



The World Bank

Panama Sustainable Rural Development and Biodiversity Conservation

Project Information Document/ Identification/Concept Stage (PID)

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**BASIC INFORMATION****A. Basic Project Data**

Project ID	Parent Project ID (if any)	Environmental and Social Risk Classification Substantial	Project Name
P178063			Panama Sustainable Rural Development and Biodiversity Conservation
Region	Country	Date PID Prepared	Estimated Date of Approval
LATIN AMERICA AND CARIBBEAN	Panama	02-Dec-2021	
Financing Instrument	Borrower(s)	Implementing Agency	
Investment Project Financing	Republic of Panama	Ministry of Environment	

PROJECT FINANCING DATA (US\$, Millions)**SUMMARY**

Total Project Cost	11.01
Total Financing	11.01
Financing Gap	0.00

DETAILS**Non-World Bank Group Financing**

Counterpart Funding	5.50
Borrower/Recipient	5.50
Trust Funds	3.51
Global Environment Facility (GEF)	3.51
Commercial Financing	2.00
Unguaranteed Commercial Financing	2.00



B. Introduction and Context

Country Context

Panama's economic growth in the last decade has been considerable, helping to reduce the national poverty rate substantially. Panama is a small, open, dollarized economy with some of the highest rates of economic growth worldwide, averaging 6.5 percent between 2010 and 2018. Economic growth has come from diverse sources: the country's transportation and logistics services sectors (dominated by the Panama Canal and Tocumen International Airport), a vibrant banking sector, the Colon Free Trade Zone, the insurance industry, a globally important ship registry, tourism, and offshore banking, among others. For the period 2010-18, poverty declined from 22 percent to an estimated 13 percent (using US\$5.50 per person per day, 2011 PPP). In 2018, the country's per capita income reached US\$13,100 – crossing the World Bank's (WB) high-income threshold. Yet, as seen in other contexts, the transition from low to high income in Panama has come with the concentration of the national economic development.[1]

Notwithstanding the country's strong overall economic growth, inequality remains high, a situation exacerbated by the impacts of the COVID-19 pandemic and particularly in the country's lagging regions largely located in Indigenous, Afro-descendant, and rural territories. A key challenge facing the Government of Panama (GoP) is how to redistribute public resources originating from an outstanding economic performance and achieve broader development outcomes. Panama has a population of around 4.1 million people, of which up to 32 percent are rural and 12 percent are Indigenous Peoples (IP), coming from seven ethnic groups or peoples, each with a distinct cultural identity. From an urban-rural perspective, multidimensional poverty is estimated at 40 percent in rural Panama, compared to only 10 percent in urban areas.[2] Panama is the fifth most unequal country in Latin America and Caribbean (LAC) with a 2019 Gini coefficient of 49.8.[3] The unequal distribution of wealth has given rise to what the new administration has described as the “five Panamas”: Modern Panama, Middle-Class Panama, Panama of the Slums, Rural Agricultural Panama, and the Panama of the Indigenous Territories.[4]

Developing the rural and Indigenous territories in an inclusive and sustainable manner will be essential for reducing Panama's economic inequality and pockets of deep poverty. As expressed in the Government's Strategic Plan[5] (*Programa Estratégico de Gobierno – PEG*) 2019-2024, the new administration aims to reduce economic disparities by promoting sustainable and inclusive territorial development. According to the Panama Multidimensional Poverty Index (MEF, MIDES, INEC, 2017), poverty levels are highest in three out of the twelve Indigenous territories and/or comarcas: Ngäbe Buglé (93.4 percent), Guna Yala (91.4 percent) and Emberá (70.8 percent); on average, poverty rates in these comarcas are 4.5 times higher than the national poverty rate. Moreover, around 14 percent of the population is Afro-descendant and rural.[6] Indigenous men earn on average 57 percent less than non-Indigenous men, while Indigenous women earn about 70 percent less than non-Indigenous women.[7]

The COVID-19 pandemic and the containment measures have affected Panama's growth drivers significantly with severe social and poverty impacts, especially on Indigenous people, women, and Afro-descendants. Panama has been the most affected country by the COVID-19 pandemic in LAC with an infection rate almost 18 percent higher than Brazil's, the second most affected country as of mid-May 2021. The pandemic, however, seems to be receding in Panama as the number of new cases have consistently



declined since mid-February of 2021. The country has made some progress in vaccination, having more than 16 percent of the population receiving at least one dose, which is below regional leaders like Chile (56 percent) and Uruguay (54 percent), but in line with neighboring countries Colombia (14 percent) and Costa Rica (20 percent)[8]. Poverty increased by two percentage points, while public debt shot up by almost 20 percentage points of GDP, leading Panama to fall under the middle-high income countries as of July 2021. Panama is facing the challenge of reigniting growth and poverty reduction while balancing its fiscal accounts. The concentration of jobs in the most affected sectors of the economy makes households particularly susceptible to the crisis. Despite recent growth, workers in the high-growth sectors remained vulnerable, with over one-fifth of them living under \$13 a day in 2018 (in terms of Purchasing Power Parity – PPP). In addition, inequality remained among the highest in the world (as indicated by a Gini coefficient of 49.8 in 2019). Unemployment reached 18.5 percent in 2020, and nearly 130,000 people are expected to fall under the poverty line of \$5.5 (PPP) a day, which implies an increase in the poverty headcount from 12.1 percent in 2019 to 14.9 percent in 2020. Government policies, which include transfers to households (*Panama Solidario*) for an amount equivalent to 1.3 percent of GDP, played a critical role in mitigating the adverse effects of the crisis. It is estimated that without it, poverty would have increased to 20.8 percent.[9] Indigenous people, women, and Afro-descendants have been especially affected, as 70, 50, and 56 percent of them, respectively, work in sectors affected by the pandemic – mainly agriculture and tourism, among others.

[1] Reshaping Economic Geography, The World Bank, 2009.

[2] The economic growth and the inequality in Panama: an urban-rural approach, Sánchez-Galán, 2020.

[3] <https://data.worldbank.org/indicator/SI.POV.GINI?locations=PA>

[4] Plan Estratégico de Gobierno 2019-24 de Panamá

[5] https://www.gacetaoficial.gob.pa/pdfTemp/28931_A/GacetaNo_28931a_20191231.pdf

[6] Afro-descendants in Latin America: Toward a Framework of Inclusion, The World Bank Group, 2018

[7] WBG 2015, Indigenous LA in the Twenty-First Century: The First Decade

[8] Data as of June 1, 2021

[9] <https://www.worldbank.org/en/country/panama/overview#1>; Updated April 6, 2021.

Sectoral and Institutional Context

Panama is considered one of the most biologically diverse countries in the world.[1] As part of the Mesoamerican Biological Corridor (MBC), the country is home to 8 of the 200 ecoregions recognized worldwide, with 21 times more plant species per square kilometer than in Brazil, and a greater number of



vertebrate species than any other country in Central America and the Caribbean. According to the National Strategy for Biodiversity 2018-2050, the National Protected Areas System (*Sistema Nacional de Áreas Protegidas – SINAP*) comprises 120 national protected areas (NPAs), 12 wildlife zones, and a variety of ecosystems, together accounting for 31.8 percent of the country's marine areas. Approximately 12 percent of the Panamanian population inhabits forested areas of the country and two-thirds of the country's forest cover is in IP traditional territories, which include both Indigenous territories and NPAs, comprising some of Panama's richest natural resources and cultural diversity. The country has a high level of biodiversity in proportion to its size and has important and critical natural habitats in high priority ecosystems containing globally significant biodiversity with 976 bird species and more than 10,000 plant species. The Panamanian territory plays an important role in the natural connectivity south of the MBC and northern South America, as it has played in different geological times. Biodiversity is of paramount importance not only due to the environmental goods and services it provides, but also because an estimated 45 percent of the global economy is based on biological products and processes.[2]

Panama has strengthened its environmental governance structure aiming to protect its biodiversity and national resources of global importance. The country is recognized for promoting the importance of biodiversity through its culture and traditions and is committed to advance towards the conservation of biodiversity post-2020 agenda and maintain a leading role in contributing to the Sustainable Development Goals (SDGs) and the Aichi Biodiversity Targets.[3] In 2015, the Ministry of Environment assumed the role of the National Environment Authority (Law 8 of March 25, 2015), achieving its direct representation in the National Cabinet Council, the Inter-Agency Consultative Commission on Environment, and the Interinstitutional Environment System. The organization structure of the institution was reformed, and there was a significant budgetary improvement; however, it remained insufficient to meet environmental challenges. The budget allocation for the year 2019 represented only 0.49 percent of the national budget (US\$69.4 million), which continues to limit the institutional work to fulfill its mandate. The financial gap of NPAs is close to US\$20 million annually, posing a significant challenge to maintain the national biodiversity at acceptable levels; furthermore, biodiversity constraints and management deficiencies in areas outside NPAs are also identified in approximately 90 percent of the country's territory and they need attention as well. Particularly, Panama is aware that conserving nature and ecosystem services is not only achievable by consolidating the network of NPAs but also working in the connectivity among them in the rural landscape. Therefore, private nature reserves are also an important part of the NPA network and should be considered as an opportunity to involve public and private partners in the conservation and management of those NPAs.

A series of mutually supportive public policy instruments aim to address the main sectoral challenges to improved environmental governance. The PEG incorporates the preservation of natural endowments for the benefit of present and future generations. The primary objective is to reduce the main threats faced by the national biodiversity and natural heritage, particularly the consequences of urban, industrial and energy development, deforestation, pollution and overexploitation of rivers, seas, tropical forests, and coral reefs. In particular, actions are directed to enforce existing laws on environmental issues, protect the biodiversity and natural heritage, incorporate environmental education into school programs, encourage actions to combat climate change, and consolidate an international policy around the conservation of the environment and biodiversity. The country's 2018-2050 Biodiversity Action Plan prioritizes short, medium and long-term



actions in five thematic axes to conserve biodiversity: (i) Conservation and Restoration; (ii) Reduction of Pressures on Biodiversity; (iii) Environmental Knowledge, Awareness and Education; (iv) Sustainable Use and Management; and (v) Integration and Governance. The National Biodiversity Strategy focuses on priority environmental issues, in accordance with the vulnerabilities and threats to conservation areas, as well as the national and international commitments, equitable sharing of benefits, nature-based solutions, and territorial planning to strengthening the resilience capacities of vulnerable communities and ecosystems. The National Water Security Plan (NWSP) 2015-2050, Water for All, constitutes the country's strategy for safeguarding water resources and guaranteeing access to safe water for all citizens. The plan represents a major step forward for the protection of river basins, the prevention of pollution and water-related disasters, and the conservation of valuable ecosystems at the national level. These plans require a much broader participation and the pertinent and due mainstreaming into institutions beyond environmental management.

However, growth in Panama's rural productive sectors continue to pose threats to its biodiversity

conservation efforts. Population growth has led to increased demands for greater supplies of food, one of the main drivers for biodiversity loss, land degradation, and GHG emissions when unproperly managed. From 2006 to 2012, a total of 65,250 hectares were deforested in Panama, of which 89 percent (58,309 hectares) were converted to areas for agricultural activities, with cattle farming accounting for most (45,542 hectares) of the deforested areas. The balance between forest gains and losses continues to be negative over the period 2012-2019, with a loss of 56,369 hectares. Recent studies indicate that connectivity for most large terrestrial mammals[4] is low in the Panamanian portion of the MBC, particularly forest in Darien, Donoso-Santa Fe, and La Amistad National Park, leading to habitat fragmentation as a primary driver of wildlife loss (Meyer et al., 2019). Infrastructure development to create connectivity between Central and South America may threaten the natural habitats remaining and leave patches of natural vegetation increasing biodiversity loss. Additionally, mining exploration and exploitation, hydroelectric projects, and the opening of rural roads and pathways are also part of the main drivers of deforestation, forest degradation and natural habitat fragmentation.

Combining strong institutional environmental governance with sustainable economic opportunities for rural communities located within and near critical habitats is key for protecting Panama's biodiversity and natural resources. Approaches to biodiversity conservation need to move beyond the wild biodiversity focus of strictly protected areas. At the same time, support for biodiversity-friendly productive activities alone is insufficient, and instead must be combined with the creation of sustained market recognition and value for biodiversity-friendly products. The productive models of eco-agriculture and eco-tourism are critical to these aims[5]. For instance, Indigenous people's agroforestry systems – including Panama's – are highly valuable and perhaps the main driver of biodiversity conservation in the Americas. However, there is an important agenda to continue disseminating the concepts and importance of promoting environmentally friendly food systems, building capacity of stakeholders, enhancing the linkages with other sectors, promoting public policies and private sector participation, and incentivizing the market to boost their performance, in NPAs as well as in the areas connecting the NPAs, that present a high relevance for biodiversity conservation. New forms of tourism are also emerging in Panama as a growing niche market that provides local rural producers with alternative outlets and sources of income while enhancing the tourism industry offerings. The demand for these sustainable and inclusive products – rural tourism, agro-tourism, ecotourism – is driven, in



part, by global shifts in consumer tastes, preferences, and ethics that increasingly favor local production and fair trade products, organic or natural foods, sustainable tourism and agriculture and desire to reconnect to farming, food, and rurality[1]. Through market recognition for the eco-aspects of these productive activities, producers can add value and income to their livelihoods while contributing to improved biodiversity outcomes.

Complicating the sustainable rural development challenge is the fact that Panama's rural economy is highly exposed to the combined effects of climate change. The annual cost of disaster impacts is estimated to range from US\$125 to 150 million (0.36 percent to 0.42 percent of GDP), which would have significant effects on long-term economic growth. Extreme weather events – intense storms, floods, and droughts – are negatively and more regularly affecting the livelihoods of people living in lagging regions, predominantly women, Indigenous people, and Afro-descendants. Evidence is accumulating that the increasing frequency and severity of extreme weather events are attributable to climate change, which threatens to undermine Panama's unique biodiversity, the sustainability of agri-food systems, and the ability to the rural families to be food- and nutrition-secure, diverse, and improve their livelihoods.[7] Climate change has affected and will continue to adversely affect biodiversity at the genetic, species, and ecosystem level. Most ecosystems in the Americas have already experienced increased mean and extreme temperatures and/or precipitation, which have, for example, caused changes in species distribution and ecosystem boundaries. The main impacts on terrestrial, freshwater, and marine species are the shift in their geographic ranges, and changes in seasonal activities, migration patterns and abundances[8] .

Panama has taken important steps to transition towards a low-carbon and climate-resilient economy through a robust national legal and institutional framework. To date, Panama has submitted three National Communications (2000, 2011, and 2018), two Biennial Update Reports[9] (2019, 2021), and an updated Nationally Determined Contributions (NDC) in 2020. The creation of the Ministry of Environment (MiAmbiente) was a critical milestone where the GoP recognizes that climate change is a significant threat that affects the country's population, ecosystems, and productive economic sectors.[10] Panama has developed various policies and institutional arrangements to support the country's strategy to address climate change, including the National Climate Change Policy (2007), National Committee for Climate Change of Panama,[11] the inclusion of the Climate Change Chapters in the General Environment Law (Law No. 41 of 1998), the National Strategy for Climate Change 2050[12], and has regulated climate change mitigation and adaptation aspects of the National Environmental Law through Executive Decree No. 100[13] and Executive Decree No. 135, April 30th, respectively.

Climate change not only impacts the livelihoods of rural inhabitants; it also affects major enterprises and contributors to the country's GDP including the Panama Canal. Enterprises rely on biodiversity and ecosystem services, which if degraded or out of balance are not able to supply the quantity and/or quality of services required to maintain profitable levels of production. For example, pharmaceutical companies rely on biological and plant resources; agricultural companies rely on soil fertility and pollination; and manufacturers need access to water and raw materials (United Nations Development Programme, 2011). In 2019, a severe drought lowered the water levels in the Panama Canal, leading to five successive reductions in the weight of cargo that ships could transport, and costing the Canal Authority about US\$15 million in lost fees. The



Panama Canal relies on the sustainable management of the complex water resource systems of the watershed formed by lakes Gatún, Alajuela, and Miraflores. Constant efforts are required to increase the availability of water and reduce soil erosion and sedimentation that undermine the efficiency of the Canal. The Canal is the supplier of drinking water to the cities of Panama, Colón, and neighboring towns, the engines of national economic activity. Additionally, around 75 percent of the water coming from Panamanian watersheds is used to generate nearly 60 percent of the electricity consumed in the country. Healthy habitats, particularly forests and grasslands, are crucial to capture rainfall; therefore, the conservation of natural habitats and the implementation of sustainable agricultural practices are needed to maintain ecosystem services.

While the COVID-19 crisis poses additional challenges to economic growth, it also presents an opportunity to "build back better" by strengthening institutional capacity and rural economic incentives to conserve biodiversity, promoting a greener and more resilient and inclusive rural economy. From an environmental perspective, the GoP's economic reactivation proposal aims to comprehensively address urgent issues, such as: (i) respect for biodiversity; (ii) climate change; (iii) the implementation of clean energy; (iv) the application of circular economy, green economy, proper solid waste management; (v) promoting the resilience of vulnerable populations and cities and food security; and (vi) strengthening the regulatory framework for environmental issues. The SINAP/MiAmbiente could play an important role in bringing together and building back better the main economic activities in the rural areas: agriculture and tourism while enhancing conservation of natural resources. Facing the COVID-19 crisis has demonstrated that NPAs and the connecting areas between them are important sources of ecosystem services and products. Although primary agriculture contributes only about 3 percent to the GDP, its strategic significance lies in being a large employer (14 percent of the national labor force) and in preserving cultural activities and biodiversity, while providing income and food security to local farmers, one of the most vulnerable groups in the population. On the other hand, Panama's tourism sector needs to redirect its strategy into a more inclusive and biodiversity-friendly agenda to facilitate the connection between rural areas and the capital, which represents a vibrant tourist and trade hub in the Americas. The tourism sector in the NPAs is growing, from 105,419 visitors in 2009 to 277,083 in 2019 (MiAmbiente), representing a potential mechanism to boost local economies and promote the sustainable management of these areas. Mainstreaming biodiversity into public policies and particularly in activities that drive the rural economy is critical towards the protection of the country's natural resources and to unlock an inclusive and sustainable agenda, representing an opportunity to: (i) strengthen the linkages with the country's existing modern logistical services, which are well-connected to global markets; (ii) maximize the untapped inclusive and sustainable development potential of the rural space; and (iii) enhance the management of NPAs containing biodiversity of vital importance.

[1] Climate Change Knowledge Portal, World Bank Group.

[2] Practical Guide for the Development of Biodiversity-based Tourism Products, World Tourism Organization, 2011.

[3] Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society; reduce the direct pressures on biodiversity and promote sustainable use; improve the status of



biodiversity by safeguarding ecosystems, species and genetic diversity; enhance the benefits to all from biodiversity and ecosystem services; enhance implementation through participatory planning, knowledge management and capacity building.

[4] Large-bodied mammals are a group of species that are suitable indicators of global human impacts and habitat degradation, and that can hence be used to gauge the effectiveness of the MBC (Morrison, Dinverstein, Wilcove & Lamoureux, 2007).

[5] Eco-agriculture recognizes the economic and ecological relationships among agriculture, biodiversity, and ecosystem services – recognizes that agriculture-dependent rural communities are critical stewards of biodiversity and ecosystem services. (Scherr & McNeely (2008) Eco-tourism refers to the responsible travel to natural areas that conserves the environment and promotes the welfare of local people. (WWF 2013)

[6] Torres & Momsen (2011)

[7] Panama Climate Risk and Adaptation Country Profile, 2011.

https://climateknowledgeportal.worldbank.org/sites/default/files/2018-10/wb_gfdrr_climate_change_country_profile_for_PAN.pdf

[6] Bustamante et al. (2018)

[7] https://unfccc.int/sites/default/files/resource/2IBA_vf_HI-RES.pdf

[8] Government of Panama Nationally Determined Contributions, 2016.

[9] Through Executive Decree No. 1 of 2009, modified by Executive Decree No. 52 of 2013.

[10] Approved by Executive Decree No. 34 and was officially published on June 4, 2019 in the Official Gazette of the Republic of Panama.

[11] https://www.gacetaoficial.gob.pa/pdfTemp/29138_C/GacetaNo_29138c_20201020.pdf

[12] Landis (2016)

[13] Scherr & McNeely (2008)

Relationship to CPF

The Project is directly aligned with two out of the three pillars of the WB's Country Partnership Framework (CPF) 2015-2021: Pillar 2 (Ensuring Inclusion and Opportunities for Marginalized and Indigenous Groups) and Pillar 3 (Bolstering Resilience and Sustainability). Water, forest, and biodiversity resources are critical to Panama's growth model. The CPF specifies that (i) given the country's rich cultural and natural assets, often located in areas occupied by some of the poorest population, Panama is in an advantageous position to



explore innovative income-generating opportunities for its more remote and culturally diverse population; and (ii) sustainable income-generating opportunities can be fostered by an integrated landscapes approach to produce long-term well-being, enhanced management of natural capital and poverty reduction. The renewed focus on inclusion aims to improve the delivery of social services, while building the basic infrastructure, and economic conditions for people to create their own prosperity and dignity over the long-term. Moreover, the main objectives of WB engagement in Panama in response to the global COVID-19 pandemic includes policy actions to protect human capital during the pandemic, particularly for vulnerable rural, Indigenous and Afro-descendant populations.[1]

[1] <https://projects.worldbank.org/en/projects-operations/project-detail/P174107>

C. Project Development Objective(s)

Proposed Development Objective(s)

To strengthen biodiversity management and improve the economic opportunities and climate resilience of targeted beneficiaries in project areas..

Key Results

The key results by component are as follows:

Component 1: Strengthening institutional capacity for biodiversity conservation

- Protected areas under improved management effectiveness (ha)
- Establishment of an interoperability mechanism for the National Biodiversity Monitoring System (SNIMDB)
- KBAs with a diagnostic of the biodiversity and proposals to improve its conservation
- Number of studies published on biodiversity in the Project's areas
- Participants in awareness-raising activities on biodiversity, of which women

Component 2: Supporting investments in biodiversity-friendly, rural economic activities

- Area of landscapes that meet national or international third-party certification that incorporates biodiversity considerations (ha)
- Individuals directly benefitting from the project (ha)
- Land area under sustainable landscape management practices (ha)
- Increase of the value of the production (or revenue/profit from the activity supported the subproject) produced by subproject beneficiaries
- Number of subprojects that received a third party certification
- Beneficiaries satisfied by support received from the Project



D. Preliminary Description

Activities/Components

Beneficiaries. The project will directly benefit both rural actors living along NPAs (family farmers, producer cooperatives, local tourism operators, community organizations, small entrepreneurs) and key public institutions. Specifically, these direct beneficiaries include (i) an estimated 2,000 small producers, agribusinesses, and providers of eco- and agro-tourism services (located in the selected NPAs or in their buffer zones) participating in subprojects, including at least 40 percent women and 25 percent Indigenous Peoples; and (ii) the Ministry of Environment (MiAmbiente), the Ministry of Agricultural Development (MIDA), and the National Tourism Authority, whose civil servants will benefit from capacity building and training activities of the project. In addition, indirect beneficiaries of the project will include an estimated 20,000 rural Panamanians benefiting from improved protected area management, enhanced biodiversity conservation in key biodiversity areas, and improved natural resource management.

Geographic scope. The project will be implemented in two interlinked types of areas relevant for biodiversity conservation in Panama: National Protected Areas (NPAs) designated under Panama's *Resolución AG - 0704 - 2012*, including their buffer zones[1] as defined in the NPA management plans, and Key Biodiversity Areas (KBAs) designated in Panama's *Biodiversity Strategy and Action Plan* that are relevant in biodiversity conservation along the MBC. The project will undertake activities across 12 NPAs to improve the management effectiveness of an estimated 387,647 ha, or about half of their total territory (component 1). The project will also target 5 KBAs not currently located within the SINAP[2] with activities aiming to establish and improve their governance and biodiversity protections (component 1).[3] Finally, in the NPA buffer zones as well as in these 5 KBAs, the project will support the implementation of Eco-business Plans ("subprojects") in agriculture and tourism (component 2). All targeted areas (12 NPAs and 5 KBAs) have been selected due to their location in the Mesoamericano Biological Corridor. Project-supported activities will serve to build and strengthen biological corridors among the NPAs and KBAs, helping to buffer against adverse impacts of agriculture and tourism activities on NPA and KBA biodiversity. Given the location and area of the selected intervention areas, it is estimated that the benefits of the project investments would be concentrated in 99 *corregimientos*, of which 56 percent are part of the GoP's *Colmena* Plan to reduce poverty and inequality.[4]

The Project will be implemented through three components: (i) strengthening institutional capacity for biodiversity conservation; (ii) supporting the promotion of biodiversity-friendly investments; and (iii) project management and Monitoring and Evaluation.

Component 1: Strengthening institutional capacity for biodiversity conservation. The objective of this component is to strengthen the management, governance, and knowledge of biodiversity in key, selected areas of the country. The project will have a significant focus on areas inhabited by Indigenous populations of the *comarcas* per its inclusive approach to conservation. The component will achieve its aims through investments intended to improve the management effectiveness of existing NPAs, improve the biodiversity conservation of KBAs located between NPAs (including private nature reserves) to strengthen ecosystem connectivity and biological corridors, and generate knowledge and awareness of the importance of biodiversity. Specifically, this component will finance: (i) goods, training, technical assistance, operational



costs, and consulting and non-consulting services. The Component will be implemented through two subcomponents. MiAmbiente will be responsible for the implementation of all activities under this component, in coordination with relevant institutions (Research Institutes, Unachi, Ude Pmá, among others).

Subcomponent 1.1: Improving management of biodiversity and governance of select protected areas

(NPAs) and key biodiversity areas (KBAs). This subcomponent will support improvements in the management effectiveness of 12 NPAs and the establishment and improved governance of 5 KBAs not currently located within the SINAP, located within the Mesoamerican Biological Corridor. Investments in the NPAs will contribute to improved biodiversity conservation within areas already protected by improving their management according to the GEF Management Effectiveness Tracking Tool METT; investments in the KBAs are expected to result in increased protection of biodiversity in areas considered to be critical for linking NPAs. This subcomponent thus expects to contribute to conservation outcomes including increased habitat connectivity, improved mobility for migratory species, and increased gene flow among species populations.

- a. Investments in the NPAs will include: (i) signaling and physical demarcation, biodiversity monitoring, and other activities to improve management effectiveness on an estimated 387,647 ha across the 12 project-selected NPAs; (ii) updating conservation plans for 2 threatened species including the necessary costs as well as financing sources to ensure the implementation of the conservation measures[5]; ; and (iii) establishment of a coordination mechanism for the National Biodiversity Monitoring System (SNIMDB) across all relevant institutions to foster incorporation in the SNIMDB of the baseline already raised in eight NPAs and the new information that is generated .
- b. Investments in the KBAs will include: (i) support through effective shared management actions, public-private partnerships and other incentives, and technical assistance the protection of biodiversity in the 5 new KBAs[6]; and (ii) diagnostics of the landscape composition, status of connectivity, and key “stepping stones” e.g. targeting flagship species (top predators and umbrella species such as jaguar, harpy eagle, and others) to inform the nature of the protections that could be established under the KBAs (whether through the SINAP, the National Network of Private Reserves, or an IUCN “Other effective area-based conservation measure” (OECMs).

Subcomponent 1.2: Research, and generation of knowledge on biodiversity conservation. The objective of the Subcomponent is to raise awareness about the intrinsic economic value, potential climate change impacts, and sustainable returns of the country’s natural capital. Subcomponent 1.2 will finance activities to improve the biodiversity knowledge and facilitate the access to information. Activities under the Subcomponent include: (i) realization of studies on the characterizations of flora y fauna of landscapes composition in some private reserves and productive landscapes to find out how these resources contribute to the establishment of biodiversity corridors; (ii) systematization and dissemination of the information on Nature-based Solutions (NbS) and Ecosystem-based Adaptation (EbA) occurring in Panama towards decision makers, civil society, private sector, including in the agriculture, tourism, and forestry sectors and scientific community. The use of Information and Communications Technology (ICT) based solutions will be critical for the project to share the information to create awareness to a large audience about the importance of conserving biodiversity. Therefore, activities under the subcomponent also include the following: (iii) promote massive, accessible, and inclusive publications to communicate the main findings of the project,



including the SNIMDB; (iv) develop technological applications and other ICTs with easy access to public and private educational institutions on the SNIMDB and other relevant environmental issues; (v) foster alliances with the educational, agricultural and tourism sectors, as well as with private companies, to carry out research, dissemination and educational activities on biodiversity; and (vi) train the beneficiary communities (with specific attention to women, Indigenous and Afro-descendant communities) to identify species indicative of the environmental improvement of restored landscapes and provide them with the ICT tools to make proper reports. The collection and sharing of NbS and EbA would provide Panama with solutions which improve livelihoods, mitigate climate change and conserve nature. Research will be promoted in conjunction with the National Secretariat of Science, Technology and Innovation (SENACYT) to prioritize nature knowledge management for Panama.

Component 2: Supporting investments in biodiversity-friendly, rural economic activities. The purpose of this component is to support activities (“subprojects”) in NPA buffer zones and selected KBAs that are biodiversity-friendly, economically viable, and inclusive through adapting the productive alliance model to the context of Panama. The WB has successfully implemented the productive alliances model in several agricultural operations across the LAC region.[7] Using a territorial and biodiversity lens, the scope for rural alliances under this component will extend beyond the agricultural sector to incorporate a broader range of income-generating opportunities in Panama’s rural space that have the potential to contribute to biodiversity outcomes. Biodiversity-friendly subprojects under this component are considered to be those which contribute to consolidating agriculture and ecotourism systems that integrate biodiversity, generating high quality products with the use of practices that favor the conservation and functionality of ecosystems.

Subcomponent 2.1: Pre-investment for the preparation of subprojects. This subcomponent will support pre-investment activities to: (i) promote the project concept and outreach to producer and tourism associations, commercial partners, and private financing entities; (ii) develop and implement communication strategies to help form productive alliances, with particular attention to the participation of Indigenous and Afro-descendant beneficiaries, and including the identification of potential private sector financing partners such as the Agriculture Development Bank (*Banco de Desarrollo Agropecuario – BDA*) per the Productive Alliance model; (iii) identify potential eco-business opportunities on the part of the productive alliances and identify technical service providers (for aspects related to biodiversity-enhancing activities, meeting third-party biodiversity certifications, financing, and social and environmental safeguarding, among others) for the design and development of Eco-Business Plans as well as their implementation; (iv) establish and provide capacity building to an Evaluation Committee to review and approve select Eco-Business Plans according to eligibility and selection criteria; (v) build capacity of commercial private finance actors and of technical service providers to support implementation, in particular in the area of biodiversity conservation and related certifications; (vi) support project-related studies to promote specific, prioritized value chains and evaluate the potential for subproject investments to contribute to biodiversity, other environmental outcomes such as climate adaptation and mitigation, and the economic inclusion of historically marginalized groups.

Subcomponent 2.2: Productive investments for the adoption of biodiversity-friendly practices in agriculture and tourism. The purpose of this subcomponent is to support key investments for the



biodiversity-friendly, economically viable, and inclusive activities included in the Eco-Business Plans selected under Subcomponent 2.1. To this end, Subcomponent 2.2 will provide matching grants (through Subproject Agreements) to support the implementation of the subprojects.^[8] The beneficiaries will contribute a minimum of 10 percent of the matching-grant. Based on the lessons learned from the Sustainable Production Systems and Conservation of Biodiversity Project (P145621), the maximum amount granted per subproject will be US\$100,000.

Component 3: Project Management and Monitoring and Evaluation. Project results will be monitored annually and periodically evaluated during implementation to ensure that the Project effectively achieves the results. M&E at the project level will be carried out in accordance with the requirements established by the WB and the GEF. This component will finance the overall project management, coordination, and implementation of Components 1-2, including the following aspects: (i) project coordination and management; (ii) monitoring, results evaluation, and impact assessment of project activities; (iii) project fiduciary administration, internal controls, and audits; (iv) project environmental and social risk/safeguards management; and (v) stakeholder engagement and grievance redress mechanism (GRM); and (vi) project-related studies, knowledge management, and dissemination activities.

[1] NPA management zoning systems frequently include a highly protected “core area” surrounded by a “buffer zone.” The core area—such as a strict reserve or no-take area (the NPAs in this case) — protects critical habitats and species. The buffer zones allow a broader range of uses but are intended to insulate the core from threats to their conservation status. In Panama, NPA buffer zones are legally established under RESOLUCIÓN AG -0304-2012 of December 11, 2012 and set out in the management plans of each NPA.

[2] Of Panama’s 57 KBAs, only 26 are currently located within the SINAP.

[3] Selection of these NPAs was conducted in coordination with the Client to support the *Colmena Plan* and the country’s 2018-2050 Biodiversity Action Plan and is based on their importance for the MBC).

[4] The *Colmena Plan* aims to aims to territorially organize the comprehensive implementation of public policy through an articulated multisectoral offer that guarantees the population the right to development.

[5] Conservation plans for jaguars, amphibians, and harpy eagle have already been designed by MiAmbiente. However, these documents are mostly oriented on technical aspects and scientific research, but do not clearly contemplate the estimation of costs for the proposed actions, the key responsible actors, as well as the coordination mechanisms. The project will help cover these aspects necessary for an effective implementation of the conservation plans.

[6] The Biodiversity Strategy and Action Plan (NBSAP) recognizes Key Biodiversity Areas (KBAs) as sites of global importance for biodiversity conservation and which are identified at the national level based on criteria of vulnerability (presence of threatened species) and irreplaceability (global importance of a site to achieve the conservation of individual species. 57 sites were identified in the SINAP’s Strategic plan 2017, 26



of which are already under some kind of protection and management measures as defined under the SINAP. The project will help advance define protection measures for biodiversity in 5 KBAs out of the rest.

[7] The productive alliance traditional has referred to a business relationship (alliance) between a group of producers, technical assistance provider, commercial financial institution, and identified market or buyer. These parties enter into a joint business plan to meet a market demand while improving productivity, value addition, market position, and sales on a benefit-sharing basis. The participation of buyers is critical to the productive alliance model, as buyers provide the market linkages and may continue to do so after project support has ceased.

[8] Investments funded by the Component are to be implemented utilizing local labor under the supervision of TA. Project activities will be implemented in accordance with national guidelines and project-specific COVID-19 management protocols, which will be in line with WB Environmental and Social Standards on Labor (ESS2) and Community Health and Safety (ESS4) and WHO guidelines for the protection of both the community and project workers.

Environmental and Social Standards Relevance

E. Relevant Standards

ESS Standards	Relevance
ESS 1 Assessment and Management of Environmental and Social Risks and Impacts	Relevant
ESS 10 Stakeholder Engagement and Information Disclosure	Relevant
ESS 2 Labor and Working Conditions	Relevant
ESS 3 Resource Efficiency and Pollution Prevention and Management	Relevant
ESS 4 Community Health and Safety	Relevant
ESS 5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
ESS 6 Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant
ESS 7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Relevant
ESS 8 Cultural Heritage	Relevant
ESS 9 Financial Intermediaries	Not Currently Relevant

Legal Operational Policies

Safeguard Policies

Triggered

Explanation (Optional)



Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

Based on preliminary screening with the information available at concept stage, Project Environmental and Social (E&S) risks are described in the risk section. In order to assess these risks and develop appropriate mitigation measures, the Borrower will be asked to prepare the E&S instruments described below. Given that the specific scope and location of project activities, including subproject investments under C2, cannot be known during project preparation, the Borrower will be asked to develop an Environmental and Social Management Framework (ESMF) to adequately identify and manage environmental and social risks and impacts of project activities. The ESMF will be new for the project but will draw on the ESMF prepared for the Sustainable Production Systems and Conservation of Biodiversity Project (P145621). The ESMF will cover activities under C1 in 12 PAs, and potential activities under C2 in all 18 PAs, and will set out the principles, guidelines and procedures to assess the environmental and social risks and impacts of each intervention based on ESF requirements. At a minimum, the ESMF will include (i) an Environmental, Social, and Gender Assessment (ESA), including environmental and social baselines and further assessing the risks identified during initial screening for their relevance in areas chosen for project intervention; (ii) the national and international legal and institutional framework related to E&S assessment and management, how each is ESS is relevant to the project, and a gap analysis between relevant national norms and the ESF; (iii) a gender and social action plan based on the results of the ESA; and (iv) the environmental and social management process to be used by the project, including an exclusion list with intervention types that will not be financed by the project due to their E&S risks, tools and procedures for the screening, review, and approval of subprojects, and guidelines for the preparation of site specific ESMPs, including a chance finds procedure to be applied in subprojects, per the requirements of the ESF and national law. Technical assistance under the project will be carried out in a manner consistent with relevant requirements of the ESSs - in particular, technical assistance for strengthening the Fideicomiso will include elements related to environmental and social risk management. A draft of the ESMF will be prepared, consulted, and disclosed before appraisal and a final version will be ready before disbursements for any activities under C1 or C2 take place. The Borrower will prepare a Stakeholder Engagement Plan (SEP), which will be both a planning and management instrument for the Project and will: i) describe the Project stakeholders and how they will be engaged and managed during project preparation and implementation, with a focus on identifying vulnerable individuals or groups and applying measures to remove barriers to their participation; ii) describe the grievance redress mechanism (GRM) to be used by the project, including any necessary language or cultural adaptations for IPs and ADs; iii) include budget, responsibilities, and implementation arrangements for the implementation of stakeholder activities under the Project. A draft SEP will be prepared, consulted, and disclosed prior to appraisal and will be finalized before disbursements under C1 and C2 take place. The Borrower will be asked to develop standalone written Labor Management Procedures (LMP), which will describe the way in which project workers will be managed. The ESMF will assess the scope of application of the LMP, in accordance with the requirements of national law and ESS2. No child labor as defined under ESS2 will be allowed under the project. The LMP will describe the specific strategies the project will use in the design, selection, and implementation of productive subprojects to ensure no child labor is present in the project. The LMP will also



describe how agreements with community workers will be reached in cases where they are involved in the project, and the terms on which such labor will be provided, including, if relevant, how the voluntary nature of the work will be ascertained and documented, how community workers will be represented, and the methods by which community workers can raise grievances in relation to the project. The LMP will also include a standard code of conduct (CoC) for workers, including considerations related to SEA/SH, and will apply to the different types of project workers, including direct project workers, contractor workers, and community workers, as relevant. The LMP will assess the Occupational Health and Safety (OHS) risks associated with project activities and will provide linkages to the ESMF to ensure that OHS measures, in line with general and industry specific WBG EHS Guidelines, are identified at the SP level and incorporated in ESMPs. Such OHS measures will include measures designed to protect workers and minimize the spread of COVID-19, taking into account, as necessary, the World Bank's Interim Note ?COVID-19 Considerations in Construction/Civil Works Projects?. The LMP will describe a GRM accessible to project workers, which will be separate from the Project level GRM to be prepared as part of the SEP. A draft of the LMP will be available before appraisal, and the final version will be disclosed before disbursements under C1 and C2 take place. Project activities are not likely to involve involuntary resettlement. Subprojects under C2 are not expected to involve land acquisition by the PIU or other government entities. As such no economic or physical displacement is expected. However, as specific subprojects will not be known during preparation, the project will include a Resettlement Policy Framework (RPF) to guide the preparation of specific Resettlement Action Plans (RAP) to address the cases of involuntary resettlement and land acquisition if they are identified during project execution, including if any result from the demarcation of PAs or from environmental territorial plans supported under the project. As activities under C1 of the project, including demarcation of existing PAs, may result in restrictions of access to natural resources, the Borrower will be asked to include in the RPF a PF which will establish the process by which members of potentially affected communities will participate in the design and implementation of the referenced project activities. Indigenous Peoples living in prioritized corregimientos in and near PAs will be among the main beneficiaries of the project. As such, the Borrower will be asked to prepare an Indigenous Peoples Framework (IPPF) outlining how the project will ensure the participation of IPs at various levels, including through their traditional decision-making bodies, including in target biodiversity area governance and conservation activities where indigenous peoples may be present or have collective attachment to the territory or natural resources of the project area. The IPPF will also describe the process by which subprojects will be screened for the presence of indigenous peoples meeting the criteria of ESS7 and the arrangements for the preparation of site-specific Indigenous Peoples Plans (IPPs) for subprojects where IPs are present but not the sole or overwhelming majority of beneficiaries. Subprojects implemented entirely in Indigenous communities will be considered Indigenous Peoples projects and would not need separate Indigenous Peoples Plans. For such cases, the IPPF will outline how the Borrower will incorporate the elements of an Indigenous Peoples Plan in SP design and site specific ESMPs through the engagement of Indigenous communities to ensure their ownership and participation in project design, implementation, monitoring and evaluation, including, when relevant based on the requirements of ESS7, their free, prior, and informed consent (FPIC), and how, the Borrower will ensure the cultural appropriateness of SPs. The IPPF will also describe how the project ensure the participation of women, youth and the elderly, avoid elite capture, and ensure equitable benefit sharing in productive subprojects involving the participation of private sector commercial entities. A draft IPPF will be developed, consulted, and disclosed by the Borrower before appraisal, the document will be finalized and disclosed before any



disbursements under C1 or C2 take place. No subproject activities that may affect IPs will commence until the respective IPPs are finalized. In addition to the above, the Borrower and the Bank will prepare and disclose an Environmental and Social Commitment Plan (ESCP) prior to appraisal. The ESCP will provide an overview of the measures that the project will need to address during implementation to comply with the requirements of the ESF, as well as monitoring and reporting arrangements. The draft ESCP will be disclosed in country and in the WB's external website prior to appraisal. OP 7.50 is not triggered. A few of the up to 35 subprojects may include investments in irrigation systems, but would focus on rainwater management to enhance climate smart irrigation and decrease water demand on river/groundwater fed areas associated with water-intensive crops, and would not adversely affect riparian users, nor be adversely affected by riparian water uses. The inclusion of 6 MPAs will be confirmed at appraisal, including potentially the Humedal San San Pond Sak on the border with Costa Rica. Primary activities envisaged in this area are associated with nature based solutions to support tourism initiatives by local communities, to be carried out in accordance with the existing PA management plans. In addition, none of the MPAs are likely to trigger the requirement to be recognized as a necessary channel of communication between the open sea and other states and any river flowing into such waters. OP 7.60 is not triggered as the project will not work in disputed areas.

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Borrower/Client/Recipient

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