SEP) and the Indigenous Peoples Plan (IPP) (Annex 8), and the Gender Action Plan (GAP) (Annex 10).
49. **Output 1.1.1. Functional governance and coordination mechanisms established at the sub-national (3) and local levels (6).** The project will support the strengthening of planning and coordination of conservation efforts at the local level of four Watershed Committees (CC)[41] and two Consultative Councils of the CHCP (CCC)[42] that have been preliminarily prioritized based on their location related to PAs and KBAs[43]. At the sub-national level, the Provincial Environmental Consultative Commissions (CCAP) [44] of Colón and Panama Oeste provinces and the CICH in the CHCP will be addressed. In addition, the project will promote establishing an inter-institutional and multi-sector platform in the province

of Coclé. A more definitive prioritization will be done at the start of implementation through additional consultations with the support of the project coordinator and other project staff. The indicative activities are:

- Activity 1.1.1a. Facilitate the creation of an inter-institutional multi-sector working group involving local government, NGOs, community leaders, and other stakeholders, that includes the development of a shared action plan to address conservation priorities in the region.
- Activity 1.1.1b. Conduct baseline assessments to identify the status and needs of the prioritized CCAP, CICH, CCC, and CC and develop and implement a Training Plan for its members.
- Activity 1.1.1.c. Hold an initial and at least 36 follow-up meetings to set goals, roles, and responsibilities for the inter-institutional multi-sector technical working group.
- Activity 1.1.1d. Develop and distribute guidelines and best practices for inclusive and innovative governance in conservation.

50. Outcome 1.2. Sectoral policies integrate biodiversity conservation, SLM, and CE principles. The project will support that biodiversity, SLM and CE concepts and principles are mainstreamed into the update and implementation of the National Forest Strategy 2020-2050 (NFS), the Master Plan for Sustainable Tourism 2020-2025 (MPST), and the Agrotourism Law 240. The update of the two policies will allow the NFS and MPST to comply with Law No. 287 on the rights of nature and the Zero Waste policy created by Law No. 33. The update and development of such policies will be through a participatory consultative process to account for all stakeholders' views. The project will conduct consultation and validation workshops in all three major regions of the country (west, central and east) to have a representation of all 10 provinces and five indigenous regions (*comarcas*), following safeguards and gender policies under the SEP and IPP (Annex 8), and the GAC (Annex 10).

51. Output 1.2.1 Biodiversity conservation measures, SLM, and CE principles mainstreamed into the National Forest Strategy and Master Plan for Sustainable Tourism. The project will support an assessment of the NFS to identify gaps in biodiversity conservation, SLM and the principles of CE. In the case of the NFS 2020-2050, the project will evaluate and review the Strategy 5 years after the Strategy was approved to evaluate how much progress has been made in its implementation. Regarding the STMP, the project will leverage the progress already made by the Government of Panama on its implementation and updating focusing its interventions on the destination level[45] by developing Community Tourism Strategy and Destination Action Plans focused primarily on promoting sustainable tourism practices that protect and integrate local biodiversity and ecological corridors. To do that, the project will support the following indicative activities

- Activity 1.2.1a. Review, assess, and update NFS and MPST policies.
- Activity 1.2.1b. Develop three Destination Action Plans[46] with their respective Tourism Destination Management Committees [47] and three biodiversity-friendly Community Tourism Strategies [48].
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52. Output 1.2.2. The Strategy and Financing Plan for Agrotourism Law developed will allow the implementation of the Executive Decree 11 of May 2022 [49] that establishes the criteria and procedures to guarantee and promote the development of agrotourism, in accordance with the provisions of Agrotourism Law

240, the project will support this process by mainstreaming SLM and Biodiversity in said Strategy and Financing Plan. The indicative activity is:

- Activity 1.2.2a. Development of Agrotourism Strategy and Financing Plan with biodiversity and SLM considerations.

53. Outcome 1.3. Strengthened institutional and local organizations' capacity to implement strategies and plans that support biodiversity conservation and SLM principles. National government institutions (MiAMBIENTE, MIDA, ATP, and ACP) and local organizations will have the necessary capacities to implement strategies and plans that support biodiversity conservation and SLM principles including through the NFS, MPST and Agrotourism Strategy, the NBSAP, and the National Biodiversity Finance Plan (NBFP). There will be improved awareness of the three policies supported under Outcome 1.2 to improve the application of these policies by national and local stakeholders and the public in general.

54. Output 1.3.1. Training program for national, regional, and local government to strengthen their capacity to understand and implement the National Forest Strategy, Master Plan for Sustainable Tourism and Agrotourism developed and implemented. The training program will support national government institutions (MiAMBIENTE, MIDA, ATP, ACP) and local governments and organizations to implement strategies and plans that support biodiversity conservation and SLM principles under the NFS, MPST and Agrotourism Strategy, and the National Biodiversity Strategy. The project will support the development of national level workshops; it will organize workshops for the regional offices of MiAMBIENTE and MIDA, and for provincial governments. Finally, it will organize local level workshops to improve the capacity of local governments and authorities. The indicative activity includes:

- Activity 1.3.1.a. Development of Training Program building on existing modules and platforms.
- Activity 1.3.1.b. Implementation of Training Program.
- Activity 1.3.1.c. Assessment of Training Program Effectiveness.

55. Output 1.3.2. Awareness raising program on supported policies designed and implemented for private landowners, IPLCs, civil society organizations, Community Based Organizations (CBOs), and local communities on the NFS, the MPST, and Agrotourism Strategy. The awareness program will consist of national and regional workshops for all three policies and an awareness campaign using social (digital) and traditional media, and where appropriate, using participatory communication processes to build narratives and solutions around each issue. The Awareness Program will identify potential partnerships and synergies with existing relevant and complementary awareness raising initiatives in the landscape.

- Activity 1.3.2.a. Development of Policy Awareness Program.
- Activity 1.3.2.b. Implementation of Policy Awareness Program.
- Activity 1.3.2.c. Assessment of Policy Awareness Program Effectiveness

56. **Component 2: Improved management and restoration of ecological connectivity corridors.** (GEF financing: 1,881,540; Co-financing: 12,227,500)

57. **Outcome 2.1. Improved site-level planning, regulatory, monitoring, and implementation framework for demonstration of CE principles for biodiversity-friendly businesses that support SLM and management of pilot biodiversity corridors between the Amistad and Darien forests.** This outcome ensures the ecological integrity and long-term viability of the region's landscapes by repairing historical

impacts, reducing and, where possible, eliminating threats, and restoring ecological processes. It involves improved participatory management, conservation, and restoration of the landscape between the Amistad and Darien forests. This effort will also enhance resilience and adaptation to climate change. To achieve these goals, the project will develop and train stakeholders on biodiversity conservation and the use of SLM and CE tools and concepts within the policy, strategy, and sustainable sectoral development context supported under Component 1.

58. The capacity built will promote connectivity in multi-use forest landscapes, combining improved sectoral management with biodiversity conservation and the restoration of ecosystem services. The management effectiveness of existing PAs, including KBAs across the *bridge* between the Amistad and Darien forests, will be improved. This will be complemented by reestablishing forest integrity to connect these PAs with newly recognized and created OECMs, such as voluntary conservation reserves, conservation set-asides, and IPLC conservation areas. Actions in this regard will be linked to MiAMBIENTE's National Gender and Climate Change Plan, aimed at promoting the effective participation of women and youth through networks of female leaders to create greater training opportunities.

59. Output 2.1.1. Site-specific integrated cluster conservation plans for key biodiversity areas designed. The project will implement participatory cluster-level support following the ESMF, GAP and IPP identify unique ecological, social, and economic contexts with the development of site-specific integrated cluster conservation plans (CCPs)[50] around prioritized KBA's and/or PA that include conservation, forest, land and agroforestry resource use and potential threats. For this, the project will coordinate with MiAMBIENTE and other key stakeholders (i.e., local governments and IPLCs) the process of delimitation of each cluster, including the boundaries of KBA's, PAs and OECMs. This analysis will be done with the support of the STRI, which will use artificial intelligence (AI) technology, local insight and on-the-ground experience to help prioritize conservation and restoration areas. The project will support having qualified personnel for monitoring, mapping and baseline management, definition of options for priority restoration areas, gathering of relevant information, technical sheets and execution of the Protected Area Management Effectiveness Tracking Tool (METT) methodology for the eight prioritized PAs. This integrated activity is designed to provide a solid foundation for sustainable conservation and restoration efforts, combining advanced technology, community involvement, and strategic planning to effectively manage and enhance natural resources and livelihoods within the project landscape. The project will support IPLC organizations, farmer/landowner cooperatives, and resource user groups, providing institutional capacity building activities and support. This will allow these local community institutions to implement the CCPs. Once the CCPs have been developed and the local community institutions have been strengthened (Activity 2.1.1c), the project will support the establishment of a robust framework for implementing, monitoring, and evaluating CCPs to ensure their effectiveness and adaptability over time. An implementation roadmap with clear timelines, responsibilities, and resources will be developed and will be included as part of the monitoring and evaluation (Component 5 - M&E) system with indicators for conservation, forest, land, agro-forest management, and livelihood outcomes. Indicative activities include:

- Activity 2.1.1a. Implement participatory cluster-level mapping.
- Activity 2.1.1b. Development of CCPs.
- Activity 2.1.1c. Implementation of capacity-building workshops to strengthen local community institutions, including IPLC organizations, farmer/landowner cooperatives, and resource user groups.
- Activity 2.1.1d. Implementation and monitoring of cluster conservation plans.

60. Output 2.1.2. Improved management effectiveness of existing eight PAs within the area between the Amistad and Darien Forest through a multi-ethnic, multi-cultural and gender-sensitive consultation process following SEP and IPP (Annex 8) and GAP (Annex 10). The project will assess the conservation characteristics of the eight prioritized PAs, including a survey to estimate the number of inhabitants, as input in assessing PA management and financing plans to determine the scope of the interventions needed to update or develop new and plans [51]Based on this assessment,

PA 5-year management and financing plans will be prepared for at least six PA. A single tool and related protocols will be developed, consolidating the criteria of the METT and the SINAP's PA Management Effectiveness Monitoring Programme[52] to respond to both national and international needs that require the use of METT (such as GEF). As part of this, the project will support training of PA staff to improve the management effectiveness of the eight PAs, METTs will be updated at MTE and TE. Indicative activities include:

- Activity 2.1.2a. Assessment of the management effectiveness of eight PAs.
- Activity 2.1.2b. Implementation of capacity building workshops for PA staff.
- Activity 2.1.2c. Development of monitoring protocols for threatened species and habitats.
- Activity 2.1.2d. Implementation of PA conservation management interventions.

61. Output 2.1.3. Network of potential Other Effective Area-based Conservation Measures (OECM) identified.

Parallel with Activity 2.1.1a, the project will implement an in-depth analysis to identify and prioritize areas with the potential to be designated as OECMs that will involve a multi-disciplinary approach encompassing ecological, social, and governance considerations tailored to conserve biodiversity outside of traditional PAs. The process will include defining clear objectives, gathering and analyzing relevant data, engaging stakeholders, conducting spatial prioritization, evaluating governance effectiveness, and developing monitoring and adaptive management plans (Activity 2.1.1a) focusing on the GEBs that represent conserving biodiversity in areas not covered by existing PAs, supporting sustainable management of natural resources, and contributing to global conservation targets. This Output will be coordinated with PAs and Biodiversity Directorate and Forestry Directorate at MiAMBIENTE and the GEF project "Panama Mesoamerica Forest IP Project: Critical Forests Biome of Panama - Collaborative Conservation of the Darién"[53] which will develop an analysis of the incentives for OECMs, as currently, there are only incentives for forest plantations. Indicative activities include:

- Activity 2.1.3a. Identification of priority areas to be considered as OECMs.
- Activity 2.1.3b. Develop a roadmap for OECM recognition and establishment (i.e. a catalog of incentives and sustainable models).
- Activity 2.1.3c. Support at least two (2) identified OECMs in the recognition and establishment process [54]

62. Output 2.1.4. Local biodiversity-friendly businesses, regional governments, private stakeholders, and IPLCs have tools, practices, procedures, and policies to support the creation/strengthening of biological corridors and restoration of degraded areas.

Under this Output, the project will support local stakeholders to support the creation and/or strengthening of biological corridors and restoration of degraded areas through Landscape Management Tools integrating a multi-ethnic, multi-cultural and gender-sensitive considerations. The project will help implement interventions such as micro conservation corridors, forest enrichment, live fences, agroforestry, etc., which will support the creation and/or strengthening of biological corridors and restoration of degraded areas. Indicative activities include:

- Activity 2.1.4a. Develop a technical guide for the design, officialization and consolidation of biological corridors in Panama.
- Activity 2.1.4b. Create detailed open-access toolkits that provide step-by-step guidance on implementing landscape management tools tailored to the specific needs and contexts of different stakeholders.
- Activity 2.1.4c. Systematization (manuals/guides, videos, tutorials, online courses, etc.) of existing modern and traditional best practices in landscape management in the tropical Mesoamerican context made available online and through printed and audiovisual formats.

- Activity 2.1.4d. At least two experiences and good practices exchange events between producers/small enterprises at national and/or regional level (such as symposiums, fairs, convivium's, practical workshops, etc.).
63. **Output 2.1.5. A multi-stakeholder collaborative Ecosystem Restoration Program implemented.** The project will utilize as a platform the already existing programs of MiAMBIENTE[55] ACP[56], STRI[57] and their partnerships with other partners (such as the French National Research Institute for Sustainable Development [5859]) to leverage resources, share expertise, engage stakeholders, ensure sustainability, and integrate scientific research with practical restoration efforts. Artificial Intelligence (AI) corridor planning tool [60]with a broader stakeholder engagement process will be utilized to provide decision support to determine where and how to restore the biological corridors in the Project area. Restoration nuclei or pilot sites will be established and used as demonstration sites for local stakeholders, students, researchers, among others, and attract further investment in key areas [61]. Restoration targets will be met by combining methods such as natural regeneration and enrichment planting, involving local communities and relevant stakeholders. Indicative activities include:
- Activity 2.1.5a. Conduct six technical missions and at least 12 participatory workshops to collect and validate information to prioritize restoration sites in the project area.
 - Activity 2.1.5b. Identify and select strategic locations for the establishment of restoration nuclei or pilot sites and develop detailed restoration plans for each site, incorporating scientific and local knowledge.
 - Activity 2.1.5c. Set up monitoring protocols to track the progress and impact of restoration activities at pilot sites and publish periodic reports on the outcomes and lessons learned from restoration efforts.
64. **Component 3: Community-based sustainable use and management systems developed through introduction of CE principles, integrating multi-ethnic, multi-cultural and gender-sensitive considerations in biodiversity-friendly enterprises and livelihood initiatives.** (GEF financing: 1,881,540; Co-financing: 12,227,500)
65. **Outcome 3.1. Biodiversity-friendly businesses improve livelihoods and embrace CE principles to avoid biodiversity loss and lead to nature positive outcomes.** This Outcome aims to empower IPLCs and local Micro, Small & Medium Enterprises (MSME) by supporting the development and strengthening of biodiversity-friendly enterprises. This includes adopting sustainable practices like avoiding harmful chemicals, using local materials and waste products, and adding value to waste. The project promotes business models that capitalize on local biodiversity as an economic asset, such as sustainable construction materials, sustainable forestry products & non-timber forest products, collection and processing of recyclable and/or up-cyclable materials, research & development, organic and non-organic waste conversion technologies, organic and sustainable food value chains, eco-tourism, agrobiodiversity produce, traditional art, handicrafts, etc. It ensures equal benefits and opportunities for women and men in a culturally sensitive manner.
66. Building on the leadership of around 380 rural and indigenous women involved in UNDP's initiatives, the project seeks to enhance women's economic leadership and autonomy through creating biodiversity-friendly enterprises. The project will collaborate with cooperatives, public and private banks to provide financial and administrative education for women leading biodiversity-friendly economic initiatives, aiming to improve access to capital and mobilize financing.
67. The project will support the establishment of strategic alliances for biodiversity-friendly MSMEs, incorporating biodiversity and CE principles to enhance conservation and management practices in the

landscape. This includes developing an inventory of existing and potential biodiversity-friendly businesses, preparing a realistic plan with a market study and financial projections, and collaborating with an organization already active on the ground. Additionally, a competitive Low Value Grant (LVG) mechanism will be established to support these ventures through innovative business plans combining technology, traditional approaches, biodiversity conservation, SLM, and CE principles.

68. Output 3.1.1. Mapping of existing and potential biodiversity-friendly businesses in the project landscape. This output aims to identify businesses that could adopt or enhance biodiversity-friendly and CE practices. The businesses will be categorized based on factors such as size, scope, stakeholder group, and their interest or potential to adopt sustainable, biofriendly, and CE approaches. Indicative activities include:

- Activity 3.1.1a. Develop inventory of existing and potential local biodiversity-friendly businesses and value chains.
- Activity 3.1.1b. Categorize them and scope their potential to embrace biodiversity friendly and CE principles in their business models.

69. Output 3.1.2: Strategic alliances with NGOs/CSOs, private natural reserves, IPLCs, producers, including public and private partnership arrangements, to strengthen biodiversity friendly value chains within the project landscape. Based on the results of output 3.1.1., the project will support the establishment of agreements and alliances with local MSME. Tools such as the UNDP Solutions Map [62] will support such a process. The indicative activity for this output is as follows:

- Activity 3.1.2a. Support the establishment of at least 12 strategic value chain alliances for biodiversity friendly and CE approaches at the local level.

70. Output 3.1.3. Comprehensive market analysis to identify potential buyers, both locally and internationally, for biodiversity-friendly products and support the development of financial projections and business plans of selected value chains that include biodiversity, SLM, and CE principles. The project will support two main actions: i) Development of a comprehensive survey to identify potential buyers, both locally and internationally, for biodiversity-friendly products. This will include a diagnosis of the potential for bio-efficiency and/or CE value chain approach. The analysis will identify existing and potential demand for such products and target potential physical and digital markets that could be accessed by the MSMEs. The analysis will also identify suitable areas for the installation of community recycling/up-cycling points through MSME/cooperative engagement, following environmental and social safeguards. ii) The project will support the development of business plans for selected MSMEs that include biodiversity-friendly friendly, SLM, and CE principles. These business plans will focus especially on strengthening forest product traceability and control systems as a central axis in the conservation of biomes. For agrotourism and sustainable tourism enterprises, the project will support the analysis and selection of appropriate national sustainability certifications such as MiAMBIENTE's Reduce Huella Programme[63] MIDA's Public Organic Products Certification[64], ATP's certifications and programs for Tourism Quality and Culture[65]. Indicative activities include:

- Activity 3.1.3a. Develop a comprehensive market analysis for value chains identified through output 3.1.2.
- Activity 3.1.3b. Develop at least eight (8) business plans with biodiversity and CE considerations for selected MSMEs.
- Activity 3.1.3c. Support at least 6 MSMEs in obtaining relevant national sustainability certifications.

71. Output 3.1.4: Provision of community level LVGs for co-investment in biodiversity-friendly IPLC led MSMEs and support for partnerships with lending institutions for financing small businesses to deserving producer groups. The project will support the provision of community LVGs for co-investment in biodiversity-friendly MSMEs. As part of this support, the project will provide training in biodiversity-

friendly and CE business models, use and maintenance of selected technologies, in coordination with MIDA, Panama Agricultural Innovation Institute (IDIAP), and academia. The project will also foster partnerships with lending institutions to facilitate access (i.e., de-risking) to finance for deserving producer groups. It will identify organizations focused on MSMEs to provide financial management and access to capital training for community groups, enhancing associativity for the development and strengthening of IPLC-led ventures with a gender focus. A competitive, safeguards-compliant selection criterion will be established to determine LVG recipients, ensuring equitable access for marginalized groups, including women, youth, and indigenous people. The project will also support access to digital markets for biodiversity-friendly enterprises and virtual payments for biodiversity-friendly goods and services.

72. Additionally, the project will build the capacity of local MSMEs to produce high-quality products that meet market demand and standards, and to develop biodiversity-friendly value chains that include CE principles such as zero waste. This support will involve evaluating and improving current practices to meet certification requirements and training local entrepreneurs in manufacturing and business management techniques. For example, the project will support the integration of forest products (i.e., non-timber and sustainably sourced timber) value chains with other sectors, promoting the expansion of benefits from forest residues (e.g., producing activated carbon from thinning residues, crushing thinning residues to produce shavings for furniture manufacturing, etc.). In general, this will be supported by partnerships with private sector companies, traders, and intermediaries experienced in marketing and selling biodiversity-friendly products. Indicative activities include:

- Activity 3.1.4a. Develop an LVG mechanism for IPLC-led MSMEs.
- Activity 3.1.4b. Deliver financial resources through LVG to at least 10 IPLC-led MSMEs.
- Activity 3.1.4c. Develop partnerships with lending institutions to facilitate access to capital (i.e. de-risking) for biodiversity friendly MSMEs.
- Activity 3.1.4d. Support at least eight (8) biodiversity-friendly value chains in implementing business plans developed under output 3.1.3.

73. **Component 4: Knowledge sharing, innovation, and management platform for gender mainstreaming, and dissemination of lessons learned.** (GEF financing: 1,066,206; Co-financing: 7,212,568)

74. **Outcome 4.1. Awareness and collaborative decision-making on biodiversity conservation, SLM and CE enhanced through effective knowledge management, social and environmental safeguards, and gender mainstreaming.** This outcome aims to document results and impacts to facilitate replication and scaling up across the Central American region. It includes a communication and inclusive knowledge management approach, promoting continuous learning and providing a foundation for scaling the project. It highlights the active role of women in each action. Under this outcome, the project will support knowledge management, communications, gender mainstreaming, and the implementation of environmental and social safeguards.

75. **Output 4.1.1 Knowledge Management and Communications implemented.** This outcome aims to document results and impacts to facilitate replication and scaling up of biodiversity friendly business models, conservation, SLM and CE approaches in other areas of the *bridge* and potentially across Central America. Knowledge management and communication strategies developed and implemented. It will systematize and share good practices and project experiences with national and local stakeholders, and at external events. It will compile lessons learned and successful experiences, highlighting contributions from women. Indicative activities include:

- Activity 4.1.1a. Develop and implement a gender-sensitive and culturally sensitive knowledge management and communication strategy.
 - Activity 4.1.1b. Design and implement project stakeholder surveys.
 - Activity 4.1.1c. Systematize and share good practices through knowledge-sharing events and focus groups.
 - Activity 4.1.1d. Develop and disseminate at least two photo-stories using EXPOSURE or a similar platform and at least one PANORAMA case.
76. Output 4.1.2. Harmonized information management system and spatial information system for integrating lessons from biological corridors, conservation efforts, CE and SLM policy implementation. This output will identify tools for community monitoring and support training for community monitoring with a gender focus. Additionally, it will develop and implement a national project portfolio dashboard to be housed in MiAMBIENTE to systematize biodiversity and other GEB outcomes and knowledge from various projects funded by cooperation agencies. This dashboard will ensure comprehensive tracking, data consistency, and facilitate reporting requirements, enhancing the project's overall impact and scalability. Indicative activities include:
- Activity 4.1.2a. Identify tools for participatory monitoring (i.e., community and other key stakeholders).
 - Activity 4.1.2b. Provide training for community/local monitoring.
 - Activity 4.1.2c. Develop and implement a national project portfolio dashboard.
77. Output 4.1.3 Gender mainstreaming and social and environmental safeguards strategies developed and implemented. This output will ensure that gender considerations and social and environmental safeguards are integrated into all project activities. It will support the development and implementation of management plans/strategies listed under the project's SESP and GAP (see Annex 5 and 10 respectively for details) that promote gender equality and safeguard social and environmental standards. Indicative activities include:
- Activity 4.1.3a. Develop and/or implement and monitor social and environmental safeguards management and gender plans/strategies for all project components, as indicated in the SESP and the GAP.
 - Activity 4.1.3b. Conduct training workshops on gender mainstreaming and social and environmental safeguards for project staff and stakeholders.
78. **Component 5: Monitoring and evaluation.** This component will develop an M&E mechanism for adaptive management in alignment with GEF and UNDP requirements. The project's M&E plan will be implemented, and results reported through Project Board and annual project implementation reports (PIRs). This includes implementation of the mid-term review (MTR) and terminal evaluation (TE). **As part of the implementation of the Gender Action Plan (GAP) and relevant gender dimension of the project, this component will ensure that the PIRs, MTR and TE include an analysis and review of all dimensions of the GAP.**
79. **Partnerships:** The success of a project of this nature hinges on dynamic, strategic and multi-sector partnerships across a number of government ministries, local governments, NGOs/CSOs, financial entities, and IPLCs. Hence, at the core of the project's strategy is to identify and engage all relevant actors who will play key roles of providing technical support, develop strategic agreements, undertake management interventions and ensure that adequate safeguards are in place to achieve the expected results. The project's main partnerships are presented in **Table 6** which briefly outlines the project's potential cooperation with the identified partners, **Table 7** shows ongoing projects whose inputs, best practices and lessons learned are key to the implementation of this project. Additional information can be found in Annex 11 (*Policy and Program baseline*), and Annex 13 (*Stakeholder engagement plan and IPP*).

Table 2: Key partners and project collaboration.

Partner	Potential areas of collaboration
Ministry of Environment (MiAMBIENTE)	<ul style="list-style-type: none"> • MiAMBIENTE will lead the implementation of Component 1 of the project, which focuses on coordinating, regulating, and establishing institutional frameworks within target sectors such as forestry, agroforestry, and tourism. This entails setting up effective governance and coordination mechanisms at both national and local levels to facilitate various initiatives. These initiatives include forming a <i>Technical Working Group</i> dedicated to multiple uses and conservation and supporting intersectoral conservation efforts involving MiAMBIENTE, MIDA, ATP, ARAP, Municipalities, and the ACP. Furthermore, assistance will be extended to the government in establishing coordination and conservation planning mechanisms at both national and subnational levels, aimed at enhancing biodiversity conservation and gender integration within government planning systems and local communities. • Through Component 1, the project will strengthen the capacities of the regional directorates of MiAMBIENTE and MIDA to design and implement strategies that promote forest ecosystem restoration efforts, mitigating deforestation, biodiversity conservation, and CE practices in close collaboration with local communities, the private sector, and community-based groups. • MiAMBIENTE, in coordination with the Ministry of Health (MINSA), ACP, and Ministry of Housing and Land Use Planning, will evaluate and reinforce the verification and compliance process of the Transisthmian Corridor, land uses, environmental laws, and impact studies by using technology to systematize information and ensure compliance with established regulations about land use, in coordination with relevant authorities. • MiAMBIENTE will collaborate with MINSA and ACP to strengthen the capabilities of water management boards. This collaboration should focus on crucial areas such as training, financial management, fund administration, and the maintenance and planning of rural aqueducts. The technical support will help define the location of the Rural Aqueduct Administration Boards water intakes to help prevent and resolve internal conflicts within communities and safeguard the forest cover in these areas. • MiAMBIENTE will execute strategies to reinforce environmental protection, encompass surveillance initiatives and access to information, and implement environmental education programs in collaboration with the Ministry of Education (MEDUCA), local NGOs/CSOs, academia and community leaders. Moreover, the focus will be on ensuring the continuity of state policies to comply with environmental regulations and fostering environmental conservation efforts. • MiAMBIENTE, through project Components 3 and 4, will focus on raising community awareness about the importance of circular approaches and protecting nature. Awareness campaigns and training sessions will promote environmentally responsible practices and strengthen local networks to maintain and conserve PAs. This includes bolstering local networks of volunteer leaders, environmental brigades, and CBOs during restoration activities and subsequent maintenance, replanting, and monitoring phases.
Ministry of Agricultural Development (MIDA)	<ul style="list-style-type: none"> • MIDA will coordinate with MiAMBIENTE the integration of the National Forest Strategy (2020-2050) within the framework of Outcome 1.2. This involves providing technical support to update the strategies and ensuring the effective inclusion of biodiversity conservation, SLM, and principles of the CE. Additionally, multisectoral coordination will be ensured to comprehensively align these aspects with the project's objectives and activities. • For Components 2, 3, and 4, IDIAP will contribute to research within the project framework, aligned with policies, strategies, and guidelines established for the agricultural sector. This research aims to generate, adapt, validate, and disseminate knowledge and technologies related to agriculture and livestock within the context of cleaner production. This work will be carried out closely with the MIDA, the Agricultural Insurance Institute (ISA), the Agricultural Development Bank, the Agricultural Marketing Institute, and the Micro, Small, and Medium Enterprise Authority.
Panama Tourism Authority (ATP)	<ul style="list-style-type: none"> • ATP will coordinate with MiAMBIENTE the review of the Sustainable Tourism Master Plan (2020-2025) as part of Project Component 1.2. This includes offering technical assistance to update both strategies and ensuring the successful integration of biodiversity conservation, SLM, and CE principles. Moreover, a concerted effort will ensure multisectoral coordination and fully integrate these aspects into the project's goals and activities. • ATP will support the development of Component 1.3, enhancing the Strategy and Financing Plan to implement Executive Decree No. 11 (2022) in line with Agrotourism Law 240, in coordination with MiAMBIENTE and MIDA. This will involve technical support for a participatory approach through interviews, consultations, and workshops to gather input from various stakeholders, ensuring the strategy's effectiveness. Additionally, a Sensitization Program will be implemented targeting private landowners, IPs, Local Communities, and civil society organizations to inform them about the benefits of the Strategy for implementing Agrotourism Law 240 and to ensure their understanding and active participation. • The project's Components 1, 2, and 3 seek collaboration with entities like the San Lorenzo Board of Trustees, Manzanillo International Terminal, and the ACP, enhancing project execution.
Panama Canal Authority (ACP)	<ul style="list-style-type: none"> • ACP will coordinate activities across the four project components through the CICH in the CHCP. Component 1 will involve diverse governmental entities based on their expertise, non-governmental organizations, and local communities, including the Participatory Platform of Local Committees and Watershed Councils in the CHCP. The objective is to streamline resources and advance comprehensive management of policies, programs, and projects in the CHCP to prevent redundancies and optimize the positive impact on enhancing community well-being and preserving natural resources.

<p>ARAP (Panama Aquatic Resources Authority)</p>	<ul style="list-style-type: none"> • ARAP will promote complementary initiatives within Component 3 of the project in collaboration with producers and companies interested in adopting biodiversity-friendly technologies and exploring their potential to integrate CE principles into their business models associated with fishing livelihood activities. The main objective is to promote sustainable development in the region by training local communities in implementing environmental management practices, thus ensuring long-term food sustainability for these producers.
<p>Municipalities and local governments</p>	<ul style="list-style-type: none"> • Municipalities and technical boards, Provincial Councils, and Provincial Technical Boards, which operate with decentralized government funds and have environmental units in each state entity will be strengthened. This strengthening will allow more efficient coordination between institutions and more effective execution of regional environmental initiatives. This will also involve the development of agreements to strengthen municipal advisory councils to resolve conflicts and community problems through preventive coordination. • In collaborating with Component 3, involves identifying biodiversity-friendly enterprises that enhance livelihoods and embrace CE principles to prevent biodiversity loss and generate positive outcomes for nature.
<p>The Private Natural Reserves Network (RRNP)</p>	<ul style="list-style-type: none"> • RRNP will contribute to Component 2 by establishing biological corridors between protected areas, aligning with the locations of integrated farms, private reserves, and other conservation zones of interest. These groups will be actively involved in planning and executing restoration and management projects for ecological corridors, leveraging their habitat conservation and restoration expertise. • As part of their participation, the RRNP will support the project to conduct an inventory of properties that could become private reserves in the future, collaborating with owners interested in protecting them. • Through Component 3 of the project, commitments will be established with the RRNP to promote forest conservation through a PSA mechanism.
<ul style="list-style-type: none"> • Technological University of Panama (UTP) • University of Panama (UP), Coclé, Regional • Smithsonian Tropical Research Institute (STRI) 	<ul style="list-style-type: none"> • STRI, UTP, and UP will collaborate in the implementation of specific interventions under Components 2 and 3. STRI will be an important organization in implementing Component 2. The UTP and UP will engage in industry and community outreach through collaborative projects, internships, and extension programs. These institutions will collaborate with MiAMBIENTE and state and private universities on programs and projects that promote sustainable landscape management, biodiversity conservation, and the integration of CE principles. • Through Component 2, a scientific and community monitoring network will be established to track umbrella species, such as the jaguar, in private estates. Alongside ongoing assessments of water quality, forest conservation, and avifauna, efforts will be made to secure funding for conducting jaguar censuses within the project's protected areas. The aim is to exchange experiences with scientists and students regarding jaguar sightings in their natural habitat. • Institutions of academia and research will contribute to Project Component 4 by providing specialized knowledge, technical expertise, and resources throughout various project stages. As a result of the project, the knowledge generated by academic and research institutions regarding biodiversity-friendly businesses and the principles of the CE will be shared. This information will be disseminated among stakeholders from other areas of the country and productive sectors, thereby facilitating the replication and expansion of biodiversity-friendly business approaches at the national, regional, and global levels. Additionally, lessons learned and best practices from the project will be collected and systematized, producing documents summarizing these experiences to guide future initiatives in this field.
<ul style="list-style-type: none"> • GEMAS[66] • Metropolitano natural Park Patronage[67] • National Association for Nature Conservation (ANCON) • Fundación Yaguará[68] • SUMARSE[69] • Foundation for Natural Resources Conservation (Natura Foundation)[70] • Afro-descendant organizations • Producer associations or organizations (e.g., coffee, cocoa) 	<ul style="list-style-type: none"> • NGOs will participate in the development of policies and regulations, as they will be consulted and collaborate in developing policies and regulations for SLM and biodiversity conservation in the forestry, agroforestry, and tourism sectors. They will be also involved in the implementation of restoration and management actions of ecological corridors, involved in the planning and execution of restoration and management projects of ecological corridors, contributing with their experience in habitat conservation and restoration. • NGOs will be consulted on good business practices that respect biodiversity and adopt CE principles to encourage companies to adopt responsible environmental and social measures through the project. NGOs could play an important role in monitoring and following up on the project, ensuring that the objectives of biodiversity conservation and sustainable management of natural resources are met. • NGOs could advocate for the active participation of IPs, local communities, and other stakeholders in decision-making processes, ensuring their rights are respected and their perspectives are considered at all project stages. • Initiatives in community tourism, sustainable livestock farming, agroforestry, and coffee production projects will encourage producers' active participation at all stages of the process. Corporate social responsibility and sustainable development will be promoted through responsible business practices and strategic partnerships with organizations such as the NATURA Foundation to foster sustainable activities and environmental best practices among small-scale farmers and livestock breeders. • As a result, all 4 project components will achieve synergies by establishing strategic alliances that span all project areas, fostering the promotion of Afro-descendant culture and traditions throughout Panama. Key efforts will concentrate on establishing effective connections with community members possessing valuable ideas but lacking skills in project development. Additionally, providing grassroots-level training or creating templates and formats will streamline the project development process, making presenting and garnering support easier. Practical assistance will be extended to organize small businesses or projects to bolster local entrepreneurship and spur economic development in the community. Furthermore, contributing to the training of young people interested in forming youth environmental organizations will simplify the process of obtaining legal status, addressing challenges within the legal process to streamline the registration of youth organizations and eliminate bureaucratic obstacles.

	<ul style="list-style-type: none"> • Agricultural producers in the region (coffee, cocoa, etc.) will receive training to improve marketing skills and enhance coffee production under CE principles. This initiative, led by MiAMBIENTE in coordination with ACP in the CHCP and MIDA in other project areas, aims to promote sustainable coffee cultivation for conserving water sources and fostering ecological connectivity. Through collaborative efforts across Project Components 2, 3, and 4, emphasis will be placed on forest restoration, ecological connectivity, green business development, and optimizing coffee waste usage. Farmers will receive financial support and guidance. The project seeks to address conservation goals, create job opportunities, and boost local economic development by promoting coffee cultivation and establishing recognizable brands for producers.
<ul style="list-style-type: none"> • Ella Drúa Emberá • Ella Purú Emberá • Organización Juventud Indígena de Panamá • CONAMUIP (National Coordinator of IPs of Panama) • Olowaigli_Kuna, CONAMUIP represents explicitly the Kuna indigenous community within CONAMUIP • COONAPIP (Coordinator of Indigenous Organizations of the Panama Canal Basin): 	<ul style="list-style-type: none"> • Local communities through the Regional Indigenous Congress and CONDIPI, CONAMUIP, and MINGO will participate to ensure broad and representative participation in the planned activities. MiAMBIENTE will have close coordination between the general and regional levels of the Congress and local leaders and representatives to ensure adequate representation of the local communities. Before commencing the planned activities, consultations will be conducted with communities in the area to gather their opinions, suggestions, and concerns, thus ensuring that their voices are heard and considered at all project stages. These activities will ensure that the CLPI with indigenous communities is implemented. • Component 3 will address significant challenges indigenous communities encounter, particularly in managing solid waste, metals, and plastics. This shift reflects a departure from their traditional consumption of natural products. In response to this issue, the project will implement targeted measures, such as establishing comprehensive recycling programs. These programs will be designed to manage waste effectively and instill environmental awareness, fostering sustainable practices within these communities. This holistic approach aims to promote a cultural shift towards more environmentally friendly behaviors while simultaneously addressing the pressing issue of waste management. Furthermore, this solution contributes to the sustainable tourism activities developed by these indigenous communities, aligning with their broader environmental preservation and community development goals. • Through project components 2 and 4, sustainable tourism will be fostered in the communities. Under Component 2, pilot projects will be conducted in indigenous communities to promote and preserve ancestral medicine practices and revitalize traditional crafts. These initiatives aim to boost community development, promote tourism, and safeguard culture. Additionally, restoration programs will be implemented, including medicinal plant species and those used in craft production that are at risk of disappearing. These initiatives will contribute to local economic development and strengthen cultural bonds and the sense of identity within indigenous communities. • Component 2 of the project will also provide training and ongoing capacity building in techniques and sustainable tourism education aimed at various groups interested in entrepreneurship or activities related to sustainable tourism. Additionally, efforts will be made to empower young women and indigenous girls through initiatives in agriculture, community tourism, and gender perspective training. Simultaneously, projects involving family agriculture, poultry farming, and handicraft production will be implemented. All these actions will take place within communities to ensure their relevance and effectiveness, ensuring spaces of equal opportunities and participation. Moreover, the valuable contribution of women in these initiatives will be highlighted, and mechanisms for monitoring and sustainability will be implemented to ensure their long-term continuity and success. • (see IP Plan for more details)

80. **Consistency with national priorities and relevant conventions.** The proposal is aligned with the following main strategic and policy frameworks: i) Strategic Government Plan 2019-2024 of Panama[71], that in terms of biodiversity includes to protect the biodiversity and the Panama’s natural heritage and comply with the SDGs; ii) National Environment Strategy of Panama[72], which seeks to promote knowledge, conservation, restoration and connectivity of ecosystems, natural resources and biodiversity, in a participatory manner promoting sustainable use of ecosystem services and the equitable distribution of their benefits in local communities; iii) National Biodiversity Policy[73], supports the implementation of the NBSAP 2018-2050, especially in the areas of planning, strengthening the management of PAs, biodiversity conservation and recovery of key ecosystems and habitats for biodiversity, improvement of connectivity and reduction of threats to biodiversity; iv) National Climate Change Strategy[74] which establishes a roadmap towards a low carbon economy with mitigation and adaptation actions; v) National Forestry Strategy (NFS) of Panama (2018-2050)[75], aims at biodiversity conservation and SLM, incorporating CE principles; vi) Panama LDN Country Commitments[76], aims to achieve land degradation neutrality by 2030 using 2015 as the baseline year.

81. The government of Panama has recently enacted a series of policies, laws, and regulations that have yet to be fully implemented, which include (i) Executive Decree N° 11 (May 6, 2022) to promote the development of agrotourism by the provisions of the Agrotourism Law 240 (October 2021); (ii) Zero Waste Policy created by Law No. 33 of May 2018 which aims to promote a CE by reducing waste generation, promoting waste separation, and fostering the reuse and recycling of waste. According to MiAMBIENTE, as of 2021,

Panama generated 5,200 tons of solid waste per day, of which only 10% was recycled, and (iii) Rights of nature as stated by Law No. 287 of February 24, 2022, which recognizes nature as a subject of rights and establishes the State's obligations to respect and guarantee these rights.

82. The project contributes to Panama's commitments as a signatory to the UNCBD and its GBF, the United Nations Convention to Combat Desertification, the United Nations Framework Convention on Climate Change, the Aichi goals and the Paris Agreement to establish commitments to reduce GHG emissions. In this sense, Panama seeks to implement concrete actions to improve its NDC and thus reduce greenhouse gas emissions by 45% in the next ten years and net zero emissions by 2050.
83. The SDGs linked to this project are Goal 13 (Climate Action), Goal 14 (Underwater Life), Goal 15 (life of Terrestrial Ecosystem), and Goal 17 (Partnership for the goals). The proposed project contributes to several targets of the GBF, particularly those related to the conservation and restoration of ecosystems, sustainable use of natural resources, and strengthening of institutional and policy frameworks for biodiversity conservation (Goals A and B and corresponding targets 1-3, 9-11, and 14). The project's focus on establishing partnerships between NGOs, private natural reserves, IPLCs, and public and private sectors for biodiversity conservation and natural corridors will also contribute to targets related to the participation of IPLC's in biodiversity conservation and governance.
84. **Cost Efficiency and Effectiveness.** To maximize the use of GEF resources, the project will use existing best practices for forest conservation and restoration that the ACP has been using in the area to maintain the watersheds of the Panama Canal zone. The incentives provided have been proven effective. In coordination with other partners such as the STRI and using AI to maximize impact of the conservation and restoration activities, the project will implement the activities under Component 2. In that way, the project will leverage activities and partnerships with other institutions with a proven track record of implementing those types of activities in the past. Additionally, the project will work with local organizations such as CBOs, to use the knowledge of these organizations regarding local implementation. These strategic partnerships will further improve the cost efficiency and effectiveness of the project interventions under Components 2 and 3. Joint operations regarding community monitoring of biodiversity will provide additional support from local stakeholders, which with training provided under Component 4, will also minimize costs, as the best practices and lessons learned compiled from other projects, and the project itself, will allow to reduce the costs associated with the learning process (e.g., testing and trial and error).
85. **Knowledge:** As described in Component 4, the project will generate various knowledge products. These include awareness campaigns and promotion developed with local actors on thematic areas such as forest conservation and protection of biodiversity (Activity 4.1.1d). The project will also develop radio programs prepared and directed by community communicators on environmental issues and biodiversity conservation. The project will develop a vertical fund project tracking tool (Activity 4.1.2c), which will allow the project to report to national government systems. The project will also support the compilation of information that captures lessons learned, good practices (including concurrent projects), and successful experiences (Activity 4.1.1c).
86. **Innovativeness, Sustainability and Potential for Scaling Up:** The project will support innovation, sustainability and has potential for scaling up, based on:
87. **Innovation:** The project's innovation is in the generation of a bridge between biomes based on a corridor approach in a multiple-use landscape to strengthen the Mesoamerican Forest biome and the concept/effort of establishing a Mesoamerican corridor. Another innovative aspect of this project is the recognition of OMECs as part of this effort to integrate these areas to support conservation efforts. The integration of CE approaches combined with biodiversity and SLM in the strengthening and creation of businesses/SMEs friendly to biodiversity will also allow to support conservation efforts in the Bridge area.
88. **Sustainability.** The extensive capacity strengthening of local communities, private businesses, and other actors and institutions will provide the technical and institutional capacities to sustain project results beyond the project

implementation period. In particular, the project, in line with Panama main environmental and climate public policies, will promote local, afro descendants and indigenous communities, deep-rooted ancestral and cultural knowledge for circularity and innovative local solutions to tackle biodiversity threats, promotes sustainable development and green economy. Including their voices, cultures and traditions meaningfully is vital to climate action, the protection of the environment and advancing the CE. Also from the private sector, under the leadership of MiAMBIENTE, sustainable finance for banking is being promoted to integrate micro and small enterprises and promote best practices to reduce the ecological footprint and water footprint for eco-friendly initiatives and ventures, promoting innovation and nature-based solutions from all sectors. The project will identify opportunities to advance sustainability and resiliency dimensions of development initiatives and to strengthen environmental management and protection.

89. Potential for Scaling up. The Bridge project is designed to provide demonstration models for their up-scaling, especially under Components 2 and 3. In particular, and based on the experience of ACP and other stakeholders with similar initiatives, the project will implement conservation models, such as biodiversity-friendly practices, and local biodiversity-friendly enterprises that promote sustainable land use and conservation, while actively involving IPLCs. This scaling-up will be facilitated with the capacity strengthening of local communities and other key stakeholders through extensive outreach programs. The involvement of NGOs and private businesses to promote sustainable landscape management, biodiversity conservation, and CE principles is also expected to lead to further support and commitment to up-scaling of the project interventions. The knowledge management dissemination activities under Component 4, will allow for the systematization of lessons learned from the demonstration models and for the wide dissemination of those results to generate bottom-up demand for similar activities throughout Panama.

90. Digital Solutions. The project will incorporate the use of digital technologies and solutions to improve the project targeting. For example, under Component 2, it will use AI to determine and prioritize the conservation and restoration areas under the project. Under Component 3, it will support access to digital markets of BD-friendly enterprises, and virtual payments for BD-friendly goods and services. Under Component 4, the project will provide a platform (database) for project monitoring by local communities.

[33] *Municipal governments are local government entities responsible for administering the districts of each province. Each municipality is led by a mayor and a municipal council, whose members are elected by popular vote every five years.*

[34] *Municipalities in the project area: La Pintada, Penonomé, Antón, San Carlos, Chame, Capira, La Chorrera, Arraiján, Panamá, San Miguelito, Colón and Chagres.*

[35] *Such as local watershed committees, rural aqueduct management boards, environmental advisory commissions at municipal level.*

[36] *Only two indigenous communities, Ella Puru and Ella Drúa, are within the project area. However, the IPPF suggests establishing communication with the traditional authorities and indigenous communities along the Chagres River, located within the Chagres National Park.*

[37] See http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/

[38] See https://www.thegef.org/gef/policies_guidelines

https://www.thegef.org/gef/policies_guidelines

[39] See <https://publications.iadb.org/es/plan-indicativo-de-ordenamiento-territorial-ambiental-piota>

[40] *The PIOTA provides comprehensive strategies for effective coordination, regulation, and institutional frameworks essential for sustainable land management (SLM) and biodiversity conservation. The plan defines the roles of key entities such as the Canal de Panamá (ACP), the CICH, and the Consultative Councils (CC), emphasizing their responsibilities in planning, management, monitoring, enforcement, and decision-making processes.*

[41] *The project area encompasses 11 of the 44 existing watershed committees in the country. See <https://cuencas.miambiente.gob.pa/comites-conformados/>*

[42] *The CHCP which is the watershed N°115 has six CCCs: (1)Chilibre Chilibrillo, (2)Hules, Tinajones and Caño Quebrado, (3)Colón Transistmico, (4)Paja, Baila Mono, Cañito and Pescado, (5)Ciri, Trinidad, and (5)Chagres Alajueta*

[43] *Preliminary Prioritization: **Watershed Committees (CC):** Anton River (136) in Cocle provinces; Caimito River (140) and Rivers between Caimito and Anton (138) shared between Panama and Panama Oeste provinces; Rivers between El Indio and Chagres (113) in Colon and Panama provinces, Cocle del Norte River (105) in Cocle and Colon provinces, and Indio River (111) shared between Colon, Panama and Panama Oeste provinces. **Consultative Councils of the CHCP (CCC):** Ciri Trinidad CCC located in Panama Oeste province and Chagres Alajueta CCC located in Colón and Panama provinces.*

[44] Executive Decree 3, May 2024 that regulates Chapter III of Title I of Ley 8 of the 25 of March, about the Environmental Consultative Commissions in https://www.gacetaoficial.gob.pa/pdfTemp/30024_C/104613.pdf

[45] Cabinet Resolution 14, February 2017, that declares Regions and Tourist Destinations or Areas of Tourist Interest in the Republic of Panama (OG 28215-C).

[46] The MPST maintains a destination-based planning approach to maximize impact in limited spaces. ATP has prioritized the development of action plans for the following destinations in the project area (1) El Valle, (2) Capira- La Chorrera- Chame- San Carlos, (3) Riviera Pacífica, (4) Penonomé- El Copé- Natá, (5) Chagres – Donoso, (6) Portobelo and (7) Santa Isabel. At the beginning of the implementation phase, further consultations will take place to select the destinations and communities that best align with the project's objectives.

[47] MPST establishes the creation of the Tourism Destination Management Committees as a purely operational public-private coordinating body to streamline investment processes and the implementation of Action Plans for the development of tourism activity in the destinations.

[48] The project will implement a meticulous selection process for pilot communities based on criteria developed during the elaboration of the Tourism Destination Action Plans. This process will ensure that at least three communities are chosen, allowing them to elaborate on their sustainable tourism strategies. This includes the development of a business plan that facilitates the implementation of sustainable tourism business initiatives that are friendly to biodiversity. The thoroughness of this selection process underscores the commitment to consider community interests and concerns, fostering a sense of inclusivity and involvement.

[49] See https://www.gacetaoficial.gob.pa/pdfTemp/29532_A/91522.pdf

[50] A specific cluster would be aimed at protecting a group of ecologically connected areas i.e. a group of ecologically connected areas that share similar conservation needs, challenges, and opportunities.

[51] An initial evaluation (METT) of the eight PA revealed that only the Metropolitan Natural Park and Soberanía National Park have current and valid Management Plans. In contrast, the Management Plans for Cerro Gaital Natural Monument, Camino de Cruces National Park, Altos de Campana National Park, and San Lorenzo National Park require updates. The Bahía de Chame Multiple Use Area has entered the public consultation phase for its Management Plan update, while the Cerro Guacamaya Water Reserve lacks a Management Plan entirely. These protected areas are crucial for biodiversity, water supply, and cultural heritage but face staffing shortages, inadequate infrastructure, and environmental threats. Notably, seven of these areas are recognized as or are part of Key Biodiversity Areas.

[52] MiAMBIENTE Resolution DAPVS-0003-2017 that approves the SINAPs Basic Guide to Implement the PA Management Effectiveness Program and its new indicators. https://www.gacetaoficial.gob.pa/pdfTemp/28255_A/GacetaNo_28255a_20170410.pdf https://www.gacetaoficial.gob.pa/pdfTemp/28255_A/GacetaNo_28255a_20170410.pdf

[53] See <https://www.thegef.org/projects-operations/projects/11280>

[54] In the project area, there are 17 voluntary conservation reserves (members of the Private Nature Reserve Network), three potential ecological corridors have been preliminarily identified, and there are 2 KBAs that do not have any protection (Panama Canal West Bank in Panama Oeste and Santa Rita in Colón) that can be considered. Further analysis and stakeholder consultations will be carried out during the first year of implementation to identify sites that meet the criteria for OECMs.

[55] MiAMBIENTE, 2020, National Forest Restoration Programme 2021-2025 in <https://www.miambiente.gob.pa/wp-content/uploads/2021/02/Programa-Nacional-Restauracion-Forestal-2020-baja-resolucion.pdf>

[56] ACP, Environmental Economic Incentive Programme (PIEA), <https://pancanal.com/programa-de-incentivos-economicos-ambientales-para-productores-de-la-cuenca-hidrografica/>

[57] The Agua Salud project boasts significant plantations (54 sites, 108 monitored plots). These serve as crucial testing grounds for native species, enabling the study of their growth concerning soil conditions, rainfall patterns, and reforestation goals such as enhancing biodiversity, promoting efficient water use, and facilitating CO2 absorption.

[58] See <https://en.ird.fr/>

[59] During the PPG through STRI, contact was made with an IRD specialist to discuss the applicability of the AI corridor planning tool and the willingness to partner in this project. See <https://dimitri-justeau.github.io/restoptr/>

[60] A preliminary analysis was conducted during the PPG phase, based on a simple scenario where the limiting factor for reconnecting forest patches comes from the accessibility criterion (roads) to identify a low-cost plan for reconnecting forest areas. The model found an optimal solution, which allows it to go from 987 forest patches to 721 forest patches (i.e., a reduction of ~27%), restoring an area of ~18,908 ha (1459 pixels). However, a more in-depth analysis is required, including all limiting factors, clearly delineated objectives, and indicators combined with participatory workshops and field validation.

[61] Based on the Connectivity Map proposed by Almanaque Azul (<https://www.almanaqueazul.org/conectividad/>) three critical biological corridors for restoration and conservation have been preliminarily identified: (1) On the Caribbean slope in Colón, from Costa Abajo to the San Lorenzo Protected Forest and Landscape; (2) In the Central Cordillera, a corridor links Division General Omar Torrijos Herrera National Park through Valle de Antón to Altos de María and Campana National Park; and (3) On the Pacific coast, a mangrove of the Bahía de Chame Multiple Use Area is isolated from the Altos de Campana National Park by the Panamericana highway.

[62] Cárdenas, 2023, in <https://www.undp.org/es/panama/blog/mapeando-el-paisaje-de-soluciones-para-la-economia-circular-y-mejorar-la-gestion-de-residuos-solidos>

[63] MiAMBIENTE, Reduce tu Huella Corporativo in <https://rth.miambiente.gob.pa/>

[64] MIDA, Public certification of organic products in <https://mida.gob.pa/certificacion-publica-de-productos-organicos/>

[65] ATP, Touristic Quality and Culture in <https://www.atp.gob.pa/asistencia-y-licencias/calidad-y-cultura-turistica/>

[66] See <https://www.gemas.org.pa/>

[67] See <https://parquemetroolitano.org/patronato/>

[68] See <https://www.yaguarapanama.org/>

[69] See <https://www.sumarse.org.pa/>

[70] See <https://naturapanama.org/natura/>

[71] Cabinet Resolution 149, December 2019, that approves Government's Strategic Plan 2019-2024 https://www.gacetaoficial.gob.pa/pdfTemp/28931_A/76510.pdf

[72] MiAMBIENTE. National Environmental Strategy 2021-2031

[73] Executive Decree 122, 2008. Which approves the National Biodiversity Policy, its principles, objectives and lines of action.

[74] MiAMBIENTE. 2019. [National Climate Change Strategy](#)

[75] Executive Decree 20, March 2019 that approves the National Forestry Strategy 2018-2050

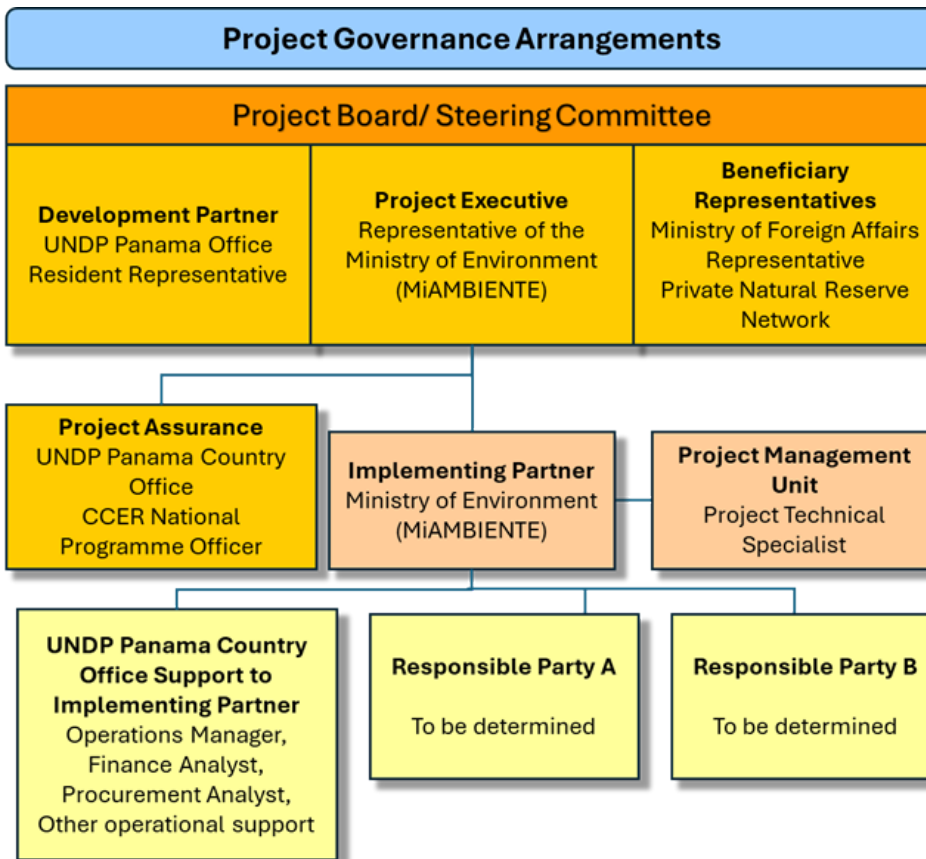
<https://naturapanama.org/natura/>

[76] MiAMBIENTE. 2018. [Panama LDN Country Commitments](#)

Institutional Arrangement and Coordination with Ongoing Initiatives and Project.

Please describe the Institutional Arrangements for the execution of this project, including financial management and procurement. If possible, please summarize the flow of funds (diagram), accountabilities for project management and financial reporting (organogram), including audit, and staffing plans. (max. 500 words, approximately 1 page)

Project governance structure



First line of defense

- Person providing oversight of execution support (COS) cannot report to UNDP staff providing project assurance or providing programmatic oversight support to the RR

Second line of defense

- Regional Bureau oversees RR and function of UNDP compliance in project assurance
- BPPS RTA oversees functions of technical oversight and GEF compliance in project assurance. BBPS NCE PTA oversees RTA function.
- UNDP GEF Executive Coordinator and Regional Bureau Deputy Director can revoke DOA/cancel/suspend project or provide enhanced oversight

91. **Implementing Partner:** The Ministry of Environment of Panama (MiAMBIENTE).

92. **UNDP:** The UNDP Resident Representative assumes full responsibility and accountability for oversight and quality assurance of this Project and ensures its timely implementation in compliance with the GEF-specific requirements and UNDP's Programme and Operations Policies and Procedures (POPP), its Financial Regulations and Rules and Internal Control Framework. A representative of the UNDP Country Office will assume the assurance role and will present assurance findings to the Project Board, and therefore attends Project Board meetings as a non-voting member.

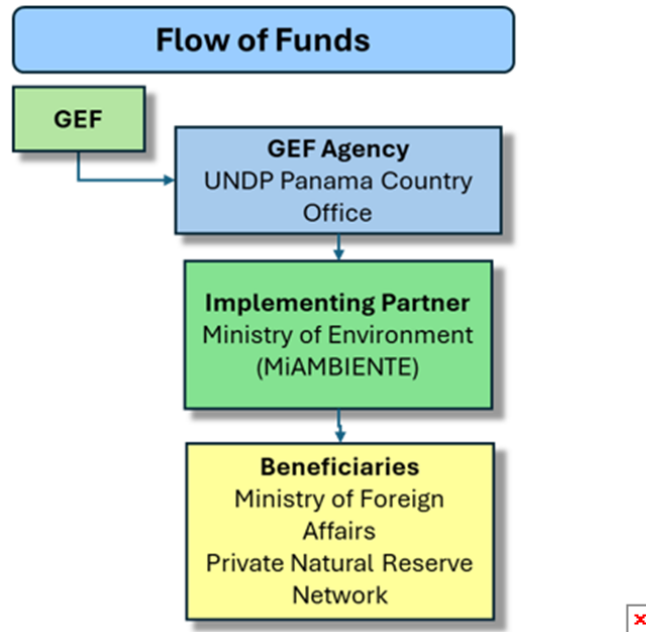
93. **Project Board:** The project will be governed by a multi-stakeholder board or committee established to review performance based on monitoring and evaluation, and implementation issues to ensure quality delivery of results. The Project Board is the most senior, dedicated oversight body for a project. The two main (mandatory) roles of the project board are (i) High-level oversight of the execution of the project by the Implementing Partner; and (ii) Approval of strategic project execution decisions of the Implementing Partner. The Project Board will be constituted by representatives from MiAMBIENTE, UNDP and beneficiary representatives (Ministry of Foreign Affairs and RRNP).

94. **Project Management Unit (PMU).** The Project Technical Specialist (PTS) (also called project coordinator) is the senior most representative of the PMU and is responsible for the overall day-to-day management of the project on behalf of the Implementing Partner, including the mobilization of all project inputs, supervision over project staff, responsible parties, consultants and sub-contractors. The PTS typically presents key deliverables and documents to the board for their review and approval, including progress reports, annual work plans, adjustments to tolerance levels and risk registers.

95. The **project partners** are MIDA, ARAP, ATP, ACP, Municipalities and local Governments and the RRNP. In addition, national and local academic and research institutions as well as NGOs will play a fundamental role for consultations and local activities. To represent the beneficiaries of the project in the Project Board

the representatives of the RRNP and the Ministry of Foreign Affairs were included. These persons will represent the views from the local communities.

96. **Flow of funds.** The following diagram showcases the flow of funds from GEF to UNDP as GEF Agency, and from UNDP to MiAMBIENTE as implementing partners. The diagram illustrates the flow of funds to projects beneficiaries, including the RRNP and the Ministry of Foreign Affairs.



97. **Audit:** The project will be audited as per UNDP Financial Regulations and Rules and applicable audit policies. Audit cycle and process must be discussed during the Inception workshop. If the Implementing Partner is an UN Agency, the project will be audited according to that Agencies applicable audit policies.

Will the GEF Agency play an execution role on this project?

Yes

If so, please describe that role here and the justification.

98. UNDP Project Support: The Implementing Partner and GEF OFP have requested UNDP to provide support services in the amount of USD 30,203 the full duration of the project, and the GEF has agreed for UNDP to provide such execution support services and for the cost of these services to be charged to the project budget. The execution support services have been set out in detail and agreed between UNDP Country Office and the Implementing Partner in a Letter of Agreement (LOA). This LOA is attached to this Project Document.

99. UNDP is accountable to the GEF for the implementation of this project. This includes overseeing project execution undertaken by the Implementing Partner to ensure that the project is being carried out in accordance with UNDP and GEF policies and procedures and the standards and provisions outlined in the Delegation of Authority (DOA) letter for this project. **The UNDP GEF Executive Coordinator, in consultation with UNDP Bureaus and the Implementing Partner, retains the right to revoke the project DOA, suspend or cancel this GEF project.** UNDP is responsible for the Project Assurance function in the project governance structure and presents to the Project Board and attends Project Board meetings as a non-voting member.

100. A firewall will be maintained between the delivery of project oversight and quality assurance performed by UNDP and charged to the GEF Fee and any support to project execution performed by UNDP (as requested by and agreed to by both the Implementing Partner and GEF) and may be charged to the GEF project management costs (only if approved by GEF). The segregation of functions and firewall provisions for UNDP in this case is described in the next section.

Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing (max. 500 words, approximately 1 page)

101. The project will work with other projects, especially GEF projects, through coordination with the GEF focal point in Panama, MiAMBIENTE. As explained earlier, there will be some collaborative arrangements with other related projects, such as the GEF project “[Panama Mesoamerica Forest IP Project: Critical Forests Biome of Panama - Collaborative Conservation of the Darién](#)” which will develop an analysis of the incentives for OCEMs and provide recommendations for implementation of those incentives which this project will use to register OCEMs in the project area.

102. In addition to the projects listed in the baseline section, the following table shows ongoing projects with potential synergies:

Project information	Objective and results	Potential synergies
<p>Title: Panama Sustainable Rural Development and Biodiversity Conservation Project LINK</p> <p>Implementation period: 2022 – 2026</p> <p>Donor: GEF</p> <p>Agency: The World Bank (WB)</p>	<p>Objective: Strengthen capacity for biodiversity conservation and increase the adoption of biodiversity-friendly and inclusive practices in select rural areas of Panama.</p>	<p>The WB project will be implemented in three interlinked types of areas relevant for biodiversity conservation in Panama: (i) National NPAs, (ii) buffer zones of PAs and (iii) KBAs. Activity overlapping may be possible in areas such as Altos de Campana national park. Therefore, the project will be in close coordination with WB, to coordinate intervention and avoid duplication.</p>
<p>Title: Living in harmony with nature: Connecting biodiversity with production systems in the Gualaca Altitudinal Corridor Landscape. LINK</p> <p>Implementation period: 2024-2027</p> <p>Donor: GEF</p> <p>Agency: CAF</p>	<p>Objective: Improve the management of the Altitudinal Gualaca Corridor and Landscape (PCAG) to benefit biodiversity conservation and foster sustainable use of natural resources with a landscape approach.</p>	<p>No overlapping on the territory is expected as the CAF project will be working in the Gualaca Corridor in the East of Panama. Nevertheless, both projects will be focusing on strengthening governance and conservation of relevant ecosystems, therefore good practices and lessons learned will be shared, to optimize project interventions. Among specific opportunities found to collaborate is to: (a) establish strategic alliances with CAF to access green funds and financial resources to promote CE projects in Panama, (b) use pilot projects financed by CAF as models for the development of sustainable practices in other sectors, (c) take advantage of CAF's experience and knowledge through the dissemination of lessons learned and best practices in environmental sustainability and CE.</p>
<p>Title: Conservation of wildcats and prey species through public-private partnerships and human jaguar conflict management in Panama LINK</p> <p>Implementation period: 2021 – 2025</p> <p>Donor: GEF</p> <p>Agency: UNEP</p>	<p>Objective: To strengthen jaguar conservation capacity and connectivity between core protected areas in the Chagres National Park-Darién National Park complex.</p>	<p>UNEP project activities are closely related to project output 2.1 and will be valuable inputs for project activities. In additions, good practices and lessons learned in jaguar conservation and increasing connectivity between core habitats, can applied on other species.</p>
<p>Title: SLM and restoration of productive landscapes in river basins for the implementation of national targets of Land Degradation Neutrality in Panama LINK</p>	<p>Objective: Expand SLM and restoration of productive landscapes in hydrographic basins for the implementation of the national goals of LDN in Panama.</p>	<p>There will be no overlapping in project areas as FAO is focusing its activities in the Chiriqui Viejo, Santa Maria and La Villa rivers and their sub-basins. The project has carried out relevant activities such as “selection and implementation of tools to estimate changes in CO2 stocks” which will be useful for activities under component 1 and 2. In addition, exchanges between projects will be fostered regarding best practices related to SLM, climate-smart agriculture (CSA) and climate-smart livestock (CSL) in production systems and restoration of productive landscapes with large-scale agroforestry.</p>

<p>Implementation period: 2022-2025</p> <p>Donor: GEF</p> <p>Agency: FAO</p>		
<p>Title: Towards the Transboundary Integrated Water Resource Management (IWRM) of the Sixaola River Basin shared by Costa Rica and Panama LINK</p> <p>Implementation period: 2021-2025</p> <p>Donor: GEF</p> <p>Agency: UNEP</p>	<p>Objective: To strengthen transboundary multi-stakeholder action in the Sixaola River Basin shared by Costa Rica and Panama to restore riverine and coastal ecosystems, reduce pollution from agricultural production and reduce risks from hydro meteorological disasters.</p>	<p>Some of the lessons learned of the Mid-Term review are: i) Analyze possible institutional resistance, and identify strategies that avoid or minimize blocking situations; ii) Demonstrative pilots: promotion of sustainable production should be informed by a comprehensive approach that considers different types of firms (small producers, but also mid and large companies) and different elements of the production process and the production chain, from inputs to marketing, including incentive systems and certification structures for sustainable products.</p>
<p>Title: Global Biodiversity Framework Early Action Support Project (GEF 7) 11023</p> <p>Implementation period: 2023 - 2025</p> <p>Donor: GEF</p> <p>Agency: UNDP</p>	<p>Objective: Fast-track early actions to implement the GBF in this decade.</p>	<p>This project, as well as the NBFP and NBSAP/7NR enabling activities will inform the policy work under component 1.</p>
<p>Title: Umbrella Programme to Support Development of Biodiversity Finance Plans (GEF 8) 11054</p> <p>Implementation period: 2024 - 2027</p> <p>Donor: GEF</p> <p>Agency: UNDP</p>	<p>Objective: Developing baseline diagnostics, increasing capacity, strengthening institutional arrangements for biodiversity finance, and preparing a finance plan to mobilize resources at scale to implement the GBF</p>	<p>This project, as well as the EAS and NBSAP/7NR enabling activities will inform the policy work under component 1.</p>
<p>Title: Umbrella Programme to Support NBSAP update and Seventh National Reports (GEF 8) 11286</p> <p>Implementation period: 2024 - 2028</p> <p>Donor: GEF</p> <p>Agency: UNDP</p>	<p>Objective: support a transformative process for biodiversity finance in all participating GEF-eligible countries.</p>	<p>This project, as well as the EAS and NBFP enabling activities will inform the policy work under component 1.</p>
<p>Title: Adaptation Action in Priority Watersheds</p> <p>Implementation period: 2024 - 2025</p> <p>Donor: AECID, Expertise France and FILAPP</p> <p>Agency: AECID</p>	<p>Objective: Increase adaptation and reduce climate change vulnerability in the CHCP through Nature-based solutions in the water basins of the Indio and Batano rivers and the Panama Canal.</p>	<p>This project will provide geospatial maps of watershed land value that could serve as information for project interventions; The guidelines of nature-based solutions and best practices on ecotourism and agrotourism will be used for Components 2 and 3.</p>

Core Indicators

Indicate expected results in each relevant indicator using methodologies indicated in the GEF-8 Results Measurement Framework Guidelines. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCF.

Indicator 1 Terrestrial protected areas created or under improved management

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
56160	56160	0	0

Indicator 1.1 Terrestrial Protected Areas Newly created

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0	0	0	0

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
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Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
56160	56160	0	0

Name of the Protected Area	WDPA ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
Altos de Campana National Park	241	National Park	4,921.00	4,921.00			59.00		
Bahía de Chame Multiple Use Area	Bahía de Chame Multiple Use Area	Protected area with sustainable use of natural resources	8,897.00	8,897.00			34.00		
Camino de Cruces National Park	40968	National Park	4,791.00	4,791.00			34.00		
Cerro Gaital Natural Monument	115116	Natural Monument or Feature	512.00	512.00			40.00		
Cerro Guacamaya Water Reserve	107271	Protected Landscape/Seascape	5,118.00	5,118.00			30.00		
Parque Natural Metropolitano	12826	Protected Landscape/Seascape	232.00	232.00			77.00		

ano-Protected Landscape									
San Lorenzo Protected Forest and Landscape	555705304	Protected Landscape/Seascape	12,145.00	12,145.00			47.00		
Soberania National Park	238	National Park	19,544.00	19,544.00			59.00		

Indicator 3 Area of land and ecosystems under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
1800	1800	0	0

Indicator 3.1 Area of degraded agricultural lands under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.2 Area of forest and forest land under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
1,800.00	1,800.00		

Indicator 3.3 Area of natural grass and woodland under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.4 Area of wetlands (including estuaries, mangroves) under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
488465	482465	0	0

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
60,000.00	460,328.00		

Indicator 4.2 Area of landscapes under third-party certification incorporating biodiversity considerations

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
22,137.00	22,137.00		

Indicator 4.4 Area of High Conservation Value or other forest loss avoided

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
Other forest	322,869.00			
High Conservation Value Forest	83,459.00			

Indicator 4.5 Terrestrial OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
Private Reserves (names TBC at PPG, estimation based on info provided by the the national network of private reserves)	TBD	6,000.00	6,000.00		

Documents (Document(s) that justifies the HCVF)

Title

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO₂e (direct)	62861024	20099199	0	0
Expected metric tons of CO₂e (indirect)	0	0	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO₂e (direct)	62,861,024	20,099,199		
Expected metric tons of CO₂e (indirect)				
Anticipated start year of accounting	2025			
Duration of accounting	20			

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO₂e (direct)				
Expected metric tons of CO₂e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)				

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	5,993			
Male	6,549			
Total	12,542	0	0	0

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

- I. CI 1.2. Terrestrial protected areas under improved management effectiveness, the PA data was sourced from MiAMBIENTE's SINAP and from <https://www.protectedplanet.net/en>. Areas were prioritized based the following criteria: connectivity; KBAs; and potential benefits to local populations.
- II. CI 3.2. The forest restoration target in the landscape was estimated as 47% of the country's restoration goals established in the National Forest Restoration Program 2020 (<https://www.sinia.gob.pa/>).
- III. CI 4.1. Area of landscapes under improved management to benefit biodiversity, including potential OECMs to be identified and registered with the support of the project. Hectarage was estimated using information provided by the National Network of Private Natural Reserves, which considers the potential of establishing functional and viable biological corridors with the support of the network.
- IV. CI 4.3. Area of landscapes under sustainable land management in production systems was sourced from the Panama 30x30 assessment (global commitment of protect 30% of the land and seas by 2030), with support from the McKinsey Foundation Panama. The estimations combined geospatial analyses that included assigning priorities of critical biodiversity variables to meet the objectives of GBF, current regulations, international benchmarks, and expert opinions.
- V. CI4.5. Area of Terrestrial OECMs supported, the area estimations were sourced from Area was estimated using information provided by the Private Natural Reserves Network, which considers the potential of establishing functional and viable biological corridors with the support of the network.

VI. CI 6.5. Carbon sequestered or emissions avoided in the sector of Agriculture, Forestry, and Other Land Use, the estimates of GHG mitigation are made for a 20-Year (6 years of implementation plus 14 years of capitalization) period. A total of 484,265 ha (terrestrial only) of the project is planned for the various activities that will yield the estimated GHG emission avoided benefits. The breakdown of the terrestrial area included in the estimates are: (i) improved management of forests outside of the PAs (460,328 ha), (ii) improved management of production landscape types (22,137 ha), (iii) 1,800 ha of degraded land that will be restored; and (iv) improved management of the forests within the protected area covering 56,160 ha and 6,000 ha to benefit biodiversity (earmarked as OECMs to be mapped and registered under the project). For (iv), the change in management does not necessarily lead to reduction in GHG emissions. Sources for the forest classifications, soil types, climatic conditions, and landcover classifications (i.e., level degradation) are obtained from: (1) <http://assets.press.princeton.edu/chapters/s9289.pdf>, (2) <https://earthmap.org>, (3) World Bank Data. These data will be further validated against the national data during the PPG phase. No negative impacts from natural or anthropogenic disasters, except for forest fire, are discounted in the estimates. The anticipated start year for the GHG benefit accounting is year 2025. All estimates are subject to the assumptions made during the development of EX-ANTE: EX-ACT (see Annexes G1 and G2 for details).

VII. CI 11. Direct beneficiaries disaggregated by sex was sourced from national demographic data (INEC 2020); the National Strategy for Poverty Reduction; and the “Plan Colmena” (Beehive Plan), a government initiative that supports territorial development processes in regions that are considered particularly vulnerable (<https://www.gabinetesocial.gob.pa/plan-colmena-panama/>). Based on historical data, the proxy estimates that approximately 20% of the people who inhabit the landscape would directly benefit from the project.

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	Moderate	Climate change and natural disasters may affect project outputs and outcomes. A project's landscape strategy that includes a climate change and disaster risk reduction and management plan, defining hazards, and identifying key stakeholders, with local governmental officers contributing to mitigation and risk management efforts will be developed in coordination with the Climate Change Directorate of MiAMBIENTE. Regular coordination among government, local authorities, the private sector, and stakeholders will enhance early warning and disaster preparedness. The Climate Change Directorate will guide risk management measures. Additionally, the project will implement nature-based solutions and participatory risk and adaptation planning, incorporating climate-resilient practices like agroforestry, sustainable water management, and techniques to protect and restore forests, including mangroves. Education and training will build local capacity for climate change adaptation, and new climate-resilient income-generating activities will be introduced.

<p>Environmental and Social</p>	<p>Moderate</p>	<p>(i) Landscape management frameworks, plans, guidance documents, training, improved policies, and regulations may not fully consider social and environmental safeguard risks and impacts. The SESA and ESIA will inform the update of the ESMF for the project, ensuring socio-environmental compliance through plans like the Stakeholder Engagement and Gender Action Plans and a Grievance Redress Mechanism. Inter-institutional planning will integrate biodiversity, SLM, and CE principles into national strategies, complying with environmental laws and policies, including the Zero Waste and Escazu Agreement. This approach promotes inclusive stakeholder engagement and environmental protection, empowering women and girls and partnering with local communities for mitigation measures. (ii) Impacting critical habitats and/or environmentally sensitive areas. The project aims to enhance socio-environmental safeguards by promoting effective environmental management and biodiversity conservation at the local level, particularly within micro-small businesses in the forestry, agroforestry, and tourism sectors. It emphasizes circularity and the cradle-to-cradle principle to ensure sustainable practices. Compliance with national laws, regulations, and UNDP SES will be rigorously monitored. While the project focuses on strengthening biodiversity conservation and the sustainable use of natural resources, it recognizes the need for mitigation measures to manage potential risks from its interventions. Key strategies include enhancing ecological connectivity and maintaining corridors between biomes. The SESP will be updated before project implementation, and the ESMF will be revised to address any new risks identified. (iii) The programme may support initiatives that could impact tangible or intangible cultural heritage in the target landscapes. The project's landscape strategy will emphasize respecting and protecting cultural heritage, including risk mitigation measures and securing FPIC as needed. The monitoring and evaluation plan will specifically oversee the protection of cultural heritage sites. The strategy adheres to established guidelines, including resolutions DAPVS-0001-2017 and DAPVS-0017-2017 from the MiAMBIENTE Office for Protected Areas and Wildlife. These resolutions, issued in March and October 2017, respectively, outline the approved use of the San Lorenzo protected forest and landscape and set guidelines for the planning and constructing ecotourism facilities in PAs, which the project will follow. (iv) The programme may support activities where working conditions might not meet national labor laws and international commitments. Procedures for managing the performance of such third parties about minimum requirements in the UNDP Standards will be incorporated into the project documentation, including relevant non-compliance remedies. Contractor workers will have access to the grievance mechanism. Periodic spot checks will also be mandatory. (v) Unintentional release of pollutants into the environment and generation of hazardous waste, as well as risks to worker health and safety. Non-chemical agricultural</p>
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		<p>practices will be actively promoted, but farmers will be trained on their safe use, handling, and appropriate hazardous waste disposal where agrochemicals remain necessary. This training and monitoring will be supported by relevant landscape-level organizations. The technical guide for pesticide use in Panama, particularly Chapter 4.2 on agricultural protection measures, developed (2022), will be the reference for best practices, including triple washing and disposal of empty containers. Following the completion of the inventory of biodiversity-friendly businesses and their potential for CE principles (Output 3.1.2), UNDP-MiAMBIENTE ESMP or a targeted pollution management plan as required by the ESMF before implementing these activities.</p>
Political and Governance	Moderate	<p>(i) There is a risk that marginalized groups, such as Indigenous Peoples (IPs), Afro-descendants, and campesinos (farmers), could be left out from actively participating in decisions that may impact them. The project will enhance local governance by strengthening CC, consultative councils, and multi-stakeholder platforms while maintaining open communication with community leaders, CBOs, and local entrepreneurs. The SEP ensures comprehensive inclusion and iterative review of all stakeholders, emphasizing the role of local communities. There is no direct opposition but a demand for transparent engagement. The project will implement the FPIC process to respect indigenous rights and integrate their traditional knowledge into project activities. An IPPF, IPP, and a Grievance and Redress Mechanism have been established as part of the ESMF. This approach aims to empower local communities and incorporate their knowledge into sustainable business and conservation efforts. (ii) Duty-bearers (e.g. government agencies) do not have the capacity to meet their obligations in the project. The project will establish an intra-institutional coordination protocol to ensure efficient communication and monitoring. Knowledge management strategies will be participatively implemented, with continuous updating of the SEP, to ensure the effective involvement of all parties and minimize delays. Information will be regularly shared with stakeholders, including new government representatives. The project also includes a climate change and disaster risk reduction plan, promoting coordination among government, local authorities, and the private sector for disaster preparedness. It will implement nature-based solutions and climate-resilient practices such as agroforestry and sustainable water management while building local capacity for climate adaptation and introducing resilient income-generating activities.</p>
INNOVATION		
Institutional and Policy		N/A
Technological		N/A

Financial and Business Model		N/A
EXECUTION		
Capacity		N/A
Fiduciary		N/A
Stakeholder		N/A
Other	Moderate	<p>Strategies and policies: There is a risk that the project's goals, strategies, or operations do not align well with the national priorities or policies, especially as the incoming government might be redefined or shift them. The project will proactively engage with the new administration to align with their vision and priorities, featuring strategic flexibility and adaptability to accommodate policy changes and protect against shifts in political priorities. Regular policy reviews and strategic planning will be implemented, while enhanced communication strategies will maintain strong relationships with all government stakeholders. The project will build broad-based support around enduring national goals such as economic development, environmental sustainability, and social equity to safeguard against political fluctuations. Documenting and sharing the project's successes will further demonstrate its value and strengthen government support. Technical design of project or Program (i) Once project funding ends, businesses may struggle to remain financially viable without external support. The project aims to promote financial self-sufficiency among businesses through intensive business management and financial literacy training and encouraging innovation to develop niche markets. Networking opportunities will be facilitated to improve supply chain terms and market access, while integration with local markets and access to microfinance and small-scale grants will enhance business stability. Risk management will include transferring risk via insurance, forming strategic partnerships for financial support, and sharing risk through cooperatives and community engagement. The implementation will involve regular assessments of business financial health, ongoing targeted training, and support in navigating the financial landscape post-project. (ii) There is a risk that the newly implemented Quantum platform (January 2023) could delay some internal processes. UNDP has a comprehensive, role-specific training program to ensure all staff uses the platform proficiently. Clear, standardized procedures and guidelines enhance consistency and reliability in reporting and internal controls. Technical support that conducts system testing helps identify and resolve integration issues or bugs. A feedback mechanism continuously improves the platform and training processes based on user experiences and suggestions.</p>

Overall Risk Rating	Moderate	The risks (SESP risks and non-SESP risks) identified in the project identification form (PIF), were discussed, and confirmed by stakeholders during the PPG consultations. In addition to the SESP risks described in Annex 5 (Social Environmental Screening Procedures) the full list of identified project risks and their assessment and management are described in Annex 6 (UNDP Risk Register). Based on these consultations, the identified risks are summarized in this table
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C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Explain how the proposed interventions are aligned with GEF- 8 programming strategies and country and regional priorities, including how these country strategies and plans relate to the multilateral environmental agreements.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how.

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this. (max. 500 words, approximately 1 page)

105. The proposed project is aligned with the GEF-8 Biodiversity and Land Degradation Focal areas as follows:

I. Biodiversity Focal Area (BDFA). The project will utilize biodiversity and SLM principles to improve conservation, sustainable use and restoration of the biological corridor between the Amistad and Darien biomes (BDFA Objective 1). Specifically, the project will support effective management and ecosystem coverage of PA systems (BD 1-1), sustainable use of biodiversity (BD 1-2), and biodiversity mainstreaming into agro-forestry, forestry and tourism sectors (BD1-4) by:

- Supporting the improvement of the forestry, agroforestry systems that are biodiversity positive;
- Supporting the development of a stronger policy and regulatory framework that also supports circular economy approaches to sustainably use biodiversity, support sustainable tourism, and conserve forests;
- Improving ecological connectivity between the Amistad and Darien forests through the development and implementation of effective biodiversity conservation measures; and
- Creating economic opportunities for local communities through the promotion of biodiversity friendly enterprises.

II. Land Degradation Focal Area (LDFA). The project seeks to avoid, reduce, and reverse land degradation by applying sustainable land management principles (LD-1). Specifically, the project will (i) support investments in agroforestry and forestry to support terrestrial landscapes in order to maximize output and support livelihoods, (ii) strengthen community based natural resources management through the principles of a circular economy to improve agro-ecosystem functions. SLM activities will help improve ecosystem connectivity and safeguard agro-biodiversity, improve soil health, and reduce greenhouse gas emissions by improving vegetative cover and accumulating soil organic matter.

106. In achieving the expected project outcomes, the project will also contribute to pursuit of the various SDGs and GBF targets listed previously in section I, as well as Panama's UNDAF UNSDCF/CPD Outcomes 1.2, 2.1, 2.2, 3.2 and 3.3.

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment

We confirm that gender dimensions relevant to the project have been addressed during Project Preparation as per GEF Policy and are clearly articulated in the Project Description (Section B).

Yes

1) Does the project expect to include any gender-responsive-measures to address gender gaps or promote gender equality and women's empowerment?

Yes

If the project expects to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment, please indicate in which results area(s) the project is expected to contribute to gender equality:

Closing gender gaps in access to and control over natural resources;

Improving women's participation and decision-making; and/or

Yes

Generating socio-economic benefits or services for women.

2) Does the project's results framework or logical framework include gender-sensitive indicators?

Yes

Stakeholder Engagement

We confirm that key stakeholders were consulted during Project Preparation as required per GEF policy, their relevant roles to project outcomes has been clearly articulated in the Project Description (Section B) and that a Stakeholder Engagement Plan has been developed before CEO endorsement.

Yes

Select what role civil society will play in the Project

Consulted only; Yes

Member of Advisory Body; Contractor; Yes

Co-financier;

Member of project steering committee or equivalent decision-making body ;

Executor or co-executor;

Other (Please explain)

Private Sector

Will there be private sector engagement in the project?

Yes

And if so, has its role been described and justified in section B project description?

Yes

Environmental and Social Safeguards

We confirm that we have provided information regarding Environmental and Social risks associated with the proposed project or program, including risk screenings/ assessments and, if applicable, management plans or other measures to address identified risks and impacts (this information should be presented in Annex E).

Yes

Please provide overall Project/Program Risk Classification

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate	Medium/Moderate		

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described during Project Preparation in the Project Description and that these activities have been budgeted and an anticipated timeline for delivery of relevant outputs has been provided.

Yes

Socio-economic Benefits

We confirm that the project design has considered socio-economic benefits to be delivered by the project and these have been clearly described in the Project Description and will be monitored and reported on during project implementation (at MTR and TER).

We confirm that the project design has considered socio-economic benefits to be delivered by the project and these have been clearly described in the Project Description and will be monitored and reported on during project implementation (at MTR and TER).

ANNEX A: FINANCING TABLES

GEF Financing Table

Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	GEF Project Grant(\$)	Agency Fee(\$)	Total GEF Financing (\$)
UNDP	GET	Panama	Biodiversity	BD STAR Allocation: BD-1	Grant	5,454,438.00	518,172.00	5,972,610.00
UNDP	GET	Panama	Land Degradation	LD STAR Allocation: LD-1	Grant	1,130,950.00	107,440.00	1,238,390.00
Total GEF Resources (\$)						6,585,388.00	625,612.00	7,211,000.00

Project Preparation Grant (PPG)

Was a Project Preparation Grant requested?

true

PPG Amount (\$)

200000

PPG Agency Fee (\$)

19000

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	PPG(\$)	Agency Fee(\$)	Total PPG Funding(\$)
UNDP	GET	Panama	Biodiversity	BD STAR Allocation: BD-1	165,653.00	15,737.00	181,390.00
UNDP	GET	Panama	Land Degradation	LD STAR Allocation: LD-1	34,347.00	3,263.00	37,610.00
Total PPG Amount (\$)					200,000.00	19,000.00	219,000.00

Please provide Justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total(\$)
UNDP	GET	Panama	Biodiversity	BD STAR Allocation	5,972,610.00
UNDP	GET	Panama	Land Degradation	LD STAR Allocation	1,238,390.00

Total GEF Resources	7,211,000.00
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Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing(\$)	Co-financing(\$)
BD-1-1	GET	1,818,146.00	14833109
BD-1-2	GET	1,818,146.00	14833109
BD-1-4	GET	1,818,146.00	5810431
LD-1	GET	1,130,950.00	7373351
Total Project Cost		6,585,388.00	42,850,000.00

Confirmed Co-financing for the project, by name and type

Please include evidence for each co-financing source for this project in the tab of the portal

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Recipient Country Government	Ministry of Environment (MiAMBIENTE, Acronym in Spanish)	In-kind	Recurrent expenditures	6400000
Recipient Country Government	Ministry of Environment (MiAMBIENTE, Acronym in Spanish)	Public Investment	Investment mobilized	36400000
GEF Agency	UNDP	In-kind	Recurrent expenditures	50000
Total Co-financing				42,850,000.00

Please describe the investment mobilized portion of the co-financing

Government: Government co-financing reflects current or planned initiatives closely aligned with the project objective and the prioritized landscape sourced primarily from the national budget.

UNDP: In-kind contribution of staff assigned to the design and start-up phase not covered by the Agency fee.

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

GEF Agency Type	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator				nancy.bennet@undp.org

Project Coordinator				gabriel.jaramillo@undp.org
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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.

Name of GEF OFF	Position	Ministry	Date (MM/DD/YYYY)
Raul Pinedo	Operational Focal Point	Ministry of Environment	4/5/2023

ANNEX C: PROJECT RESULTS FRAMEWORK

Please indicate the page number in the Project Document where the project results and M&E frameworks can be found. Please also paste below the Project Results Framework from the Agency document.

<p>Contribution to the Sustainable Development Goal (s): <i>Goal 5: Achieve gender equality and empower all women and girls, Goal 6: Ensure availability and sustainable management of water and sanitation for all, Goal 12: Ensure sustainable consumption and production patterns, Goal 13: Take urgent action to combat climate change and its impacts, Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development, Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss, Goal 17: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development</i></p>
<p>Intended Outcome as stated in the UNSDCF/Country Programme Results and Resource Framework: <i>1.2. Local economic development processes promoted and implemented following an approach that fosters social and economic inclusion, innovation, competitiveness, gender equality, and environmental sustainability; 2.1. Modernized and strengthened institutions respond to people's and territories' needs and deliver efficient public functions at national and subnational levels; 2.2. Spaces enabled for citizen participation, and interaction in decision-making and public policies and programme design, implementation, and evaluation, especially for women and vulnerable groups; 3.2. Integrated water and coastal management include climate resilience and good practices in green supply chains; 3.3. Improved national capacities for nature-based solutions and climate change adaptation for livelihoods advanced</i></p>
<p>Applicable Output(s) from the UNDP Strategic Plan: UNDP Strategic Plan 2022-2025: SP Outcome 1: Structural transformation accelerated, particularly green, inclusive and digital transitions. Signature Solution: Poverty and Inequality Result 1.1: The 2030 Agenda, Paris Agreement and other intergovernmentally-agreed frameworks integrated in national and local development plans, measures to accelerate progress put in place, and budgets and progress assessed using data-driven solutions. IRRF 1.1.1 Number of countries that have development plans and budgets that integrate intergovernmentally-agreed frameworks across the whole-of-government: 2030 Agenda for Sustainable Development and Paris Agreement SDGs Targets Signature Solution 4: Environment Result 4.2: Public and private investment mechanisms mobilized for biodiversity, water, oceans, and climate solutions IRRF 4.2.1 Number of people directly benefiting from mechanisms for biodiversity, water, oceans, and climate solutions funded by public and/or private sector resources. SDG Targets: 1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions. 5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life 6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes 12.2 By 2030, achieve the sustainable management and efficient use of natural resources 13.2 Integrate climate change measures into national policies, strategies and planning 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution 15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally 17.14 Enhance policy coherence for sustainable development</p>
<p>Project title and Quantum Project Number: 1002327 Strengthening Ecological Connectivity in Natural and Productive Landscapes between the Amistad and Darien Biomes</p>

Objective and Outcome Indicators ^[1] (no more than a total of 20 indicators)	Data Source	Baseline ^[2]	Mid-term Target ^[3]	End of Project Target	Data Collection Methods ^[4]	Risks/Assumptions	
<p>Project Objective:</p> <p>1-4 indicators maximum</p>	<p><i>Improved and sustained ecological connectivity between the Amistad and Darien biomes by strengthening biodiversity conservation, improving sustainable land use, and promoting CE initiatives.</i></p>						
	<p>Mandatory GEF Core Indicators: Indicator 1: GEF CI 11. # direct project beneficiaries disaggregated by gender (individual people)^[5]</p>	<p>Direct beneficiaries disaggregated by sex was sourced from national demographic data (INEC 2020); the National Strategy for Poverty Reduction; and the “Plan Colmena” (Beehive Plan), a government initiative that supports territorial development processes in regions that are considered particularly vulnerable (https://www.gabinetesocial.gov.pa/plan-colmena-panama/).</p>	<p>0</p>	<p>1,798 women; 1,965 men; 3,763 total</p>	<p>5,993 women; 6,549 men; 12,542 total</p>	<p>Based on historical data, the proxy estimates that approximately 20% of the people who inhabit the landscape would directly benefit from the project.</p>	<p>Risks: Reduced effectiveness and sustainability due to unaddressed gender-specific needs and contributions</p> <p>Assumptions: all genders have equal opportunities and resources to participate and benefit, with equitable distribution of information and value of the project across genders. The baseline historical data reflects well on the target estimates for both men and women.</p>
	<p>Mandatory GEF Core Indicators: Indicator 2: GEF CI 1.2. Terrestrial protected areas created or under improved management (hectare)</p>	<p>PA data was sourced from the MiAMBIENTE’s SINAP and from https://www.protectedplanet.net/en.</p>	<p>0</p>	<p>16,848</p>	<p>56,160</p>	<p>Existing PAs were prioritized in the project areas between the Amistad and Darien, based on the following criteria: connectivity; KBAs; avoid overlapping with other projects, prioritizing subnational level PAs and potential benefits to IPLCs.</p>	<p>Risks: resource shortfalls, community opposition, ecological misjudgments of the values or resilience of PA, regulatory and policy shifts, and the impacts of climate change.</p> <p>Assumptions: There are sufficient resources (financial, human, and technical) for establishment and ongoing management, the support of local communities and stakeholders towards protected area</p>

							<p>initiatives, an accurate understanding of the ecological value and biodiversity of the areas targeted for protection, stable and supportive policy and legal frameworks, and the predictability of climate change impacts.</p>
<p>Mandatory GEF Core Indicators: Indicator 3: GEF CI 3.2. Area of land and ecosystems under restoration (hectare)</p>	<p>National Forest Restoration Program 2020 (https://www.sinia.gob.pa/).</p>	0	540	1,800	<p>The forest restoration target in the landscape was estimated as 47% of the country's restoration goals established in the National Forest Restoration Program 2020 (https://www.sinia.gob.pa/).</p>	<p>Risks: potential failure to achieve desired ecological outcomes, resistance from local communities or stakeholders, insufficient resources, unintentional adverse ecological impacts, and vulnerability to policy and regulatory change .</p> <p>Assumptions: selected degraded lands are ecologically viable for restoration, technical solutions for restoration are universally applicable and effective, stakeholder engagement will be positive and cooperative, sufficient funding will be consistently available throughout the potentially lengthy duration of restoration projects, and that there will be stable and supportive policy</p>	

						environments to back these initiatives.
<p>Mandatory GEF <u>Core Indicators:</u> Indicator 4: GEF CI 4.1. Area of landscapes under improved management to benefit biodiversity</p>	<p>Area of landscapes under improved management to benefit biodiversity.</p>	0	138,098	460,328	<p>Area estimated considers the potential of establishing functional and viable biological corridors.</p>	<p><u>Risks:</u> management practices may not align with local ecological needs or fail to adapt to changing conditions, stakeholder conflicts, resource limitations, policy and regulatory changes, and inadequate monitoring that fails to capture the effectiveness of management practices or facilitate necessary adjustments.</p> <p><u>Assumptions:</u> selected management practices are effective across diverse ecosystems, stakeholder groups support these practices, efforts will be sustained over time, sufficient monitoring and evaluation mechanisms are in place to assess impacts on biodiversity, and a stable policy and regulatory environment supports the initiatives.</p>
<p>Mandatory GEF <u>Core Indicators:</u> Indicator 5: GEF CI 4.3. Area of landscapes under SLM in production systems</p>	<p>Area of landscapes under SLM in production systems was sourced from the Panama 30x30 assessment (global commitment of protect 30% of the land and seas by 2030), with support from the McKinsey Foundation Panama.</p>		6,641	22,137	<p>The estimations combined geospatial analyses that included assigning priorities of critical biodiversity variables to meet the objectives of GBF, current regulations, international benchmarks, and expert opinions.</p>	<p><u>Risks:</u> potential for low adoption or discontinuation of practices due to insufficient perceived benefits, economic barriers, or lack of support; practices</p>

							<p><i>failing to adapt to local conditions; economic constraints that make sustainable practices unfeasible for some stakeholders; policy and regulatory frameworks that do not align with or support SLM goals; and the vulnerability of these practices to external shocks that could compromise their effectiveness and sustainability.</i></p> <p><i>Assumptions: sustainable practices are effective and adaptable across diverse landscapes, stakeholders are ready and willing to adopt these practices, the economic viability of such practices is assured for all parties involved, supportive policy and market mechanisms are in place to facilitate this transition, and that these practices are resilient to external shocks such as climate change, market fluctuations, or political instability.</i></p>
<p>Mandatory GEF Core Indicators: Indicator 6: GEF CI 4.5. Terrestrial OECMs supported</p>	<p>Area of landscapes under improved management to benefit biodiversity, under potential OECMs to be identified and registered with the support of the project.</p>		1,800	6,000	<p>The area was estimated using information provided by the Private Natural Reserves Network, which considers the potential of establishing functional and</p>	<p>Risks: inadequate recognition and support, which could limit their contribution to biodiversity conservation; stakeholder</p>	

						<p>viable biological corridors with the support of the network.</p> <p>conflicts; governance and management challenges that hinder effective protection and stewardship; financial, human, and technical resource limitations; and policy misalignment or conflicts that challenge OECM integration and effectiveness.</p> <p><i>Assumptions:</i> widespread recognition of the biodiversity value of OECMs, effective and inclusive stakeholder engagement, robust governance and management systems, availability of sufficient resources, and the integration of OECM strategies within broader conservation and land-use policies.</p>
<p>Mandatory GEF Core Indicators: Indicator 7: GEF CI 6.5. Carbon sequestered or emissions avoided in the sector of Agriculture, Forestry, and Other Land Use (direct)</p>	<p>Ex-ACT tool used for estimates of GHG mitigation</p>	0	1,684,901	1,689,008	<p>Estimates of GHG mitigation are made for a 20-year period (6 years of implementation plus 14 years of capitalization) for a total of 20,099,199 tCO₂e. A total of 546,425 ha (terrestrial only) of the project is planned for the various activities that will yield the estimated GHG emission avoided benefits.</p> <p>Note that the EOT refers to the total GHG mitigation achieved by year 6. The values included</p>	<p>Risks: limited adoption of best practices due to economic, knowledge, or cultural barriers, fluctuations in policy and incentives that could destabilize efforts, along with challenges in accurately measuring and verifying carbon stock changes or emissions reductions, competition for land use,</p>

						<p>correspond to year 1 of the Ex-ACT estimate for the mid-term target and year 4 for EOT, if project activities related to GHG emissions reduction do not start until year 2 (see Work Plan, Annex 4).</p>	<p>driven by economic pressures or policy changes, poses a risk to maintaining or expanding areas dedicated to carbon sequestration.</p> <p><u>Assumptions:</u> there is a widespread adoption of best management practices known to enhance carbon sequestration or reduce emissions, stable policy environments and incentive structures to support these practices, and there are capabilities for accurate measurement and verification of carbon outcomes.</p>
<p>• Project component 1</p>	<p>Improved strategies, plans, and institutions to align with Panama's laws and regulations, promote Sustainable Landscape Management (SLM), conserve biodiversity, and integrate CE principles with a multi-ethnic, multi-cultural and gender-sensitive approach</p>						
<p>Project Outcome^[6] 1.1. Effective coordination, regulatory and institutional framework for planning, management, monitoring, enforcement, and decision making for SLM and biodiversity conservation/sustainable use, utilizing CE principles that incorporate biodiversity conservation in target sectors (i.e., forestry, agro-forestry, and tourism).</p>	<p>Indicator 8: Number of sub-national and local level multi-sectoral multi-ethnic, multi-cultural and gender-sensitive governance systems (e.g., CCC, CC, recognized and documented by the main actors) that promote connectivity, biodiversity conservation and SLM at the national level.</p> <p>(At least 35% of total participants are women)</p>	<p>Project progress reports, Bi-monthly Gender Action Plan reports, MiAMBIENTE annual reports</p>	0	<p>1 (sub-national) 2 (local)</p> <p>(at least 35% women participants)</p>	<p>3 (sub-national) 6 (local)</p> <p>(at least 35% women participants)</p>	<p>Meeting reports and related attendance list, workshop reports, Gender Action Plan bi-monthly evaluations</p>	<p><u>Risks:</u> The national multi-sectoral governance system does not include all interested parties, or there is no active participation of some of those actors.</p> <p><u>Assumptions:</u> The main institutions and stakeholders, namely MiAMBIENTE, MIDA, ACP, ATP, private sector (e.g., Private Natural Reserves Network), local governments (including</p>

							watershed committees, etc), academia, and research institutions, participate actively in the proposed multi-sectoral governance system.
• Outputs to achieve Outcome 1.1	1.1.1 Functional governance and coordination mechanisms established at a sub-national (3) and local levels (6).						
Outcome 1.2. Sectoral policies integrate biodiversity conservation, SLM, and CE principles	<p>Indicator 9: Number of updated/new sectoral policies that integrate biodiversity conservation, SLM and CE with a multi-ethnic, multi-cultural and gender-sensitive approach</p> <p>(At least 35% of total participants providing inputs and reviewing the policies are women)</p>	Project progress reports, MiAMBIENTE annual reports	0	3 (35% women participants)	3 (35% women participants)	Assessment of NFS, MPST, and Agrotourism Strategy and its Finance Plan, and development of updated Strategy based on a multi-ethnic, multi-cultural and gender-sensitive participatory approach with meetings, surveys, workshops and focus groups with main stakeholders	<p>Risks: There is no active participation of main stakeholders.</p> <p>Assumptions: Active participation of stakeholders, including namely MiAMBIENTE, MIDA, ACP, ATP, private sector (e.g., Private Natural Reserves Network), local governments (including watershed committees, etc.), academia, and research institutions</p>
Outputs to achieve Outcome 1.2	1.2.1 Biodiversity conservation measures, SLM, and CE principles mainstreamed into the into the National Forest Strategy and Master Plan for Sustainable Tourism. 1.2.2. Strategy and associated financing plan developed.						
Outcome 1.3. Strengthened institutional and local organizations' capacity to implement strategies and plans that support biodiversity conservation and SLM principles	<p>Indicator 10: Increase in institutional capacity to implement NFS, MPST, and Agrotourism Law as measured by a 15% increase in the gender-sensitive UNDP Capacity Development Scorecard of baseline values of:</p> <ul style="list-style-type: none"> -Ministry of Environment -Ministry of Agriculture, -Ministry of Tourism -Canal Authority <p>(At least 35% of total participants are women)</p>	UNDP Capacity Development Scorecard report. The Scorecard includes a gender indicator (#14): Degree of knowledge, application and participation (gender mainstreaming) of variables associated with gender considerations.	<p>MiAMBIE NTE: 43.75 %</p> <p>ACP: 56.25 %</p> <p>MIDA: 29.17 %</p> <p>ATP: 47.92 %</p>	<p>MiAMBIE NTE: 45.94 %</p> <p>ACP: 59.06 %</p> <p>MIDA: 30.63 %</p> <p>ATP: 50.31 %</p>	<p>MiAMBIE NTE: 50.31 %</p> <p>ACP: 64.69 %</p> <p>MIDA: 33.54 %</p> <p>ATP: 55.10 %</p>	<ul style="list-style-type: none"> • UNDP Capacity Development Scorecard report will be developed based on a multi-ethnic, multi-cultural and gender-sensitive consultation process with meetings, surveys, workshops and focus groups. The Mid-term Target value is a 5% increase from the baseline value, and the End-of-Project Target is a 15% increase. 	<p>Risks: There is no active participation of MiAMBIENTE, MIDA, ATP, ACP in the project's capacity strengthening activities. Gaps in capacity-building efforts that fail to address the practical implementation challenges, conflicts among entities with competing interests,</p>

							resource limitations.
							<p><u>Assumptions:</u> Capacity-building efforts will be effective in enhancing the necessary skills and knowledge for SLM and conservation of MiAMBIENT E, MIDA, ATP, ACP, and these entities and other stakeholders will collaborate and support these initiatives and efforts to sustain them over the long term; these activities can effectively integrate diverse cultural and gender perspectives into conservation practices.</p>
Outputs to achieve Outcome 1.3	<p>1.3.1 Training program for national, regional, and local government to strengthen their capacity to understand and implement the NFS, MPST and Agrotourism developed and implemented.</p> <p>1.3.2. Awareness program on supported policies designed and implemented.</p>						
Project component 2	Improved management and restoration of ecological connectivity corridors						
Outcome 2.1. Improved site-level planning, regulatory, monitoring, and implementation framework for demonstration of CE principles for biodiversity-friendly businesses that support SLM and management of pilot biodiversity corridors between the Amistad and Darien forests	<p>Indicator 11: Average increase by at least 20% in METT from current PA baselines covering 56,160 ha from current baselines of:</p> <p>(a) Parque Natural Metropolitano Protected Landscape (232 ha)</p> <p>(b) Cerro Gaital Natural Monument (512 ha)</p> <p>(c) Camino de Cruces National Park (4,791 ha):</p> <p>(d) Altos de Campana National Park (4,921 ha):</p> <p>(e) Cerro Guacamaya Water Reserve (5,118 ha):</p>	<p>Mid-term evaluation report and Final Evaluation Report</p>	<p>(a) Parque Natural Metropolitano Protected Landscape : 77% (2024)</p> <p>(b) Cerro Gaital Natural Monument : 40% (2024)</p> <p>(c) Camino de Cruces National Park: 34% (2024):</p> <p>(d) Altos de Campana National Park: 59 % (2024)</p>	<p>(a) Parque Natural Metropolitano Protected Landscape : 81%</p> <p>(b) Cerro Gaital Natural Monument : (42%)</p> <p>(c) Camino de Cruces National Park: 36%</p> <p>(d) Altos de Campana National Park: 62%</p> <p>(e) Cerro Guacamaya a Water</p>	<p>(a) Parque Natural Metropolitano Protected Landscape : 92%</p> <p>(b) Cerro Gaital Natural Monument : 48%</p> <p>(c) Camino de Cruces National Park: 41%</p> <p>(d) Altos de Campana National Park: 71%</p> <p>(e) Cerro Guacamaya a Water</p>	<p>METT assessments will be carried out based on a consultation process with AP managers and staff through meetings, surveys, workshops and focus groups. The baseline values for each PA in the first year of project implementation will be validated. The Mid-term Target value is a 6 % increase from the baseline value, and the End-of-Project Target is a 20% increase from the baseline value.</p>	<p><u>Risks:</u> Lack of understanding of METT criteria by local PA managers; change in PA managers may change METT perception and may affect comparability with baseline.</p> <p><u>Assumptions:</u> The evaluation reflects accurately the improvement in PA management</p>

<p>(f) Bahía de Chame Multiple Use Area (8,897 ha); (g) San Lorenzo Protected Forest and Landscape (12,145 ha); and (h) Soberania National Park (19,544 ha)</p> <p>(At least 35% of total participants are women)</p> <p>This indicator is linked and contributes to Objective Indicator 2.</p>		<p>(e) Cerro Guacamaya Water Reserve: 30% (2024); (f) Bahía de Chame Multiple Use Area: 34% (2024); (g) San Lorenzo Protected Forest and Landscape : 47% (2024); (h) Soberania National Park: 59% (2024)</p> <p>(52% women participation during project design)</p>	<p>Reserve: 32%; (f) Bahía de Chame Multiple Use Area: 36%; (g) San Lorenzo Protected Forest and Landscape : 50%; (h) Soberania National Park: 62%</p> <p>(At least 35% of total participants are women)</p>	<p>Reserve: 36%; (f) Bahía de Chame Multiple Use Area: 41%; (g) San Lorenzo Protected Forest and Landscape : 56%; (h) Soberania National Park: 71%</p> <p>(At least 35% of total participants are women)</p>			
<p>Indicator 12: Number of site-level plans developed, updated, or revised, and implemented that incorporate CE principles and biodiversity-friendly business practices, through a multi-ethnic, multi-cultural and gender-sensitive approach.</p>	<p>Project progress reports, MiAMBIENTE annual reports</p>	<p>(a) Site-specific integrated cluster conservati on plans (CCPs): 0 (b) PA managemen t plans: 0 (c) Conservati on Plans (i.e., for private reserves and/or conservati on set-asides, and IPLC conservati on areas): 0</p>	<p>(a) Site-specific integrated cluster conservati on plans (CCPs): 2 (b) PA managemen t plans: 2 (c) Conservati on Plans (i.e., for private reserves and/or conservati on set-asides, and IPLC conservati on areas): 2</p>	<p>(a) Site-specific integrated cluster conservati on plans (CCPs): 5 (b) PA managemen t plans: 6 (c) Conservati on Plans (i.e., for private reserves and/or conservati on set-asides, and IPLC conservati on areas): 5</p>	<p>Initial evaluations, developed based on a multi-ethnic, multi-cultural and gender-sensitive consultation process with meetings, field visits, surveys, workshops and surveys</p>	<p><u>Risks:</u> Limited participation of certain stakeholders, affecting representation ; limited knowledge and skills to effectively develop and implement plans; lack of recognition of Government of private sector/IPLC initiatives</p> <p><u>Assumptions:</u> Active participation of local and regional actors, including IPLC, women, and young people</p>	
<p>Indicator 13: Number of Provincial Restoration Plans implemented, covering 1,800 has.</p> <p>(At least 35% of total participants in the plan are women)</p>	<p>Project progress reports, MiAMBIENTE annual reports</p>	<p>0</p>	<p>1 (35% women participant s)</p>	<p>3 (35% women participant s)</p>	<p>The Ecosystem Restoration Program will identify and select strategic locations for the establishment of restoration nuclei or pilot sites</p>	<p><u>Risks:</u> Not optimal identification of project sites for restoration due to technical limitations and/or limited participation of local stakeholders.</p>	

								<i>Assumptions:</i> Active participation of local actors and relevant stakeholder for the design and implementation of the Program
Outputs to achieve Outcome 2.1	<p>2.1.1. Site-specific integrated cluster conservation plans for key biodiversity areas designed.</p> <p>2.1.2. Improved management effectiveness of existing eight PAs within the area between the Amistad and Darien Forest.</p> <p>2.1.3. Network of potential Other Effective Area-based Conservation Measures (OECMs) identified.</p> <p>2.1.4 Local biodiversity-friendly businesses, regional governments, private stakeholders, and IPLCs have tools, practices, procedures, and policies to support the creation/strengthening of biological corridors and restoration of degraded areas.</p> <p>2.1.5. A multi-stakeholder collaborative Ecosystem Restoration Program implemented.</p>							
Project component 3	Community-based sustainable use and management systems developed through introduction of CE principles, integrating multi-ethnic, multi-cultural and gender-sensitive considerations in biodiversity-friendly enterprises and livelihood initiatives							
Outcome 3.1. Biodiversity-friendly businesses improve livelihoods and embrace CE principles to avoid biodiversity loss and lead to nature positive outcomes.	<p>Indicator 14: Area (hectares) with improved management by biodiversity friendly businesses.</p>	Registry of Private Natural Reserves	0	1,800	6,000	Private Natural Reserves Network georeferenced polygons within their network	<p><i>Risks:</i> Biodiversity friendly businesses may not have proper incentives to protect additional areas.</p> <p><i>Assumptions:</i> Biodiversity friendly businesses are able to protect areas given local incentives and government recognition for their conservation activities</p>	
	<p>Indicator 15: Number of Biodiversity-friendly value chains that consider biodiversity, SLM and/or CE principles supported</p> <p>(At least 35% of biodiversity friendly businesses led by women)</p>	Project progress reports, MiAMBIENTE annual reports. MIDA annual reports	0	2	8	Business plans reports	<p><i>Risks:</i> Biodiversity friendly businesses may not have proper incentives to protect additional areas.</p> <p><i>Assumptions:</i> Biodiversity friendly businesses are able to protect areas given local incentives and government recognition for their conservation activities</p>	

	<p>Indicator 16: Number of households directly benefiting from biodiversity friendly businesses and sustainable livelihood improvement approaches with an increase up to, or more than, 15% in average annual income? (at least 50% of beneficiaries are women).</p>	<p>Reports of biodiversity-friendly businesses, project reports</p>	<p>• 0</p>	<p>900 (450 women, 450 men)</p>	<p>3,000 (1,500 women, 1,500 men)</p>	<p>Surveys of biodiversity-friendly businesses, LVG recipients and beneficiary households.</p>	<p>Risks: Households participating in the program do not achieve expected average income benefit due to internal and external factors; cultural idiosyncrasies or bias may affect women participation in income generating activities Assumptions: Project beneficiaries are able to increase their average economic benefit</p>
<p>Outputs to achieve Outcome 3.1</p>	<p>3.1.1: Mapping of existing and potential biodiversity-friendly businesses in the project landscape. 3.1.2: Strategic alliances with NGOs/CSOs, private natural reserves, IPLCs, producers, including public and private partnership arrangements to strengthen biodiversity friendly value chains within the project landscape. 3.1.3: Comprehensive market analysis to identify potential buyers, both locally and internationally, for biodiversity-friendly products and support the development of financial projections and business plans of selected value chains that include biodiversity, SLM, and CE principles. 3.1.4: Provision of community level LVGs for co-investment in biodiversity-friendly IPLC led MSMEs and support for partnerships with lending institutions for financing small businesses to deserving producer groups.</p>						
<p>Project component 4</p>	<p>Knowledge sharing, innovation, and management platform for gender mainstreaming, and dissemination of lessons learned</p>						
<p>Outcome 4.1. Awareness and collaborative decision-making on biodiversity conservation, SLM and CE enhanced through effective knowledge management, social and environmental safeguards, and gender mainstreaming</p>	<p>Indicator 17: Percentage of the people who inhabit the landscape aware of biodiversity conservation, SLM and CE measures, conservation threats, and impacts of unplanned developments, demonstrating behavior change for positive biodiversity outcomes. (Data disaggregated by sex, ethnic group, and age At least 35% of total participants are women)</p>	<p>Survey report of effectiveness of communication campaigns, capacity building workshop reports, awareness raising events reports</p>	<p>2% (Value is a proxy based on project design consultations - Additionally a KAP survey will be carried out at year 1 to confirm this baseline)</p>	<p>6% (Data disaggregated by sex, ethnic group, and age At least 35% of total participants are women)</p>	<p>20% (Data disaggregated by sex, ethnic group, and age At least 35% of total participants are women)</p>	<p>Baseline target estimated using population census data (5993 women; 6549 men; 12,542 total). During project implementation, KAP surveys will be used to elicit whether communication campaigns reached the targeted population.</p>	<p>Risks: Certain media used in the KM and communication campaigns are not effective given local circumstances (e.g., access to internet in some remote areas, lack of access to electricity); Lack of interest by stakeholders (government and sector agency staff, private sector, IPLCs and others); Limited women participation due to local cultural bias, proper</p>

							incentives (e.g., provision of childcare in capacity building activities) <i>Assumptions:</i> KM and communication campaigns are effective and reach the intended targeted population.
	Indicator 18: Number of dashboards/monitoring tools developed [AF1] [GJ2] [JY3], implemented and maintained for monitoring BD benefits (and CC/LD co-benefits), with a multi-ethnic, multi-cultural and gender-sensitive approach within the MiAMBIENTE and in alignment with national government systems	Project reports, MiAMBIENTE annual reports	0	0	1	Reporting from internal MiAMBIENTE systems	<i>Risks:</i> MiAMBIENTE does not have the capacity and does not assign adequate resources for the tool's development, implementation, and maintenance. <i>Assumptions:</i> The project is able to integrate into the Governments internal platforms the reporting tool for GEF projects; MiAMBIENTE has the capacity to effectively follow up and report on the tool's performance
	Indicator 19: Number of good practices, tools, communication and KM products related to connectivity, conservation, sustainable resource management and circularity codified, adapted, and disseminated nationally and internationally. (Number of tools (e.g., manuals, guides) for gender mainstreaming) Number of communication and KM products developed and published (i.e.,	Project reports, Systematization of good practices (including concurrent projects), Mid-term report, Final evaluation report	0	6 (5 tools) (1 communication product) (At least 35% female)	20 (18 tools) (2 communication products and 1 PANORAMA solution) (At least 35% female-led)	Knowledge sharing events, focus groups meetings held based on a multi-ethnic, multi-cultural and gender-sensitive approach	<i>Risks:</i> The good practices of the project are not codified correctly; there is no proper dissemination of these good practices; limited interaction with concurrent projects which limits sharing of good practices with those projects. <i>Assumptions:</i> The project can generate

	<p>PANORAMA solutions and EXPOSURE photo-stories)</p> <p>(Percentage of female that lead these initiatives)</p>					and document good practices in an effective manner
<p>Outputs to achieve Outcome 4.1</p>	<ul style="list-style-type: none"> 4.1.1 Knowledge Management and Communications implemented. 4.1.2. Harmonized information management system and spatial information system for integrating lessons from biological corridors, conservation efforts, CE and SLM policy implementation. 4.1.3 Gender mainstreaming and social and environmental safeguards strategies developed and implemented. 					

[1] UNDP publishes its project information (indicators, baselines, targets and results) to meet the International Aid Transparency Initiative (IATI) standards. Make sure that indicators are S.M.A.R.T. (Specific, Measurable, Attainable, Relevant and Time-bound), provide accurate baselines and targets underpinned by reliable evidence and data, and avoid acronyms so that external audience clearly understand the results of the project.

[2] Baseline, mid-term and end of project target levels must be expressed in the same neutral unit of analysis as the corresponding indicator. Baseline is the current/original status or condition and needs to be quantified. The baseline can be zero when appropriate given the project has not started. The baseline must be established before the project document is submitted to the GEF for final approval. The baseline values will be used to measure the success of the project through implementation monitoring and evaluation.

[3] Target is the change in the baseline value that will be achieved by the mid-term review and then again by the terminal evaluation.

[4] Data collection methods should outline specific tools used to collect data and additional information as necessary to support monitoring. The PIR cannot be used as a source of verification.

[5] This indicator captures the number of individual people who receive targeted support or assistance from a given GEF-financed project or program and/or who use the specific resources that the project maintains or enhances. Direct beneficiaries are all individuals receiving either: (a) Targeted support. This includes individuals whom can be identified as receiving direct support or assistance, can be counted individually and are aware they are receiving support in some sort and/or use the specific resources. This implies a high degree of attribution to the project; or (b) High intensity of support. This means receiving a high level of support/effort provided per person, assessed on a continuum with broad levels from Low to Medium and High, where only high intensity of support qualifies as direct beneficiary as per Table 1 (page 26) of the GEF's [Guidelines on the Implementation of the GEF-8 Results Measurement Framework](#).

[6] Outcomes are medium term results that the project makes a contribution towards, and that are designed to help achieve the longer-term objective. Achievement of outcomes will be influenced both by project outputs and additional factors that may be outside the direct control of the project.

ANNEX D: STATUS OF UTILIZATION OF PROJECT PREPARATION GRANT (PPG)

Provide detailed funding amount of the PPG activities financing status in the table below:

Project Preparation Activities Implemented	GETF/LDCF/SCCF Amount (\$)		
	Budgeted Amount	Amount Spent To date	Amount Committed
International consultant	36,000.00	7,527.60	30,110.40
Local consultants	69,000.00	39,984.83	24,084.00
Contractual Services	45,000.00	10,062.60	34,937.40
Travel	15,000.00	409.18	
Supplies	1,000.00		

Professional Services	9,000.00		17,000.00
Audio Visual&Print Prod Costs	5,000.00		7,042.13
Training, Workshops and Confer	20,000.00	14,842.71	13,999.15
Total	200,000.00	14,842.71	38,041.28

ANNEX E: PROJECT MAP AND COORDINATES

Please provide geo-referenced information and map where the project interventions will take place

Location Name	Latitude	Longitude	GeoName ID
Isla Margarita	9.3915	-79.8902	

Location Description:

Activity Description:

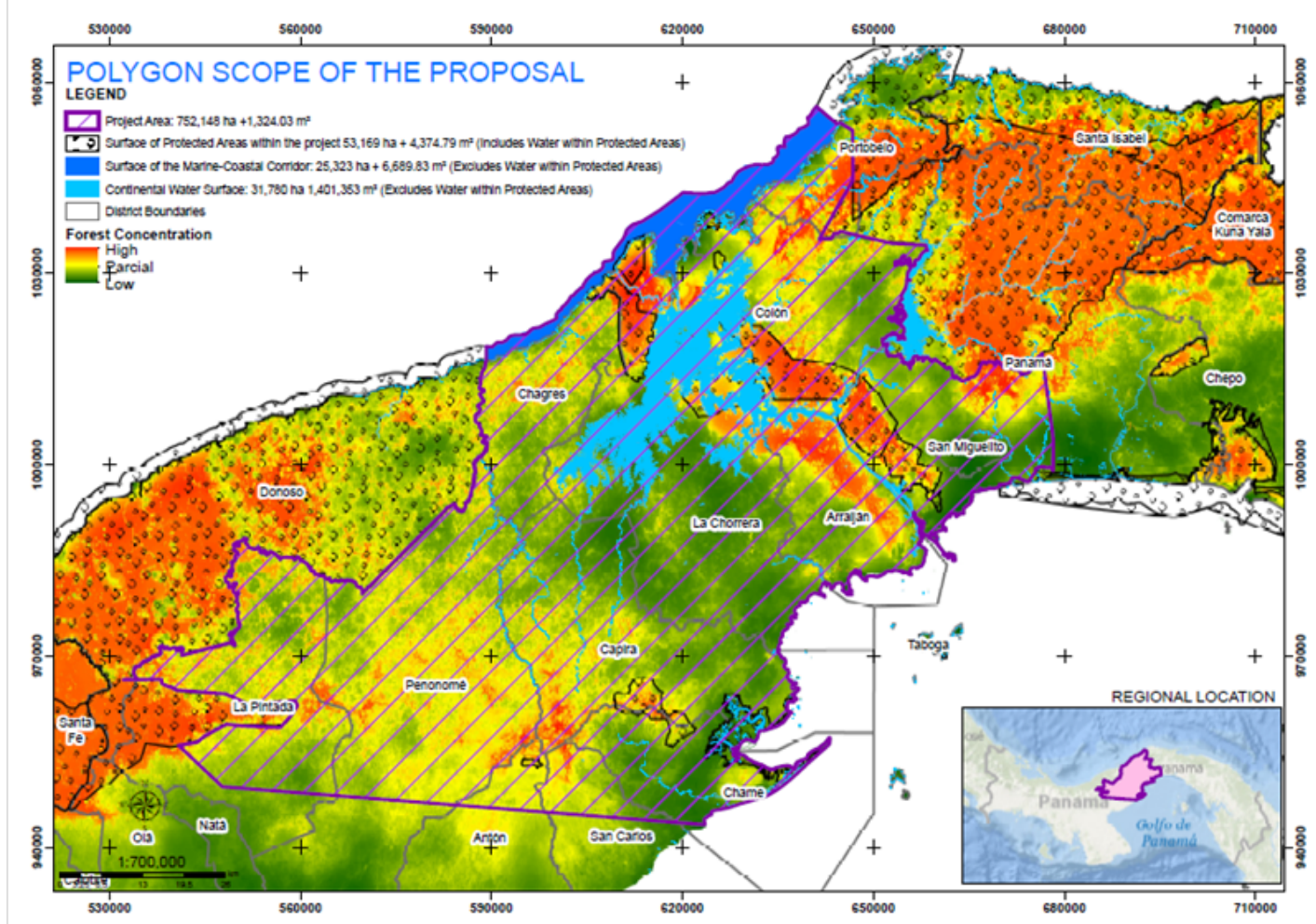
Location Name	Latitude	Longitude	GeoName ID
Quebrada Aguacate	8.9559	-79.9791	

Location Description:

Activity Description:

Please provide any further geo-referenced information and map where project interventions are taking place as appropriate.

See also Annex 3.1 for shapefiles of the project landscape.



ANNEX F: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

Attach agency safeguard datasheet/assessment report(s), including ratings of risk types and overall project/program risk classification as well as any management plans or measures to address identified risks and impacts (as applicable).

Title

PIMS 9653 SESP

ANNEX G: BUDGET TABLE

Please upload the budget table here.

Expenditure	Detailed Description	Component (USDeq.)	Total (USDe)	Responsible Entity
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Category		Component 1			Component 2	Component 3	Component 4	Sub-Total	M&E	PMC	q.)	(Executing Entity receiving funds from the GEF Agency)[1]
		Sub-components 1.1	Sub-components 1.2	Sub-components 1.3								
Equipment	PMC: Six laptops and equipment at an average cost of \$1,796 TOTAL: 10,776						-		10,776	10,776	Ministry of Environment (MiAMBIE NTE)	
Grants	Grants for investment in biodiversity friendly value chains (Activity 3.1.4b). Grants will be released following UNDP Guidance on Low-value Grants. TOTAL \$1,398,295					1,398,295	1,398,295			1,398,295	Ministry of Environment (MiAMBIE NTE)	
Grants	Grants for the Implementation of PA conservation management interventions. Grants will be released following UNDP Guidance on Low-value Grants. TOTAL \$302,900				302,900		302,900			302,900	Ministry of Environment (MiAMBIE NTE)	
Grants	Grants to implement interventions (e.g., micro conservation corridors, forest enrichment, live fences, etc.) for the creation and/or strengthening of biological corridors and restoration of degraded areas (Activity 2.1.4b). Grants will be released following UNDP Guidance on Low-value Grants. TOTAL \$909,380				909,380		909,380			909,380	Ministry of Environment (MiAMBIE NTE)	
Other operating costs	PMC: UNDP Cost Recovery Business Process: Delivery Enabling Services (DPC) TOTAL: \$30,203						-		30,203	30,203	Ministry of Environment (MiAMBIE NTE)	
Contractual services-Individual	M&E: Project M&E Officer (part-time 40% NPSA-5 level @\$24,610 (\$9,844) per year for 6 years) required to report on progress made in reaching GEF core indicators and project results included in the project results framework TOTAL: \$59,064						-	59,064		59,064	Ministry of Environment (MiAMBIE NTE)	

Contractual services-Individual	One (1) Circular Economy National Specialist to provide technical advisory and oversight for the implementation of Component 3 NPSA-6 at @\$ 29,730 per year for 6 years (Activity 3.1.1a) TOTAL \$178,380					178,380		178,380			178,380	Ministry of Environment (MiAMBIE NTE)
Contractual services-Individual	One (1) Forestry National Specialist and one (1) Biodiversity National Specialist to jointly coordinate Component 2 (each at NPSA-6 at @\$ 29,730 per year for 6 years) (Activity 2.1.1a) TOTAL 356,760				356,760			356,760			356,760	Ministry of Environment (MiAMBIE NTE)
Contractual services-Individual	One Project Communications Officer (NPSA-6, @\$29,730 per year for 6 years) and one Project Gender Officer (partial time, 50%) (NPSA-6, @\$29,730 per year for 6 years) (Activity 4.1.1a) TOTAL \$267,570						267,570	267,570			267,570	Ministry of Environment (MiAMBIE NTE)
Contractual services-Individual	One Project Social and Environmental Safeguards Officer to implement ESMF and ESMP (NPSA-6 at @\$ 29,730 per year for 6 years) (Activity 4.1.3a) TOTAL \$178,380						178,380	178,380			178,380	Ministry of Environment (MiAMBIE NTE)
Contractual services-Individual	Project Technical specialist for Component 1 (NPSA-10 Total cost 376,243) to facilitate coordination among institutions and technical support. TOTAL: \$326,286. This represents approximately 86.72% of the total cost allocated here.	326,286						326,286			326,286	Ministry of Environment (MiAMBIE NTE)
Contractual services-Individual	PMC: One Project Technical Specialist (NPSA-10 Total cost 376,243) Approximately 13.28% is allocated here to represent time supporting Project management. Total \$49,957. One Project Assistant (at NPSA-5 level) @\$24,609 per year for 6 years TOTAL: \$197,610							-		197,611	197,611	Ministry of Environment (MiAMBIE NTE)

Contractual services-Company	Company to conduct market analysis (Activity 3.1.3a) and develop business plans for selected companies (Activity 3.1.3b) (lump sum @164,865) TOTAL \$164,865					164,865		164,865			164,865	Ministry of Environment (MiAMBIE NTE)
Contractual services-Company	Consulting firm to conduct awareness campaign (lump sum \$347,073) (Activity 1.3.2a) TOTAL \$347,073			347,073				347,073			347,073	Ministry of Environment (MiAMBIE NTE)
Contractual services-Company	One (1) company hired for the design and implementation of continuous survey (\$50,000 per year for 6 years) (Activity 4.1.1c); TOTAL \$300,000					300,000		300,000			300,000	Ministry of Environment (MiAMBIE NTE)
Contractual services-Company	One (1) company to develop and implement a national dashboard on BD benefits (Lump sum \$171,256) (Activity 4.1.2c) TOTAL \$171,256					171,256		171,256			171,256	Ministry of Environment (MiAMBIE NTE)
International Consultants	M&E: Independent Mid-term Review (MTR) (\$50,000) and Independent Terminal Evaluation (TE) (\$71,089) (the TORs include delivery of products in English and Spanish) TOTAL: \$121,089							-	121,089		121,089	Ministry of Environment (MiAMBIE NTE)
Local Consultants	Consultant to develop inventory (60 days @\$500 per day) (Activity 3.1.2a) TOTAL \$30,000					30,000		30,000			30,000	Ministry of Environment (MiAMBIE NTE)
Local Consultants	Local consultant (90 days @\$400/day) to support the systematization of tools, practices to support the creation of biological corridors (Output 2.1.4) TOTAL: \$36,000				36,000			36,000			36,000	Ministry of Environment (MiAMBIE NTE)
Local Consultants	Local consultant for the development of protocols for species monitoring (40 days @\$400 / day) (Activity 2.1.2c) TOTAL \$16,000				16,000			16,000			16,000	Ministry of Environment (MiAMBIE NTE)
Local Consultants	Local consultant to collect information on tools for community monitoring (25 days @\$400 per day) (Activity 4.1.2a) TOTAL: \$10,000						10,000	10,000			10,000	Ministry of Environment (MiAMBIE NTE)

Local Consultants	Local consultant to develop communications strategy (60 days @\$500/day = \$30,000) (Activity 4.1.1a); Local consultant for the systematization of good practices (80 days @\$500/day = \$40,000) (Activity 4.1.1c); Local consultant to develop two photo-stories using EXPOSURE or a similar platform and at least one PANORAMA case (\$3000 per product = \$9,000) (Activity 4.1.1d) TOTAL \$79,000							79,000	79,000			79,000	Ministry of Environment (MiAMBIE NTE)
Local Consultants	Local consultant to develop training material and deliver the trainings (12 months @\$3,000 / month) (Activity 1.3.1) TOTAL: \$36,000			36,000					36,000			36,000	Ministry of Environment (MiAMBIE NTE)
Local Consultants	Local consultant to support identification of priority areas to be considered as OECMs (3 months @2,500) (Activity 2.1.3a); Local consultant to support OECM in the process of recognition (12 months @\$2,500) (Activity 2.1.3b) TOTAL \$37,500					37,500			37,500			37,500	Ministry of Environment (MiAMBIE NTE)
Local Consultants	National consultant for 12 months @\$2500 per month to conduct policy analysis (6 months each) (Activity 1.2.1a) TOTAL: \$30,000			30,000					30,000			30,000	Ministry of Environment (MiAMBIE NTE)
Local Consultants	National consultant for 12 months @\$2500 per month to provide support for institutional coordination (Activity 1.1.1b, Activity 1.1.1d). TOTAL: \$30,000	30,000							30,000			30,000	Ministry of Environment (MiAMBIE NTE)
Local Consultants	National consultant for 6 months @\$2500 per month to conduct policy analysis (Activity 1.2.2a) TOTAL: \$15,000			15,000					15,000			15,000	Ministry of Environment (MiAMBIE NTE)
Local Consultants	Three (3) Forestry national consultants with experience in GIS and planning @40,000 each (\$2,500 per month for 16 months) (Activity					130,000			130,000			130,000	Ministry of Environment (MiAMBIE NTE)

	2.1.1a); Support for the implementation of the CCPs (\$2,500 for 4 months) (Activity 2.1.1c) TOTAL \$130,000												
Training, Workshops, Meetings	Capacity building workshops (4 workshops @\$5,000 each) (Activity 2.1.1b) TOTAL \$20,000				20,000			20,000				20,000	Ministry of Environment (MiAMBIE NTE)
Training, Workshops, Meetings	Conduct at least 12 participatory workshops (\$2,000/workshop) to collect and validate information to prioritize restoration sites in the project area (Activity 2.1.5a) TOTAL: \$24,000				24,000			24,000				24,000	Ministry of Environment (MiAMBIE NTE)
Training, Workshops, Meetings	Four (4) workshops in four nuclei within the project area (Colon, Panamá, Panamá Oeste and Coclé). (@\$5,000 per workshop) (Activity 2.1.2a); Four (4) capacity building workshops for technical personnel of regional offices of MiAMBIENTE (Colon, Panama, Panama Oeste and Coclé), one for each regional office @\$5,000 per workshop (Activity 2.1.2b) TOTAL \$40,000				40,000			40,000				40,000	Ministry of Environment (MiAMBIE NTE)
Training, Workshops, Meetings	Four events to share good practices (\$5,000 each) (Activity 4.1.1c) TOTAL: \$20,000						20,000	20,000				20,000	Ministry of Environment (MiAMBIE NTE)
Training, Workshops, Meetings	Four training events for local communities on community monitoring (4 @\$5,000 per event) (Activity 4.1.2b) TOTAL: \$20,000						20,000	20,000				20,000	Ministry of Environment (MiAMBIE NTE)
Training, Workshops, Meetings	M&E: Inception Workshop and Report TOTAL: \$8,000								8,000			8,000	Ministry of Environment (MiAMBIE NTE)
Training, Workshops, Meetings	One (1) national workshop (\$5,000 per workshop) and 2 regional workshops (\$5,000 per workshop) (Activity 1.2.2a) TOTAL: \$15,000		15,000					15,000				15,000	Ministry of Environment (MiAMBIE NTE)

Training, Workshops, Meetings	Three on-site workshops (3 x \$5,000) and three online workshops (3 x \$5,000) per year for 2 years (for both events) for MiAMBIENTE, MIDA, ATP y ACP; Twelve (12) regional workshops (at least one with IPs) per year for 2 years @\$5,000 (Activity 1.3.2a). TOTAL: \$180,000									180,000	180,000	Ministry of Environment (MiAMBIENTE)
Training, Workshops, Meetings	Training workshops on gender mainstreaming and social and environmental safeguards for project staff and stakeholders (Activity 4.1.3b) (5 workshops @\$2,000/each) TOTAL \$10,000						10,000	10,000			10,000	Ministry of Environment (MiAMBIENTE)
Training, Workshops, Meetings	Two (2) national workshops (1 for each Policy) (\$5,000 per workshop) and 4 regional workshops (\$5,000 per workshop) (2 for each policy) (Activity 1.2.1a) TOTAL: \$30,000			30,000				30,000			30,000	Ministry of Environment (MiAMBIENTE)
Training, Workshops, Meetings	Two (2) national workshops (1 for each policy) (\$5,000 per workshop) and 9 regional workshops (at least one with IPs) (Darién/Centro/Colon/Panamá Oeste/Guna Yala, Azuero/Veraguas, Chiriquí/Bocas del Toro (\$5,000 for each workshop) (2 for each policy) (Activity 1.3.1) TOTAL \$55,000			55,000				55,000			55,000	Ministry of Environment (MiAMBIENTE)
Training, Workshops, Meetings	Two events per year @\$5,000 per event (Activity 1.1.1a); Four (4) meetings per year (1 every three months \$5,000 per meeting) to support coordination mechanisms (Activity 1.1.1c) TOTAL \$180,000	180,000						180,000			180,000	Ministry of Environment (MiAMBIENTE)
Travel	Conduct six technical missions (\$1,500/mission) to collect information to prioritize restoration sites in the project area (Activity 2.1.5a) TOTAL: \$9,000			9,000				9,000			9,000	Ministry of Environment (MiAMBIENTE)

Travel	PMC: Travel for PMU (7 people) (\$8,000 per year for 6 years) TOTAL: \$48,000									48,000	48,000	Ministry of Environment (MiAMBIE NTE)
Office Supplies	PMC: Office supplies @\$2,000 per year for 6 years TOTAL: \$12,000									12,000	12,000	Ministry of Environment (MiAMBIE NTE)
Other Operating Costs	Acquisition of biodiversity friendly technologies (e.g., biodigestors, composting/upcycling units, etc.) (Activity 3.1.4a) TOTAL \$110,000				110,000			110,000			110,000	Ministry of Environment (MiAMBIE NTE)
Other Operating Costs	Design services for training materials (lump sum @10,000 for 5 documents @\$2,000 / document) (Activity 1.3.1) TOTAL: \$10,000			10,000				10,000			10,000	Ministry of Environment (MiAMBIE NTE)
Other Operating Costs	Document design for publication (@\$2,000 per publication for 5 publications) (Activity 4.1.1d) TOTAL \$10,000						10,000	10,000			10,000	Ministry of Environment (MiAMBIE NTE)
Other Operating Costs	PMC: Audit costs @\$2,500per year for 6 years TOTAL: \$15,000									15,000	15,000	Ministry of Environment (MiAMBIE NTE)
Grand Total		536,286	90,000	628,073	1,881,540	1,881,540	1,066,206	6,083,645	188,153	313,590	6,585,388	-

Please explain any aspects of the budget as needed here

ANNEX I: RESPONSES TO PROJECT REVIEWS

From GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF.

STAP SCREENING REVIEW

GEF ID	11209
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Project Title	Strengthening ecological connectivity in natural and productive landscapes between the Amistad and Darien biomes
Date of Screen	08 June 2023
STAP Panel Member	John Donaldson
STAP Secretariat	Alessandro Moscuza

#	STAP Observation (Specific points to be addressed, and suggestions)	UNDP Response
1	<p>A clear description of the proposed circular economy (CE) principles should be added to the proposal either in the project description section or the components description section. This should include concrete elements and/or aspects such as specific CE practices, methods and approaches. References to CE principles in different sections should also provide greater clarity and separation between the activities relating to CE versus others relating to biodiversity-friendly enterprises.</p>	<p>The circular economy principle has been more coherently embedded in the project description. In Footnote #20 the circular economy definition based on Law 33 (2018) is clearly defined. The footnote mentions the following:</p> <p><i>“In Panama, Law 33 of 2018 which establishes the Zero Waste Policy, defines the circular economy as the non-linear economy, based on the principle of closing the life cycle of products, services, waste, materials, water, and energy. It is a low-carbon economy that generates new jobs.”</i></p> <p>In Component 3, more specific and concrete elements and practices have been incorporated. From project consultations during the PPG phase, activities relating to CE versus other relating to biodiversity were identified. These are described under Outcome 3.1 (paragraph 65) as follows:</p> <p><i>“...adopting sustainable practices like avoiding harmful chemicals, using local materials and waste products, and adding value to waste. The project promotes business models that capitalize on local biodiversity as an economic asset, such as sustainable construction materials, sustainable forestry products & non-timber forest products, collection and processing of recyclable and/or up-cyclable materials, research & development, organic and non-organic waste conversion technologies, organic and sustainable food value chains, eco-tourism, agrobiodiversity produce, traditional art, handicrafts, etc.”</i></p> <p>Output 3.1.3 (paragraph 70) mentions:</p> <p><i>“...identify suitable areas for the installation of community recycling/up-cycling points through MSME/cooperative engagement.”</i></p> <p>Output 3.1.4 (paragraph 72) mentions:</p>

		<p><i>“the project will support the integration of forest products (i.e., non-timber and sustainably sourced timber) value chains with other sectors, promoting the expansion of benefits from forest residues (e.g., producing activated carbon from thinning residues, crushing thinning residues to produce shavings for furniture manufacturing, etc.)”</i></p>
2	<p>The section on threats should be improved to be more focused on the issues that the project is trying to address and the proposed scope of its activities.</p>	<p>The section has been fully updated. Paragraphs 9-13 and accompanying figure 2 outlining the connection between: Drivers, Environmental and Socioeconomic Root Causes, Threats, Environmental and Socioeconomic Problems, and the Problem to be addressed by the Project. Section A includes a specific analysis for each of the drivers following the logical chain, to underline the project logic and justification.</p>
3	<p>The ToC diagram should be revised entirely to ensure that all the concerns noted above are addressed, with a specific focus on ensuring that the logical pathway and links between different elements and stages of the ToC framework are illustrated clearly as described in the STAP ToC primer.</p>	<p>The ToC diagram (Figure 3) has been updated, and it now includes a clear vertical logic between Components, Outcomes, and Outputs. The ToC also states how the outputs will address the identified barriers. Finally, the assumptions (paragraph 35 and Figure 3) have been updated to outline how they influence the logical pathway.</p>
4	<p>The risk section of the document should be revised and improved to address all the concerns highlighted in the previous section of this document. Specific attention should be devoted to ensuring that the description of mitigating actions is clear and includes measures that are specifically designed to address the risks identified.</p>	<p>The risk section (paragraph 104) has been revised and mitigation actions have been strengthened, including details about the proposed measures.</p>
5	<p>A stakeholder engagement strategy and/or plan should be developed (preferably before the project proceeds to PPG stage), this should include a clear description of each stakeholder’s anticipated role and responsibilities and should provide an adequate explanation of: a) how stakeholders will contribute to the development and implementation of the project, and b) how they will benefit from the project. Further guidance on developing a stakeholder engagement plan can be found in the STAP advisory document on Multi-stakeholder dialogue for transformational change.</p>	<p>A stakeholder Engagement Plan has been developed and is included as Annex 13 (Stakeholder Engagement Plan and IPP). In addition, the document provides additional detail on the roles, responsibilities to deliver on the GEBs, adaptation benefits, and other proposed outcomes through: (a) <i>Table 1: Key Stakeholders and their roles and responsibilities</i> and (b) <i>Table 2: Key partners and project collaboration</i>.</p>