

Technical Cooperation Document

I. Basic Information for TC

▪ Country/Region:	PANAMA
▪ TC Name:	Preparation of GEF project: "Reducing coastal pollution in the Parita Bay in Panama"
▪ TC Number:	PN-T1355
▪ Team Leader/Members:	Gonzalez Mahecha, Esperanza (CSD/CCS) Team Leader; Orellana, Miguel Angel (VPC/FMP); Corriols Diaz, Leonor Odilie (VPC/FMP); Jaen Gonzalez Eymmis Griselle (CSD/CCS); Le Pommellec, Marion (CSD/RND); De Dobrzynski, Esteban (LEG/SGO); Gomez, Juan Carlos (CSD/CCS); De Obaldia Fierro, Ana Victoria (CID/CPN); Parra Alvarez, Juliana (CID/CPN); Castrellon Rios Nitzia Lynnet (VPC/FMP)
▪ Taxonomy:	Client Support
▪ Operation Supported by the TC:	N/A
▪ Date of TC Abstract authorization:	03/08/2024
▪ Beneficiary:	Ministry of Environment and Agricultural Innovation Institute of Panama (IDIAP)
▪ Executing Agency and contact name:	Inter-American Development Bank
▪ Donors providing funding:	IADB/Global Environment Facility Fund(FMM)
▪ IDB Funding Requested:	US\$100,000.00
▪ Local counterpart funding, if any:	US\$0
▪ Disbursement period (which includes Execution period):	24 months
▪ Required start date:	April 2024
▪ Types of consultants:	Individuals; Firms
▪ Prepared by Unit:	CSD/CCS-Climate Change
▪ Unit of Disbursement Responsibility:	CID/CPN-Country Office Panama
▪ TC included in Country Strategy (y/n):	Yes
▪ TC included in CPD (y/n):	No
▪ Alignment to the New Update of the Institutional Strategy 2024-2030:	Environmental sustainability Biodiversity, Natural Capital, and Climate Action; Gender Equality and Inclusion of Diverse Population Groups

II. Objectives and Justification of the TC

- 2.1 The overall objective of this technical cooperation is to provide technical assistance to the Government of Panama (GoP) in the design of the project "Reducing coastal pollution in the Parita Bay in Panama with the GEF ID 11356", which is a Child project under the Global Environment Facility's (GEF) integrated program of clean and healthy oceans (CHO-IP). The specific objectives of this TC are to: (i) develop agricultural assessments in three priority watersheds in Parita Bay; and (ii) prepare and design the full project document. On February 5th, 2024, the CHO-IP, including all child projects, was approved by the 66th GEF Council Meeting. As part of the Child project's approval of US\$ 2.9M¹, GEF Project Preparation Grant (PPG) resources in the amount of US\$100,000 were granted to prepare the full Child Project Document (GEF CEO

¹ Excluding GEF Agency fees

Endorsement Request (CER)). The CER document of the child project will be prepared during 2024 and must be submitted to the GEF for final approval (endorsement) within 12 months of Council Approval, with a possibility of a 6-month extension to obtain the GEF's CEO endorsement.

- 2.2 The GoP, through the Ministry of Environment (MiAMBIENTE) and other government entities, has been strengthening the legal and policy framework that addresses water pollution, biodiversity conservation, and coastal pollution. This framework includes but is not limited to (i) [Ley de Cuencas Hidrográficas](#); (ii) [Ley Forestal](#); (iii) [Política Nacional de Biodiversidad](#); (iv) [Política Nacional de Recursos Hídricos](#); (v) [Política Nacional de Humedales](#); and (vi) [Política Nacional de Océanos](#). These regulations show different levels of progress in their implementation, but at the same time, they have been complemented by a significant number of activities that partially contribute to their implementation. Likewise, this entire political framework contributes to the achievement of the objectives established in the [Estrategia Nacional de Ambiente \(ENA\) 2021-2031](#) for the environmental management and restoration of the country's ecosystems.
- 2.3 Panama is committed to concrete actions that position it as a leader in the region concerning the conservation and sustainability of the oceans. An example of this is the global initiative 30x30 in which the country committed to protect 30% of its marine areas by 2030, reaffirming the importance of the oceans for the State as an irreplaceable resource. Similarly, Panama's 2020 Nationally Determined Contribution (NDC1) prioritizes ten strategic areas: energy; forests; agriculture, livestock, and aquaculture; integrated watershed management; biodiversity; marine-coastal systems; resilient human settlements; sustainable infrastructure; public health and circular economy.
- 2.4 Panama is currently developing its National Adaptation Plan, Nature-based Solutions (NbS) guidelines, and green taxonomies; as well as water quality standards for water discharge in coastal-marine ecosystems, including nationwide projects such as Panama Bay Sanitation Program, Sanitary Project of Panama Oeste, and Panama's Water and Sanitation Project².
- 2.5 However, compliance and adoption of these frameworks has been challenging, thus it is necessary to strengthen local and regional governments' implementation, enforcement capacities and producers and communities' participation, which play a key role in advancing more sustainable production systems.
- 2.6 On the other hand, the agricultural sector, understood as: agriculture, livestock, hunting, forestry, fishing, and related activities, has great social importance in Panama, occupying 14.2%³ of the country's economically active population. Small-scale agricultural production (more than 200.000 families and 80% of the total number of producers) cultivates areas of less than 10 hectares⁴ and is the main occupation and source of income for 40% of the Panamanian population living in rural areas. Women have increased their participation in agricultural production activities: out of a total of 245,105 farms, 68.0% are owned by men and 32.0% by women, the participation of women producers has grown, but their access to areas with a larger

² Chiriquí, Bocas del Toro, and Veraguas and the Ngäbe Buglé indigenous territory.

³ IDIAP. [Sustainable and Inclusive Agricultural Innovation Project](#). 2022

⁴ INEC. [Basic Final Results, VI National Agricultural Census](#). 2011

number of hectares has not increased⁵. The project to be designed with this technical cooperation will involve women producers in inception and validation workshops as well as in the components of the projects encouraging and promoting their inclusion in capacity-building workshops along with the project execution.

- 2.7 However, the economic, technical and environmental performance of the sector is weak: (i) agriculture is the main factor of deforestation in the country and generates high soil degradation and pollution due to uncontrolled use of agrochemicals contributing to agricultural run-off; ii) the participation in the Panamanian economy has decreased consistently during the last decades and today contributes less than 5%⁶ in addition, it has a scarce and decreasing contribution to international trade; (iii) most crops demonstrate a productivity gap with yields below the regional average; (iv) in rural areas, where agriculture is the main occupation of the population, poverty reaches 40.8% of the population (reaching 80% among indigenous populations); (v); (vi) Panama's levels in the "Forests" (27.05/100) and "Agriculture" (11.23/100) indicators of Yale University's 2018 Environmental Performance Index (EPI) demonstrate very weak environmental performance in these areas; and (vii) the livestock and crop losses observed during the latest episodes of the El Niño phenomenon that has confronted the country, demonstrate the low climate resilience of the sector, when it is estimated that by 2030, 30% of the territory could lose areas suitable for agriculture as a result of climate change⁷.
- 2.8 With the [support of the Inter-American Development Bank](#), the Program PIASI, executed by the Ministry of Agricultural Development (MIDA) and the Agricultural Innovation Institute (IDIAP), Panama is advancing the promotion of agroecology, to improve farmers' knowledge, skills, and investment capacities. UK/IDB⁸ also support projects highlighting values and services provided by key coastal ecosystems in Panama ([BNH](#)).
- 2.9 Having in mind this context, one of the main environmental challenges in the country is the maintenance of an adequate water supply in terms of quantity and quality, which faces environmental threats created by agricultural run-off, livestock manure, soil erosion, poor wastewater management, and deforestation, which can sustain ecosystem and human needs. This is exacerbated by increased climate variability and slow-onset climate change effects, leading to decreased water availability and increased water stress.
- 2.10 The GEF's Child Project to be fully designed with this assistance aims to develop a replicable integrated landscape management model focused on prioritized watersheds of Parita Bay to reduce water contamination and coastal pollution while increasing key biodiversity in the area. This approach will entail a) Baseline assessment of Parita Bay and resilient landscape planning will provide a comprehensive understanding of the current state of the watersheds and identify the most promising areas for NbS intervention (e.g., agroecology systems and mangrove restoration); b) NbS pilot projects to restore mangroves and develop AES in prioritized areas will be implemented and serve as a model to scale across the watersheds and decrease the risk of hypoxia in the coast, through financial incentives and capacity building for local

⁵ [PNUD \(2022\). Acceso de las mujeres a la tierra y la propiedad en Panamá.](#)

⁶ INEC. [Gross Domestic Product Third quarter of 2022.](#)

⁷ CCAFS. [Agriculture in Panama and climate change.](#) 2014

⁸ United Kingdom Government and Inter-American Development Bank. PN-T1233: Project: valuing, protecting, and enhancing coastal natural capital.

communities and landowners to implement the developed plans; c) Monitoring, evaluation, and outreach: the project will develop a long-term community monitoring system to evaluate the effects of project implementation and raise awareness about the impacts of coastal pollution and hypoxia. The low water quality of Parita Bay watersheds jeopardizes people's health, increases treatment costs, and its pollutants affect downstream coastal ecosystems, causing eutrophication and other damages.

- 2.11 The child project will build on ongoing projects and complementary activities and geographic reach such as: i) Technical cooperation BNH supported by UK/IDB (US\$2.3M); ii) Sustainable and Inclusive Agricultural Innovation (US\$41M IDB loan to MIDA and IDIAP); iii) IDB Technical cooperation Enhancing the transition towards sustainable agriculture in Central America (US\$2.9M); iv) Project Blockchain and Precision: Innovating with farmers in the rice chain in Panama (US\$577,000.00). Interventions under this project can be replicated nationally and regionally.
- 2.12 **Strategic Alignment.** The TC is consistent with the [IDB Group Institutional Strategy: Transforming for Scale and Impact \(CA-631\)](#) and is aligned with the objectives of: (i) address climate change. The TC is also aligned with the operational focus areas of: (i) biodiversity, natural capital, and climate change action; and (ii) gender equality and inclusion of diverse population groups. The TC is aligned with the [Country Strategy with Panama 2021-2024 \(GN-3055\)](#) by contributing to environmental sustainability and climate change adaptation. The TC is also consistent with the GEF CHP objective to address marine hypoxic zones by curbing coastal pollution from agriculture, industrial, and municipal sources through policy and regulatory measures and infrastructure investments combined with nature-based solutions.

III. Description of activities/components and budget

- 3.1 **Component 1. Development of agricultural assessments (US\$60,000.00).** The objective of this component is to develop agricultural assessments in the prioritized watersheds of the Parita, La Villa and Santa Maria rivers that flow into Parita Bay, given their national importance and environmental deterioration to which they have been subjected in recent decades. It will include support for a territorial approach to actions such as: (i) agroecological zoning and identification of agrarian dynamics; (ii) identification and description of farming and breeding systems (special emphasis on the use of agrochemicals); and (iii) case studies through in-depth technical economic interviews with producers.
- 3.2 **Component 2. Development of the CEO endorsement request document for the Child project under the Global Environment Facility's (GEF) Integrated Program for Clean and Healthy Oceans (US\$40,000.00).** The objective of this component is to prepare and design the proposal for the GEF grant project called: "*Reducing Coastal Pollution in Parita Bay in Panama*". Support will be included in actions such as: (i) collection of data and relevant information for the survey of the project's baseline, including information on geography, biodiversity, and human activities in the area; (ii) consultations with stakeholders (local authorities, non-governmental organizations and residents) to improve understanding of the challenges and opportunities associated with coastal pollution reduction, as well as the identification of possible solutions and approaches to addressing the problem; (iii) inception, validation, and capacity building workshops for officials of the Ministry of Environment, IDIAP and the Parita, watersheds committees, building farmers' associations and protected area

managers'; and (iv) development of the project proposal, including the elaboration of clear objectives, specific activities, and any other elements necessary to submit a solid proposal to the GEF.

- 3.3 The resources will be used to finance the hiring of consulting firms and individual consultants based on the presentation of verifiable products. Product development may include travel and per diem expenses related to product development where applicable.
- 3.4 The total cost of this operation is US\$100,000.00 financed with GEF resources.

Indicative Budget

Activity/Component	IDB/Fund Funding	Counterpart Funding	Total Funding
Component 1. Development of agricultural assessments	60,000.00	0	60,000.00
Component 2. Development of a project proposal for the Global Environment Facility's (GEF) Integrated Clean and Healthy Oceans Program	40,000.00	0	40,000.00
Total	100,000.00	0	100,000.00

- 3.5 The results that are expected to be obtained once the components have been implemented are (i) agroecological zoning and identification of agrarian dynamics in the watersheds of the Parita, La Villa, and Santa María rivers; (ii) identification and description of the main production systems to represent the diversity and dynamics of the prioritized watersheds; and (iii) proposals for interventions to support agricultural transformations and overcome barriers to improving the technical, economic and environmental performance of production systems.

IV. Executing agency and execution structure

- 4.1 The Executing Agency is the Inter-American Development Bank (IDB). The Ministry of Environment has expressed its interest in the IDB being the executing agency, considering the Bank's experience in institutional strengthening, governance, and climate change mitigation and adaptation. The TC will be executed by the Climate Change Division Specialist (CSD/CCS) at the IDB Country Office in Panama. The implementation period is two years. The Ministry of Environment and IDIAP will appoint a team of professionals who will act as the IDB's technical counterpart in implementing the TC. All activities to be executed under this operation have been included in the Procurement Plan and will be executed by the Bank's established procurement methods, namely: (a) Hiring of individual consultants, as outlined in AM-650; (b) Contracting of consulting firms for services of an intellectual nature by GN-2765-4 and its associated operational guidelines (OP-1155-4) and (c) Contracting of logistics and other non-consulting services, by GN-2303-28.
- 4.2 The Bank has recent experiences in Panama in the execution of projects with cooperation resources such as: (i) "Valuing, Protecting and Enhancing Coastal Natural Capital" [ATN/BB-18013-PN](#), and (ii) "Resilient Urban Watershed Program" ([4704/OC-PN](#)).

V. Major issues

- 5.1 Achieving this operation's objectives has a low-level risk that officials of the Ministry of Environment and other participating actors will declare themselves reluctant to implement the tools and actions that derive from this cooperation.
- 5.2 There is a risk associated with obtaining firms/people who meet the appropriate profiles for the execution of the activities in the established time. This risk is expected to be mitigated by widely publicizing consulting opportunities.
- 5.3 The change of government in 2024 could cause delays in the schedule of execution of activities, to mitigate the risk of delays, a dialogue and close monitoring of the activities of the TC will be maintained with the counterparts.

VI. Exceptions to Bank policy

- 6.1 This project does not provide for any exceptions to the Bank's policies.

VII. Environmental and Social Aspects

- 7.1 This TC will not finance feasibility or pre-feasibility studies of investment project with associated environmental and social studies; therefore, it is excluded from the scope of the Bank's Environmental and Social Policy Framework (ESPF).

Required Annexes:

[Request from the Client_53044.pdf](#)

[Results Matrix_37154.pdf](#)

[Terms of Reference_25844.pdf](#)

[Procurement Plan_80521.pdf](#)