

### GEF-8 PROJECT IDENTIFICATION FORM (PIF)



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### **General Project Information**

#### **Project Title**

Improving the source to sea governance to reduce the impacts on the transboundary large marine ecosystems in the SICA region

Region	GEF Project ID
Regional	11520
Country(ies)	Type of Project
Regional	FSP
Belize	
Guatemala	
Nicaragua	
Dominican Republic	
Panama	
Costa Rica	
El Salvador	
Honduras	
GEF Agency(ies):	GEF Agency ID
FAO	750528
Executing Partner	Executing Partner Type
Leading Executing Agency: Central American Commission for	Others
Environment and Development (CCAD)	Government
Relevant National Ministries and Entities (TBD)	
GEF Focal Area (s)	Submission Date
International Waters	3/18/2024
Project Sector (CCM Only)	·

#### Taxonomy

Land Degradation, Focal Areas, Biodiversity, Financial and Accounting, International Waters, Learning, Acquaculture, SIDS : Small Island Dev States, Biomes, Mangrove, Coral Reefs, Seagrasses, Marine Protected Area, Large Marine Ecosystems, Freshwater, River Basin, Pollution, Nutrient pollution from all sectors except wastewater, Nutrient pollution from Wastewater, Strategic Action Plan Implementation, Coastal, Payment for Ecosystem Services, Sustainable Land Management, Ecosystem Approach, Integrated and Cross-sectoral approach, Community-Based Natural Resource Management, Influencing models, Deploy innovative financial instruments, Convene multi-stakeholder alliances, Demonstrate innovative approache, Transform policy and regulatory environments, Strengthen institutional capacity and decision-making, Stakeholders, Local Communities, Beneficiaries, Type of Engagement, Consultation, Information Dissemination, Participation, Partnership, Communications, Behavior change, Public Campaigns, Awareness Raising, Education, Civil Society, Community Based Organization, Non-Governmental Organization, Academia, Private Sector, Financial intermediaries and market facilitators, SMEs, Non-Grant Pilot, Capital providers, Gender Equality, Gender results areas, Access and control over natural resources, Knowledge Generation and Exchange, Access to benefits and services, Capacity Development, Participation and leadership, Gender Mainstreaming,



Gender-sensitive indicators, Sex-disaggregated indicators, Women groups, Capacity, Knowledge and Research, Indicators to measure change, Adaptive management, Theory of change, Innovation, Knowledge Generation, Training, Workshop

Type of Trust Fund	Project Duration (Months)
GET	60
GEF Project Grant: (a)	GEF Project Non-Grant: (b)
18,048,624.00	0.00
Agency Fee(s) Grant: (c)	Agency Fee(s) Non-Grant (d)
1,624,376.00	0.00
Total GEF Financing: (a+b+c+d)	Total Co-financing
19,673,000.00	148,332,855.00
PPG Amount: (e)	PPG Agency Fee(s): (f)
300,000.00	27,000.00
PPG total amount: (e+f)	Total GEF Resources: (a+b+c+d+e+f)
327,000.00	20,000,000.00
Project Tags	

**Project Summary** 

CBIT: No NGI: No SGP: No Innovation: No

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. The explanation and justification of the project should be in section B "project description".(max. 250 words, approximately 1/2 page)

### Context: Importance of region for biodiversity and ecosystems

The Central American Integration System (SICA) includes Belize, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua, and Panama. This region comprises 62 million inhabitants across more than 570,000 km2 and contains 12% of global biodiversity. The Large Marine Ecosystems (LME) that flank the Central American Isthmus—the Caribbean LME (CLME) and Pacific American Coastal (PACA) LME—are environmentally significant. The Caribbean LME supports 10% of the world's coral reefs, 20% of all mangroves, and 66,000 km2 of seagrass beds. It also encompasses the Mesoamerican Reef (MAR), the largest transboundary barrier reef on the planet. This reef supports 12% of the world's marine biodiversity and 8% of its mangroves, iconic species such as Spiny Lobsters, sea turtles, whale sharks, and one of the largest populations of West Indian Manatees and a dynamic tourism industry based on this biodiversity and aesthetic beauty. The PACA LME thrives in endemic and widespread fish species, particularly around the Cocos Island area, renowned for its unique thermal dome, and the Pacific upwellings that nourish a rich marine biodiversity.

The health, function, and productivity of these LMEs are intricately linked with equally diverse Mesoamerican terrestrial ecosystems, including cloud, tropical broadleaf and dry forests, as well as large rivers, karstic hydrological systems, lagoons, and wetlands. The health and productivity of the LMEs are sustained by environmental flows from these diverse terrestrial ecosystems. The SICA nations depend on the ecosystem services from these interconnected coastal marine and terrestrial ecosystems for food and water



security; hydroelectricity; aesthetic and cultural value; community livelihoods and economic prosperity; and other important human development goals. The downstream coastal marine zones support a productive coastal agricultural economy consisting of commodities such as bananas, citrus, oil palm, pineapple, and sugar in addition to shrimp aquaculture; commercial, sport and artisan fishing; and a growing service industry in nearshoring and tourism that produce diverse revenue streams supporting an emerging blue economy.

### Problem statement, root causes and drivers, and barriers to overcome

The wellbeing of the LMEs/coastal zones of the SICA region is compromised by the escalating effects of land-based threats due to rapid economic development and drivers such as population growth, coastal urbanization and tourism, fishing activities, and pollution from multiple sources like agriculture, aquaculture, urban settlements, and tourism. Such activities are transforming natural habitats into production zones and enlarging the water footprint of growing urban areas. This expansion not only curtails the natural flow of freshwater to the coastal and marine ecosystems but also escalates the flow of detrimental elements. These include increased sediment from land erosion, nutrient overload due to poor waste and stormwater management, and pollution from microplastics and solid waste. Collectively, these negative flows degrade coastal and marine ecosystems, affecting their self-sustenance, interaction with open ocean systems, and capacity to buffer the impacts of climate-induced phenomena like rising sea levels and intensified storm surges.

Previous and ongoing GEF IW projects have identified, through Transboundary Diagnostic Analysis (TDAs) and various baseline assessments, the many terrestrial drivers of environmental degradation in the LMEs of the SICA region. These include: (i) unregulated land use changes to production, industrial, commercial and municipal systems (and weak services and infrastructure); (ii) inappropriate production practices; (iii) unregulated water and groundwater flows to agribusiness, and domestic, commercial and industrial uses; (iv) inadequate wastewater and stormwater management; (v) inadequately regulated extraction of forest, waterway and coastal zone resources; and (vi) insufficient solid waste management. The resulting impacts, along the source to sea spectrum, are: (i) reduced water capture and storage potential of watersheds; (ii) changes in drainage patterns leading to excessive runoff and erosion; (iii) land degradation in the upper watersheds; (iv) habitat loss and degradation, including reef bleaching; (v) sediment choking of waterways, coastal wetlands, mangroves, seagrasses and coral reefs; (vi) excess nutrients contaminating surface water and groundwater leading to algal blooms and oxygen deficit in marine areas; and (vii) species decline.

There are a number of identified barriers that need to be overcome to tackle these drivers, including: inadequate or incomplete policy regimes; siloed planning based-on short-term expediency; weak governance mechanisms; financial constraints that limit effective monitoring and administrative responses; and institutional capacity constraints in addressing land and sea effects holistically.

### **Important Baseline Actions**

Previous regional and national initiatives have sought to address sustainable land management, promote responses to wastewater effluent, and a more rational use of water, land and natural resources. These have had mixed success due to changes in political administrations, incomplete/fragmented engagement of all actors in both the terrestrial and marine realms holistically and within an integrated approach that follows a land-water-sea nexus, and distinct institutional cultures and incongruent project Theories of Change that do not reach the level of ambition necessary to achieve transformational change and enduring outcomes.

The recently-completed GEF (5765) Integrated Ridge to Reef Management of the Meso-American Reef Ecoregion (MAR2R), implemented by WWF-US and executed by the Central American Commission for Environment and Development (CCAD) with the Ministries of Natural Resources in Belize, Guatemala, Honduras and Mexico laid the groundwork for an integrated approach to tackle degradation in the MAR region by developing policy tools, strengthening watershed and coastal management processes, and enhancing ecological restoration efforts and cooperative dialogue on solving environmental problems, such as collective



effort on spiny lobster disease, in a Ridge-to-Reef framework. The success of this collaborative effort and the consolidated vision presented in the resulting MAR Strategic Action Program (SAP) prompted the CCAD Council of Environment Ministers of the eight SICA governments to mandate the extension of the source to sea (S2S) approach to the other SICA nations and to introduce the concept into the Pacific Ocean side of the region. Most recently, the Council, on 16 April 2024 mandated CCAD to make operational a common governance mechanism for the Mesoamerican Reef region. Hence, the MAR SAP forms the conceptual foundation for the development of this consolidated regional S2S initiative.

### Proposed alternative: objective and geographic target area

The S2S approach was mandated based on the results of the Ridge-to-Reef approach successfully demonstrated by the GEF MAR2R project, which included policy instruments for common coastal areas, linking land-based contaminants to near shore environmental productivity and protection against the effects of climate change and the demonstration that the countries involved were able to establish a common vision on many issues. This shared vision is based on the recognition that the region's water and environmental challenges require a long-term, large-scale and coordinated approach. This approach addresses both land- and sea-based sources of pollution and their combined impacts, for which the region is not prepared. S2S is the only vehicle to accomplish that holistically. To the contrary, the land and sea based authorities will continue to work in silos with separate agendas and with little coordination of policy, financing, and knowledge. Likewise, investments in transboundary river basins require the same level of institutional strengthening to make them sustainable and to scale the lessons learned to all basins in the region. The proposed alternative therefore seeks a stepwise transformational and long-term process to make operational the strategic actions of the MAR SAP in Belize, Guatemala and Honduras and begin and enhance the S2S process in Costa Rica, Dominican Republic, El Salvador, Nicaragua and Panama. In other words, addressing the identified governance and policy, capacity, financing, technical and knowledge, awareness and learning gaps through an integrated process following the SAP strategy, with adaptations to the context and reality of the newly integrated SICA nations.

The objective of the project—which has been agreed on by the CCAD Council of Ministers—is to enhance environmental sustainability, economic prosperity and climate resilience in the Caribbean and the Pacific, Central American Coastal Large Marine Ecosystems through a Source-to-Sea approach that safeguards marine and freshwater resources for ecosystems and livelihoods. The S2S approach ties the two LMEs (CLME and PACA LME) and their productivity to the health and conservation of Central America's terrestrial ecosystems, which involves overcoming critical environmentally-degrading anthropogenic processes.

In order to achieve a sustained and long-term S2S process, the project will invest in short-term actions that will lead to a wide range of medium- and long-term products, such as the 2050 Action Plan. This will be achieved through the implementation of four intertwined components, inspired by and linked to the MAR SAP. The proposed S2S project will represent the first building block of the described long-term process.

<u>Component 1:</u> Focuses on strengthened and harmonized policy and institutional frameworks to facilitate S2S management and sustainable development of LMEs, transboundary and national watersheds. As recently mandated, CCAD will establish the governance structure for the MAR SAP implementation, extend and promote the S2S approach to new nations and consolidate the vision in an endorsed S2S 2050 Action Plan that will be developed through a phased, strategic, participative and analytic process. The purpose of an S2S 2050 agenda is to establish the conditions needed for a transformational scaling (out-up and deep) that will both respond to the issue of contaminants in a long term basis and provide the institutional improvements needed for sustainability of the GEF IW investments in both IW-1 and IW-3. To successfully succeed in the LMEs requires success in reducing the drivers of threats in all river basins to both LMEs . Therefore, the S2S 2050 is a spirited effort by the 8 governments to tackle this challenge. The S2S project prepares SICA-CCAD for that mission in coordination with the pertinent authorities in each of the 8 SICA nations. The S2S 2050



Plan will guide policy, technology, finance, and knowledge management and learning outcomes. To support the science informing regional and national decisions, the project will: develop a regional M&E system with agreed indicators for land and sea based progress; examine the need and structure for a broader regional application of the MAR2R governance mechanism for long-term development; and upgrade systems for project development, gender mainstreaming, stakeholder engagement, risk assessment and resource mobilization.

<u>Component 2:</u> An integrated S2S management approach for water security and ecosystem stability will be practiced and demonstrate the benefits of a S2S governance through integrated management planning and investments in twelve key basins in the eight countries linking to the LMEs. Each basin will develop and adopt integrated management plans and water quality monitoring strategies, including for coastal and near-shore marine areas. The purpose of these exercises is to evaluate and make water users conscious of the water balance at the watershed level and the water footprint of their activities, assuring a quota for ecosystem sustenance. In addition, the exercises will inform decision-making by water users and regulators through Knowledge Management and Learning and advocacy. Inclusive, multi-stakeholder basin governance structures will be promoted through which capacity needs can be assessed and the basin governance mechanisms and commensurate capacity development can be achieved.

<u>Component 3:</u> Increased water security through innovative technologies and finance. The project will invest in innovative technologies that will demonstrate and have the potential to scale water and groundwater recovery, reuse, efficiency, and systems to reduce contamination, increase efficiency or reduce the water footprint, and enable environmentally friendly business opportunities. These may range from grey to green infrastructure or nature-based solutions to the possible extent. The process will be demand-driven by local populations within the selected watersheds, will promote minority and women's business opportunities, and will involve scoping, feasibility analysis and due diligence with knowledge management and sharing of experiences. Monitoring systems for each investment will be developed to quantify the number of cubic meters of water treated or saved through management. To sustainably finance and cover recurrent costs, the project will support proponents to develop public-private partnerships or consortium building and mechanisms to fund watershed development, such as water funds, Payment for Environmental Services regimes, water payment systems, among others, which can then be scaled across the region. The project will work with the governments and donor communities to form strategic partnerships and leverage financing to support the first 5-year phase of the S2S 2050 Action Plan in line with its strategic actions.

Component 4: To support long-term capacity building on the S2S approach, a Knowledge Management and Learning component will upgrade SICA's current KM structure, the Regional Environmental Observatory (REO) with hardware and software to upgrade a regional management portal, strategic communications, partnerships and connectivity with IW:LEARN and other platforms dedicated to sustainable land, water and coastal and marine management; financing, and capacity building. This component will also support targeted training, workshops in technical topics, a diploma course in wastewater management, among other knowledge products generated throughout the project lifecycle. Capacity building opportunities will include aspects related to gender equality, women empowerment, and broader inclusivity of key stakeholder groups with the aim of securing engagement and inclusion. The KML platform will connect diverse stakeholders to structured multi-stakeholder dialogues and will underpin regional and national activities, mainstreaming inclusiveness, gender equality and stakeholder engagement. The Knowledge Management and Learning system will ensure proper curation and sharing of information while also benefiting other GEF projects and investments by creating productive linkages with established learning hubs at global and regional levels. Finally, the platform will offer connectivity to existing and related Communities-of-Practice and the project overall will strongly encourage citizen science and learning from traditional practices, knowledge from non-state actors and best practices from various sectors in the S2S continuum.

### Innovation



About 40 percent of the terrestrial area in Central America is found in transboundary basins. Therefore, the impact from climate change will increase the need for transboundary cooperation. These watersheds will require a multi-national structure and regional vision to address the drivers of environmental degradation in the LMEs and to support national economies. The initiative stems from a request of the Council of Environmental Ministers of the SICA system recognizing that an integrated vision and coordinated efforts are the only pathways to reverse the decline of terrestrial and marine ecosystems, ensure the delivery of ecological services and preserve the environmental integrity of the region's terrestrial ecosystems and LMEs. The project is innovative to GEF, SICA-CCAD and the national governments in combining the shared and cooperative management of a process that involves land-based development to support Global Environmental Benefits in the marine environments and improves SICA-CCADs structure that reaches all eight nations in maintaining a long-term coordinated objective. Addressing siloed management will be innovative for participating governments and will require creative and system thinking to create the S2S 2050 action plan that is financed in the mid-term and that embraces transformational scaling, which is also a novel concept. The SICA-CCAD structure combined with the S2S 2050 and its mechanisms will make it possible to sustain actions to reduce contamination and secure water resources in the long run that would not be possible with any singular project. The successful implementation of the project will enable SICA Member States to prioritize high impact interventions and to monitor risks and progress through a mutually agreed process. This will lead to improved coordination between strategic investments, productive sectors and the interests of relevant stakeholders, such as indigenous peoples and local communities. Without the GEF increment, threats will continue to scale possibly reversing the effects of Global Environmental Benefits generated by individual projects.

### Project implementation and execution modality

FAO is the implementing agency. The CCAD is the executing agency endorsed by the Council of Ministers to develop the PIF and the project. Through the PPG process other executing agencies will integrate. WWF, the MAR2R implementing agency will have a significant executing role, especially in Component 2, and focused in the MAR countries. Other potential partners include MARFUND, the fund manager for KfW financing to CCAD for ecosystem restoration. The Ministries of Environment will have an active role in their jurisdictions and in project governance in addition to national entities. An integrated project governance structure will be validated with SICA-CCAD and their national focal points during the PPG phase.

### **Global Environmental Benefits**

The Project supports the following GEF Core Indicators: (a) Indicator 1 - 1,679,874 ha terrestrial protected areas under improved management; (b) Indicator 2 - 166,540 ha of marine protected area under improved management effectiveness; (c) Indicator 3 - 300 ha of land and ecosystems under restoration; (d) Indicator 4 - 353,881 landscapes under improved practices; (e)Indicator 7 - two shared water ecosystems under new or improved cooperative management; and Indicator 11 - 350,000 direct beneficiaries (175,000 women, 175,000 men): benefiting from GEF-financed investments. These figures will be revised and confirmed by submission.

### Gender

Gender mainstreaming ensures equitable and sustainable water resource management in the source-to-sea continuum through diverse roles, needs, and vulnerabilities of women and men. The project will seek to amplify women's voices in shaping policies and actions related to improving the source-to-sea governance and reducing the impacts on the regional transboundary LMEs through gender-responsive consultations across sectors and disciplines, the involvement of civil society and indigenous women in joint management discussions, gender-balanced representation in the agreed regional frameworks, among others. The Project will be gender-responsive and help to narrow gender gaps in natural resource access and management, as well as offering expanded opportunities for women empowerment to engage in nature-positive businesses through capacity development and targeted financing. This vision is encapsulated in the project design and will be put into practice through a number of concrete outputs and activities as described in the logical framework and detailed in the future Gender Action Plan (GAP) that will be developed in PPG. Women will be engaged



vertically throughout the project. Component 3 investments will seek to create business opportunities for women-owned businesses. Gender disaggregated indicators will be included in the Project Results Framework.

### Key stakeholders

Key stakeholders include national ministries with mandates in agriculture (including forests and fisheries), environment, water resources and climate and specialized agencies concerned with management or research related to these sectors e.g., academic institutions, civil society organizations, and private sector actors (especially linked to the agricultural and tourism sectors), along with regional bodies and groups such as OSPESCA. Local farmer communities and other water users are likely to be the group to benefit most directly from the program, through improved capacity (knowledge, skills, tools) and involvement in participatory water/land planning and management activities and restoration of degraded agricultural areas and natural ecosystems. The private sector, including the energy sector, will have important connections to component 3, the project governance structure, and in defining the role of the private sector in identifying the effects of incentives and in their sub-sector roles in the S2S 2050. Through a dedicated analysis and characterization of relevant stakeholders, appropriate engagement strategies will be designed to ensure meaningful and effective participation of all identified groups. Specific attention will be devoted to facilitating a participatory and meaningful involvement of local communities, indigenous people, youth and women's organizations, and non-state actors proactively addressing potential barriers to their relevant engagement in project activities.

### Funding and co-financing

The combined GEF funds requested is US\$ 20,000,000, and a combined US\$ 148,332,855 has been provisionally identified as co-financing for the project, representing a 1: 8 ratio for the GEF financing.

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### Footnotes:

[1] Mathews, R. E., Tengberg, A., Sjödin, J., & Liss-Lymer, B. (2019). Implementing the source-to-sea approach: A guide for practitioners. SIWI, Stockholm

Indicative Project Overview

### **Project Objective**

To enhance environmental sustainability, economic prosperity and climate resilience in the Pacific, Central American Coastal and Caribbean Large Marine Ecosystems through a Source-to-Sea approach that safeguards marine and freshwater resources for ecosystems and livelihoods.

### Project Components

Component 1: Strengthened Policy and Institutional Frameworks to facilitate S2S Management and sustainable development of LMEs, ransboundary and national watersheds.

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
3,000,000.00	25,086,585.00
Outcome:	



**Outcome 1.1.** Strengthened capability for regional Implementation and governance that enables long-term S2S management.

**Outcome 1.2.** Strengthened SICA/CCAD's capability to implement a Regional. Strategic S2S Action Plan 2050.

Indicators:

S2S 2050 endorsed endorsement by all states.

Cooperative agreements supporting reporting on common indicators in-force.

Number of regional policies developed or revised to facilitate Source-to-Sea processes. [TBD at PPG].

Output:

Output 1.1.1. An endorsed consolidated Regional S2S Action Plan to 2050. .

**Output 1.1.2.** A regional S2S M&E System with agreed indicators to measure progress on land and sea-based process and impacts.

**Output 1.2.1.** A consolidated inter-sector, inter-agency S2S governance, coordination and planning mechanism within SICA/CCAD.

**Output 1.2.2.** Implementation capacity in Strategy, Planning, Execution, safeguards, stakeholder engagement, risk assessment & resource mobilization.

Component 2: Integrated Source-to-Sea management approach for water security and ecosystem stability.

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
4,500,000.00	35,833,214.00

Outcome:

**Outcome 2.1.** Integrated and coordinated planning and management of twelve (12) basins within an S2S approach.

Outcome 2.2. Enhanced capacity for Integrated and inclusive, multi-stakeholder resource governance.

Indicators:

(12) watersheds with Integrated Management Plans developed and under implementation

(8) basins with water quality monitoring strategy designed operational.



(8) countries have an integrated basin governance structure in place and functional.

Output:

Output 2.1.1. Integrated Management Plans developed in 12 watersheds

Output 2.1.2. Water Quality Monitoring strategy designed in at lease 8 basins.

Output 2.2.1. 12 Integrated Basin governance structures in prioritized watersheds.

Component 3 : Innovative Technologies & Finance.			
Component Type	Trust Fund		
Technical Assistance	GET		
GEF Project Financing (\$)	Co-financing (\$)		
7,089,166.00	59,689,814.00		

Outcome:

**Outcome 3.1.** Water security increased through innovations in water and groundwater conservation, efficiency, wastewater treatment and reuse in eight (8) watersheds.

**Outcome 3.2.** Water security is facilitated through sustainable financing instruments supporting eight (8) watersheds.

Outcome 3.3. Financial commitments to support the S2S 2050

Indicators:

The yield (M3) of water conserved or decontaminated through targeted investments.

*The* # *of ha. of ecosystems restored (T=500 ha.) in prioritized sites.* 

*# of bankable projects discussed and included in the pipeline of financial institutions.* 

The number of public-private partnerships established to finance actions within basin management plans. (T=6).

The number and value of new projects confirmed in support of S2S 2050. [Target = 14 projects with (9) supporting the MAR SAP.

### Output:

**Output 3.1.1.** Targeted investments in innovative technologies applied in eight (8) basins (ecosystem restoration, Groundwater conservation, Blue Carbon, clean development, Nature based solutions. etc.).



Output 3.2.1. Twelve (12) Feasibility studies for financing mechanisms and public private partnerships.

**Output 3.2.2.** Financial mechanisms for the sustainable finance of ecosystem conservation and restoration activities are applied by four (4) basins (water funds, offsets, PES, water payment systems).

Output 3.3.1. Innovative Public Private Partnerships financing basin action plans in six (6) basins.

Output 3.3.2. A portfolio of projects for financing during a 5-year phase 1 of the S2S 2050.

Component 4: Knowledge Management & Learning.			
Component Type	Trust Fund		
Technical Assistance	GET		
GEF Project Financing (\$)	Co-financing (\$)		
2,000,000.00	15,526,614.00		

Outcome:

**Outcome 4.1.** A strengthened Regional Environmental Observatory catalyzes interactive and inclusive knowledge exchange and learning.

**Outcome 4.2.** Increased knowledge of S2S concepts, practices and professional capacity foments regional and national governance and management.

Indicators:

80% of the number of users connected to the platform, ranking 4 to 5 stars for quality of information (sliding scale 1-5, disaggregated by gender).

*The number of national decisionmakers surveyed indicating KM products to informing their decisions (N=80, 10/country).* 

*# training sessions conducted reporting # of participants disaggregated by gender.* 

Number of IW:LEARN Conferences attended from all SICA countries (Target 1 by country at the project closing).

Twelve (12) Watershed Organizations connected to Communities of Practice.

Output:

Output 4.1.1. A regional S2S KML Engagement Plan developed and implemented .

Output 4.1.2. A S2S Strategic Communications Strategy developed and implemented.

Output 4.1.3. A regional information portal and architecture upgraded.



**Output 4.1.4.** Partnership agreements for Hub interconnectivity e.g., IW:Learn, CLME+ Hub, CReW Academy, etc.

**Output 4.2.1.** Five (5) Knowledge Products distributed on S2S, Best practices from innovation experiences, blue economy, multistakeholder governance and technical themes to be determined.

**Output 4.2.2.** Technical Training and Professional Development Courses and special events in wastewater treatment, agrochemical management, and other thematic areas to be determined.

M&E	
Component Type	Trust Fund
	GET
GEF Project Financing (\$)	Co-financing (\$)
600,000.00	4,779,986.00

Outcome:

Outcome 5.1. Effective project implementation based on adaptive management and lessons learned.

Indicators:

*Recommendations from operational M&E systems fed back into project implementation captured by the M&E reports.* 

Degree of stakeholder satisfaction with project management processes and communication of lessons learned surveyed annually.

Output:

Output 5.1.1. An inclusive and representative project governance structure.

Output 5.1.2. A gender-sensitive project M&E plan updated annually.

**Output 5.1.3.** Independent Mid-term Review and Terminal Evaluation undertaken with results fed back to project management.

### **Component Balances**

Project Components	GEF Project Financing (\$)	Co-financing (\$)
Component 1: Strengthened Policy and Institutional Frameworks to facilitate S2S Management and sustainable development of LMEs, ransboundary and national watersheds.	3,000,000.00	25,086,585.00



Component 2: Integrated Source-to-Sea management approach for water security and ecosystem stability.	4,500,000.00	35,833,214.00
Component 3 : Innovative Technologies & Finance.	7,089,166.00	59,689,814.00
Component 4: Knowledge Management & Learning.	2,000,000.00	15,526,614.00
M&E	600,000.00	4,779,986.00
Subtotal	17,189,166.00	140,916,213.00
Project Management Cost	859,458.00	7,416,642.00
Total Project Cost (\$)	18,048,624.00	148,332,855.00

Please provide justification

### **PROJECT OUTLINE**

### A. PROJECT RATIONALE

Briefly 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

### **Environmental, Social, Political and Economic Context**

1. Interconnected and interdependent environmental flows within the SICA region are vital for the exchange of biologic assets between forested mountain ecosystems, karstic lowlands, agricultural and urban landscapes, coastal wetlands, mangroves, seagrass beds, coral reefs and into complex networks of sea currents that connect near-shore and pelagic habitats that provide reproduction spaces, nursery and feeding habitats and migratory routes in the Pacific Central American Coastal and the Caribbean Large Marine Ecosystems (LMEs).[1] [2] [3] The former covers almost 2 million Km2 from central Mexico to Ecuador with numerous and widely distributed endemic fish species. The area surrounding the Cocos Island is known for its unique thermal dome and Pacific upwellings supporting rich marine biodiversity.[4] The Caribbean LME harbors equally diverse ecosystems and carbon sinks with  $\pm 10\%$  of the world's coral reefs,  $\pm 20\%$  of global mangroves and ±66,000 km2 of seagrass beds.[5] This LME includes the Mesoamerican Reef (MAR) the world's largest transboundary barrier reef. Spanning over 464,263 km2 of ocean, coasts, and watersheds, the MAR houses 12% of global marine biodiversity, 8% of the world's mangroves and iconic species such as Spiny Lobsters, sea turtles, whale sharks, and one of the largest populations of West Indian Manatees. [6] [7] [8] [9] [10]. The health and productivity of the LMEs depends on quality environmental flows; such as, freshwater, oxygen, and replenishment of nutrient rich sediments, from equally diverse Mesoamerican terrestrial ecosystems ranging from cloud forests, broadleaf jungles, and dry forests to large rivers, karstic hydrogeological systems, lagoons and wetlands.



2. The economic development of over sixty million people also depends on the provisioning services provided by these ecosystems. The Central American Dry Corridor, for example, spans 1,600 km across Guatemala, Honduras, El Salvador, and Nicaragua and requires vast water resources to support food security and the agricultural economy ranging from staples such as maize, beans, and coffee to commodities such as bananas, citrus, oil palm, pineapple, and sugar produced in coastal lowlands. On both coasts, shrimp aquaculture; commercial, sport and artisan fishing; and a growing service industry in nearshoring and tourism produce diverse revenue streams supporting an emerging blue economy.[11] [12]. However, rapid economic development is causing a two way effect by channeling increased levels of environmental services to support the livelihood needs of expanding populations, especially in urban and coastal areas, that concurrently result in detrimental environmental flows including pollutants such as excessive loading of sediments, nutrients, chemicals, microplastics and plastic waste in addition to reduced water flows to ecosystems contributing to the decline of coastal and marine ecosystems.

3. Multiple projects and their diagnostic assessments identified in paragraph 5 below, inform the understanding of the causal chain pathways supporting the basis for the project's Theory of Change (TOC). The supporting information is provided through the GEF International Waters (IW) Transboundary Diagnostic Analyses (TDAs) and multi-national Strategic Action Programs for the Meso-american Reef, for the Caribbean Large Marine Ecosystem (CLME), and for the Caribbean Regional Wastewater Project (CREW) as described below. In addition, numerous transboundary river basin and watershed management projects contribute to the body of knowledge of the threats, drivers, impacts and barriers drivers. Summarized, the drivers are defined as: (a) unregulated land-use changes to production, industrial, commercial and/or municipal systems; (b) inappropriate production practices; (c) unregulated water and groundwater flows to agribusiness, domestic, commercial, and industrial uses; (d) inadequate wastewater and stormwater management; (e) inadequately regulated extraction of forest, coastal and marine resources such as reef cleaning species; and (f) inadequate solid waste management. The resulting impacts are: (i) reduced water capture and storage potential of watersheds, (ii) changes in drainage patterns leading to excessive runoff and erosion; (iii) land degradation; (iv) habitat loss and degradation; (iii) sediment choking of waterways, coastal wetlands, mangroves, seagrass and coral reefs; (iv) nutrient contamination of surface and groundwater leading to algae blooms and oxygen deficit; (v) species decline; (vi) mangrove and sea grass decline; (vii) reef bleaching; (viii) expanding hypoxic zones, among others. [13]

4. The stated impacts will be amplified by the effects of climate change. Meso-America and Hispaniola are projected to experience increases in mean temperatures and frequency of extreme heat days, changes in precipitation patterns, sea level rise and higher sea surface temperatures. [14] [15] These will increase vulnerability to climate induced shocks by increasing propensity for extreme droughts, wildfires, soil erosion, and consequently nutrient loading. Increased rates of evaporation and consequently the demand for irrigation and domestic water will further reduce stocks of quality water for coastal and nearshore marine ecosystem function and maintenance. Water deficit to service domestic and productive needs drives over-pumping of groundwater, especially in areas with expanding populations, leading to drawdown of aquifers. This combined with sea level rise and storm surges leads to saltwater intrusions reducing freshwater availability for economic development and health and a lower site quality for coastal ecosystems. Other related socioeconomic impacts include the increased costs of water treatment, lower agricultural production, commerce, and domestic needs and a reduced supply of water for ecosystem support and maintenance. [16] Ultimately, reduced food security and unrealized opportunity from the blue economy will contribute to increased migration from rural areas to urban centers and expanding tourism centers, accelerating the demand for water and inexpensive food in urban areas further solidifying a feedback loop between environmental degradation, resource stress, economic decline and ultimately more stressors affecting the LMEs. [17] [18].

### Baseline



5. The project builds upon GEF IW projects, national and emerging efforts that provide a framework for a region-wide Source-to-Sea (S2S) effort. The GEF (5765) Integrated Ridge to Reef Management of the Meso-American Reef Ecoregion (MAR2R), by WWF US and executed by the Central American Commission for Environment and Development (CCAD) with the Ministries of Natural Resources in Belize, Guatemala, Honduras and Mexico, has laid the groundwork by developing policy tools, strengthening watershed and coastal management processes, and enhancing ecological restoration efforts. This success and the collaborative vision presented in the resulting SAP prompted the CCAD Council of Environment Ministers to mandate the extension of the concept to the other SICA nations and to introduce the concept into the Pacific Region; hence, the basis for this project.[19] Based on the results, with drainages to both LMEs, the S2S concept complements the SAP implementation of the MAR2R, the CLME, and supports initiatives oriented to the Pacific Central American Coastal LME. The baseline consists of Several GEF supported LMEs and Integrated Programs (Ips) (See also Table 2).

- GEF (10800) Protecting and Restoring the Ocean's natural Capital, building Resilience and supporting region-wide Investments for sustainable Blue Socio-Economic development (PROCARIBE+): The S2S project draws from the CLME+ TDA and SAP and is central to the S2S approach for SICA nations with Caribbean exposure. The S2S project design will be coordinated and complementary with PROCARIBE+ in reduction of contamination, governance, and knowledge management and learning (KML).
- In formulation, GEF (10076) Towards Joint Integrated, Ecosystem-based Management of the Pacific Central American Coastal Large Marine Ecosystem (PACA): a regional project with participation of 3 SICA nations (Table 2) and multiple SICA organizations e.g., OSPESCA (see Stakeholder Involvement) will provide the TDA and SAP for the Pacific Central American Coastal LME. The S2S project will support the Blue Economy and KML using the referenced MAR2R Blue Economy baseline and extending it regionally.
- GEF (9601) An integrated approach to water and wastewater management in the Wider Caribbean Region using innovative solutions and sustainable financing mechanisms (CReW+). The TDA and Guidance document inform the types of wastewater issues that will need to be addressed by the project on the long term once CReW+ is concluded.
- GEF (10108) and GEF ID (11277) the work that will be done under the projects "El Salvador Mesoamerican Forest IP Project: Promoting Forest Conservation and Integrated Water Management in Trifinio" and "Fostering Water Security in the Trifinio Region: Promoting the formulation of a TDA/SAP for its transboundary Lempa River Basin," will be considered defining an important baseline for the countries. The proposed project will prioritize and coordinate and exchange with these projects working in the Trifinio river. To ensure synergies and leverage and to avoid duplication, CCAD will document these discussions and ensure that built-in mechanisms for synergies and leverage and to avoid duplication are articulated in the PPG materials.
- GEF (10172). The proposed project will work in coordination with the project "Towards the Transboundary Integrated Water Resource Management (IWRM) of the Sixaola River Basin shared by Costa Rica and Panama" to ensure syneregy and avoid overlapping towards strengthening 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.

6. Across the SICA nations, there are important but diverse baselines consisting of projects in International Waters (IW) Sustainable Land Management (SLM); Integrated Water Resources Management (IWRM) and Integrated Coastal Zone Management (ICZM), Sustainable Forest Management (SFM), Biodiversity (BD) among others, all underscored by a commitment to good governance. However, these are not connected in a practical framework forming an important barrier discussed below. A complete inventory



of relevant projects from all sectors will be developed during the PPG phase. Regionally, The S2S project will benefit from SICA/CCAD, a mandated inter-state authority for environmental concerns with close relationships with national ministries; experienced in concepts, transboundary and multisectoral dialogue, and in coordinating multi-national projects with linkages to global partners. Also, across the participating nations, there is general experience in multi-stakeholder engagement in participative resource governance.

7. A preliminary Survey and interviews with project focal points supporting the PIF design process indicates that all nations have surface water monitoring systems to differing degrees of completeness. Groundwater monitoring systems are generally lacking as are systems to monitor coastal waters. These systems are not articulated nationally or within any consolidated or holistic national or regional decision-making forum or support mechanism. An important first step is the Protocol for Effluent discharge signed by the Meso-american Reef Nations (Mexico, Belize, Guatemala, Honduras. [20] The remaining SICA states have yet to negotiate minimum standards for system components, such as, water and wastewater quality between all SICA nations. There are isolated experiences with complementary monitoring networks that can support more comprehensive coverage and stakeholder engagement and learning, such as Community-Based Monitoring (CBM), Citizen or participative Science providing cost-effective opportunities for the S2S project.[21]

8. There are diverse and mixed levels of experience in financing water, land and coastal management, which is done in silos. Examples include coral reef insurance, water funds, environmental service payments, debt swaps. Etc. CCAD has a baseline financing stream through KfW/MARFUND to support ecosystem restoration and baseline experience in engaging private sector participation in ecosystem conservation in the coffee, sugar, palm oil and aquaculture sectors. FAO, the implementing agency, WWF, an executing partner, among others, have experiences that can be grafted into a regional financing support effort. In addition, they offer freshwater management tools and participative conservation models. These assets will be engaged during the PPG phase to inform a Private Sector Engagement strategy to scale-out positive baseline experiences.



The main environmental pressures and threats, organized by each of the river basins identified by the countries during the PIF phase, are presented in the table below.

Country	Watersheds	Environmental Pressures/Threats
Belize	New River and Belize River	Major flood events, industrial and agricultural operations along the river, significant agricultural activities within the river basins, and the presence of major dams contributing to national electricity.
Costa Rica	San Carlos River	Supports significant ecological areas and is part of the Mesoamerican Biological Corridor, notable for its very humid forest with significant biodiversity. Critical for hydroelectric energy generation and tourism.
Dominican Republic	Pedernales River	The river basin includes mostly forested areas with agricultural crops leading to potential issues like erosion and pollution from agrochemicals. Significant biodiversity in the Sierra de Bahoruco National Park.
El Salvador	Las Banderas River	Includes varied ecosystems such as canyons and tropical forests, agricultural crops leading to erosion and pollution, significant terrestrial components affecting the protected natural area and Ramsar site Los Cóbanos Complex.
Guatemala	Motagua Basin	S Shared by Guatemala and Honduras, flows through diverse life zones and ecoregions including pine-oak forests and mangroves. Potential environmental pressures are not specifically listed but implied through the variety of ecosystems and the binational management needs.
Honduras	Chamelecon and Ulua rivers	Part of the Mesoamerican biological corridor, includes protected areas important for biodiversity. Environmental pressures include flooding threats and the need for integrated management to reduce pressures from the basin towards the marine-coastal area.
Nicaragua	Las Perlas Lagoon	Contains critical ecosystems like coral reefs, mangroves, and extensive seagrass areas. Vulnerable to impacts from artisanal fishing and the potential impacts of extreme weather events on biodiversity.
Panama	Tonosi River	Includes ecosystems like forests, protected areas, wetlands, and mangroves. Environmental pressures include the need for improved restoration and conservation of ecosystems and management of hydrological, socioeconomic, and environmental dynamics.

### Barriers

9. The understanding of barriers to scaling the S2S process barriers to scaling an S2S process were defined in a preliminary scoping exercise and through bilateral meetings. The results were further informed by the GEF IW CLME and MAR TDAs and SAPs, the recent MAR Terminal Evaluation, from multiple GEF transboundary basin management projects, as well as GEF STAP guidance on Sea-to-Source and on Transformational Processes. Persistent barriers are noted in (i) governance, (ii) policy, (iii) finance, (iv) and technical and capacity gaps. More work is necessary during the PPG Phase to understand the dimensions of the barriers at the nexus between the national and local watershed/coastal-marine systems.

10. <u>Governance:</u> Expertise in holistic management of land-based and Coastal-marine resources is not common. Despite progress, there are gaps in the coordinated governance of environmental flows across jurisdictions, between sectors and between distinct sets of stakeholders. Integrating stakeholders from land and marine communities is central to understanding and assuring environmental flows between terrestrial, coastal-marine, and open ocean systems. This barrier will also affect the GEF investments in the MAR, Caribbean, and eventually in the Pacific Central American Coastal LME. The MAR2R project provided proof-of-concept that municipal leaders, national agencies, and local stakeholders can converge around a holistic S2S approach to resource management. A similar disconnect between actors also occurs at the regional level leading to policy dialogue in silos. Finally, as member states experience changes in political administrations, the S2S concepts and the relevant SAPs must be continually promoted to ensure continuity. CCAD and other SICA organizations are not currently wired to support national governments in that regard.

11. <u>Policy Gaps:</u> inconsistent and disconnected policies create gaps in decision-making, limit private sector participation and scaling at the regional and national levels. Policies are generally not informed by science or multi-stakeholder dialogue adding to the gap. Policies are also developed in silos driven by short-term economic or political expediency or in reaction to shocks. Sharing of knowledge and lessons learned from framework policy instruments developed for the MAR nations and a growing understanding of the Blue



Economy concept is important to support an integrated S2S approach, which is not a mainstream process thereby limiting the decision-making favoring integrated management of environmental flows and effects between terrestrial and coastal-marine systems. The PPG process will determine the levels for policy development at the regional and national levels, where appropriate.

12. <u>Financing Limitations:</u> All SICA nations indicate that financing is a transversal and underlying constraint to sustainable infrastructure, water monitoring, enforcement of existing regulations and science in support of decision making. Financing is generally project-to-project rather than strategic. Seven of Eight participating nations have water funds and/or public-private mechanisms for financing global environmental benefits. However, only one of the geographies prioritized for this project (presented below) has an active financing mechanism. Current mechanisms will be studied during the PPG phase for possible scaling. On the surface, these tend to be small cap constructs leaving gaps in consistent and predictable financing streams to reduce or eliminate land-based threats and contamination to riverine, coastal and marine ecosystems. Their impacts are not consistently evaluated or widely published limiting the exposure to new investors.

Technical and Capacity Gaps: The regional system capacity to interpret data from member states and 13. make projections on critical environmental flows, water security, potential hotspots, etc. and to inform regional dialogue and to support national partners in their decision-making is limited and fragmented by sector. Information on hydraulic resources (surface and groundwater), quality of environmental flows, and condition of LMEs depends on SICAs ability to draw from national data and model regional climate, water, and other trends to be able to advise the council of ministers on trends or hotspots in water security, shifts in biodiversity, risks, new threats, etc. Presently, regional analysis tends to be targeted to problem-specific topics, such as sargassum blooms or spiny lobster disease. Linkages between National and regional systems require strengthening. The dissemination of new capabilities, such as the 3D printing of coral reef bases or solutions to Sargassum, is also limited to traditional actors in specific sectors implying "siloed" knowledge and learning. Unfortunately, national monitoring systems and regional organizations do not collect or process consistent data is lacking for watercourses and collectively across the region to determine periodicity, hotspots, and trends. The weakness of consistent scientific information is a barrier that must be removed to allow the SICA states to validate the causal chain analysis presented for MAR2R, for GEF IW transboundary projects, and for both LMEs on a progressive basis and allocate resources accordingly. The causal chain analysis presented is a synthesis of those sources. The S2S 2050 Action Plan described herein must address the need to revise thinking on the causal chain and provide data to validate or reject elements of that chain.

14. If the barriers are not addressed, the alterations to environmental flows will deepen with population effects and added climate change effects. The Coastal wetlands and nearshore environments will degrade affecting nutrient flows and germplasm to the LMEs. Without a comprehensive Source-to-Sea S2S approach, national and regional systems will not be integrated to the degree necessary, that will contribute to lower-than-expected results as the land-based impacts may outpace the gains in global environmental benefits obtained from individual projects and/or regional efforts separately focused on individual LMEs. A GEF increment is needed to establish an integrated Source-to-Sea approach and planning paradigm to conservation and environmental management that will produce environmental flows needed to produce Global Environmental Benefits while limiting contamination. GEF investment in an integrated approach and planning framework is needed to produce more investment in strategically targeted projects based on evidence from monitoring and evaluation, and finally, through a long-term approach to capacity building, knowledge and learning to a scale not attainable by projects and programs working separately.

### Selection of Project in Preference to Other Potential Options

15. The project is linked to the results and recommendations delivered in the MAR2R terminal evaluation. The MAR2R project illustrated that the governments and all stakeholders including civil society can grasp the Ridge-to-reef concept and it is a favorable vehicle for addressing the combined land based and sea based



effects of anthropogenic processes. The proposed suite of components and results relates to the high-altitude evaluation points in (i) upscaling the TOC into a Regional effort, add capacity to CCAD to deliver to scale-out results through policy coherence, financing and technical mechanisms e.g., regional M&E systems, an improved KML system and process, and scaling-up of the Ridge-to-Reef concept. CCAD presented the results of the evaluation to their Council-of-Ministers. In response to the favorable results obtained by the MAR2R project, the CCAD Council of Ministers mandated the scaling of the concept, experiences, and benefits, to the remaining SICA members and to capitalize on the experiences of the transboundary, multi-sectoral dialogue supporting the approach in the region, the AFOLU 2040 initiative, and the Blue Economy approach; and, to introduce the S2S process into Pacific region. With that mandate, CCAD has the opportunity to partner with SICA members to link both LMEs and their programmatic and governance processes with that of the Meso-American terrestrial vision based on environmental flows and connectivity. This approach will integrate the planning and management of LMEs with that of terrestrial ecosystems, which will improve the results of each beyond that which each program could achieve if the option of undertaking these separately is exercised.

### Stakeholders and their Roles

16. Multiple stakeholder groups have relevant and significant roles in the system that affect the chain of consequences ultimately affecting GEBs. Consequently, they are critical to delivering adaptations benefits that will lead to GEBs. Although these may vary between countries, they are summarized as follows:

17. <u>International Stakeholders:</u> includes project implementation and executing agencies. FAO is the implementing agency. CCAD is the primary executing agency at the regional level and will coordinate with each nation. WWF is expected to provide continuance to the be an executing agency in the MAR nations. Both FAO and WWF connect the project to global thematic knowledge, such as freshwater technology, sustainable financing, and direct relationships to global platforms.

18. <u>Regional Organizations:</u> SICA identifies, articulates and manages dialogue and supporting solutions on problems common to their member states through the states' thematic Councils of Ministers and via SICA agencies. Principal to the problem is CCAD, SICA's environmental agency and executing agency for this project. CCAD networks with Council of Ministries of Environment and other SICA agencies critical to supporting GEBs on a regional scale and to the S2S approach. Multiple SICA agencies support members in sectors relevant to the problem; such as, the Central American Agriculture Council (CAC); the Fishing and Aquaculture Sector Organization for the Central American Isthmus (OSPESCA); the Tourism Integration Secretary (SITCA); the Central American Water Council; and the Regional Environmental Observatory (REO). They are important in engaging regional initiatives supporting sector specific outcomes, such as spiny lobster disease control. Other regional facilitator organizations important in delivering on GEBs include institutions such as, the Network for Environmental Funds for Latin America and the Caribbean (RED LAC) and MARFUND, both involved in sustainable financing. Regional private sector production roundtables and associations, such as sustainable palm oil, are equally important for private sector engagement and capacity building.

19. <u>National Policy and Regulators:</u> Governmental ministries and agencies have a direct role in supporting adaptation benefits for their roles competent authorities for developing and executing national policies through their regulatory and enforcement frameworks and in creating governmental incentives that influence GEBs. As CCAD focal points, the environment ministries are also coordination hubs to other government agencies, private sector and civil society within their jurisdictions.

20. <u>Information and technology providers:</u> International and national information providers and think tanks, such as IW:Learn, SIWI, or the Pacific Institute and specialized International NGOs provide inputs to problem solving and access to global and regional experiences. National Academia is important in identification, analytical, science, and thought leadership on the related drivers of the problem. Their ability to



work in long-term consortia with government and the private sector to quantify processes and trends contributes to continuity.

21. <u>Private sector industry and commerce organizations</u>: involvement of the sectors mentioned in Section A is critical to reducing the water and wastewater footprints and addressing the financial drivers of land use cover change and unregulated extractions. From the MAR2R Terminal Evaluation, an important lesson is that agribusiness sectors such as palm oil, shrimp, and sugar cane were willing to participate in establishing better practices with positive results. However, only 25% of the producers were engaged with national or international rountables where they could access ideas and information. The project outcome on innovative financing is the result of the MAR2R interviews with the private sector on how to maintain water quality. The baseline experiences with agribusiness sectors offers an important pathway for adaptation benefits that are equally profitable for businesses. Important in this space are national and local producers' associations; such as dairy, livestock, aquaculture, and agricultural, and the tourism, developers and the construction sectors. International Sustainable Industry Roundtables provide targeted experiences from like producers in responding to similar problems.

22. <u>Civil Society/Local Organizations</u> specific to the targeted watersheds and with linkages to the previous groups mentioned are local government, local NGOs, such as incorporated watershed council organizations, women's organizations, local community and indigenous peoples. National-level indigenous authorities and advocacy organizations provide protocols and connections with and between indigenous communities. Some countries, such as Panama, have established watershed governance structures in place. The project aspires to establish ad hoc multi-stakeholder structures to inform and provide feedback on the S2S 2050 process and products. These will be helpful in determining what types of structures will be needed and promoted by the project to assure delivery on GEBs to 2050.

23. To ensure adequate engagement throughout the project's development and execution and equal access to the project's opportunities and benefits, the PPG process will involve a full stakeholder mapping and analysis at each level as part of a comprehensive stakeholder engagement plan that defines the roles of each. The PPG phase will incorporate inputs and perspectives from the stakeholder groups identified into the design of the project activities and budget. The requisite Stakeholder Engagement Plans, Gender Mainstreaming Plans, Indigenous Engagement and budgets will be developed nationally and compliant with national protocols and collated at the regional level.

### Fit within the current landscape of investments, country priorities and lessons learned from previous projects.

24. Table 1 illustrates the relationship between the S2S project and the foundational projects mentioned (par. 5,6) and others from GEF and non-GEF sources. Through the PPG phase, CCAD will analyze the complementarity between the TDAs, SAPs and lessons learned with national priorities, plans and investments to form a complete picture of the S2S project's landscape.

### Table 1. Project Fit to key investments



Investment	Belize	Costa Rica	Dom. Rep.	El Salvador	Guatemala	Honduras	Nicaragua	Panama
MAR2R	•				•	•		
PROCARIBE	•	•	•		•	•		•
PACA		•			•	•		•
CREW	•	•	•		•	•		•
Dry Corridor		*		*	*	*	*	
Circular Caribbean	*		*	*	*	*		
Water/env. Funds		*	*	*	*	*	*	*

Project fit to key investments GEF (•)and Non GEF (\*)

25. The S2S approach as mandated based on the results of the Ridge-to-Reef approach successfully demonstrated by the GEF MAR2R project, which demonstrated a Ridge-to-Reef approach that included policy instruments for common coastal areas, linking land based contaminants to near shore environmental productivity and protection against the effects of climate change and the demonstration that the countries involved were able to establish a common vision on many issues, such as spiny lobster disease and coral reef dieback. The project supports the MAR SAP and CLME SAP priorities in (i) the integrated management of water, coastal and marine resources, (ii) regional and local governance, and (iii) knowledge management. In addition, the project will directly address the drivers of contamination, which is a core aspect of the SAPs inforce and the CREW Action Plan. The project supports CCAD and WWFs efforts within the 'Prevention of plastic waste in the seas of Central America and the Caribbean (Circular Caribbean)' project (BMZ, GIZ) to prevent ocean plastic waste and promote regional private sector exchange and cooperation within a circular economy.

26. The Hand-in-Hand Initiative or "Corredor Seco," unites CCAD, the CAC, and the Central American Economic Integration Secretariat (SIECA) in investment planning to build resilience in the Central American Dry Corridor mentioned previously. This FAO coalition promotes innovations such as digital market access, climate-resilient agricultural practices, digital soil mapping, and agricultural climate risk zoning. All beneficial to promoting innovations in water management, supply, productivity, and decision-making. Agricultural productivity and its present and future water needs given climate change temperature models is critical to the S2S approach and by the AFOLU 2040 framework.

27. Through a dedicated KML component, the project will link with IW:LEARN (GEF 10374) information systems, events and communities-of-practice, included in the S2S project's KML outcomes. [22] The project will connect national stakeholders to other international actions, such as the FAO actions in The Restoration Initiative's (GEF 9522) information platform and communities of practice and the U.N. Decade's FERM network for areas under restoration, such as mangroves, forest and seagrass restoration. During the PPG phase, CCAD will undertake extensive mapping of the investment landscape to determine the strategic fit to S2S 2050. CCAD is a major actor and steering committee member in all projects related to S2S. The S2S project will maintain complementarity with the GEF 8 Clean and Healthy Ocean Integrated Program (CHO-IP GEF 11349) at several levels. First, its Panamanian child project in Parita Bay is an opportunity for integrated management linking the entire coastline in an integrated S2S approach with the Rio Tonosí watershed, the chosen geography for the S2S project. The Rio Tonosi is one of 10 rivers draining into the PACA, all of which will be integrated into the S2S 2050. Secondly, through linkages between the proposed



SICA Knowledge Management and Learning system to that of the CHO-IP, both the IP and SICA nations will benefit from technical workspaces and learning events. FAO, as the implementing agency for both has the opportunity for shared Knowledge, Management and Learning to cross fertilize the two initiatives, inviting each to link information systems and lessons learned, developing new partnerships. With FAO as the Implementing Agency for both initiatives, the CHO-IP will support the S2S in learning events and access to technical information supporting common themes, such as, efforts to reduce hypoxia by addressing agrochemicals associated with commodities and nutrient loading from improper wastewater treatment. The level of engagement between the S2S project and the IP will be defined during project formulation. Likewise through the same process, CCAD will promote linkages and KML with the GEF 9601 CReW+: An Integrated Approach to Water and Wastewater Management Using Innovative Solutions and Promoting Financing Mechanisms in the Wider Caribbean Region. The S2S training for wastewater operators can be shared with CReW and the S2S project will support the sharing of the CReW Hub and its learning opportunities. In addition, the project is directly related to many key GEF investments in transboundary river systems, such as, (i) GEF 10263 Promoting sustainable landscapes in the Motagua River watershed; (ii) GEF 9246 Integrated Environmental Management of the Rio Motagua Watershed (binational), (iii) GEF 10599 Transforming Food Systems and Reducing Deforestation in the Protected Areas and Biological Corridors landscapes from the Southern Caribbean Coast and San Juan River autonomous region and (iv) Like the CHO-IP, GEF (11273): S2S will link with the Mesoamerica Critical Forest Biome Integrated Program as part of the S2S 2050 Planning process. The information gleaned from the Child Projects in El Salvador, Guatemala, Honduras, Nicaragua, and Panama will support the terrestrial planning process. CCAD is the president of the steering committee for the IP. Securing benefits for the well-being of local communities and the Meso-american forest biomes speaks to the landscape stabilization aspects of the MAR SAP and a central aspect of the S2S 2050. A similar integration strategy will be developed during the PIF between the KML systems. Of special interest are Child Projects with IW focal area linkages, such as, El Salvador 11277, Guatemala 11275, S2S will be able to extend the lessons learned to the other SICA nations such as Costa Rica, Belize and the Dominican Republic. Likewise, CCAD will coordinate for all IPs support for the upgrading of SICAs information platform.

Secondly, all of the LMEs address the issue of contaminants, as does CReW. These responses require a longterm, scaled and coordinated approach that encompasses both land-based and sea-based sources of contamination. Currently, the region is not prepared for a coordinated and long-term response. S2S is the only vehicle to accomplish that holistically. To the contrary, the land and sea based authorities will continue to work separately with separate agendas and with little coordination of policy, financing, and knowledge. Likewise, investments in transboundary river basins require the same level of institutional strengthening to make them sustainable and to scale the lessons learned to all basins in the region. The S2S project prepares SICA-CCAD for that mission in coordination with the pertinent authorities in each of the 8 SICA nations. The purpose of an S2S 2050 agenda is to establish the conditions needed for a transformational scaling (out-up and deep) that will both respond to the issue of contaminants in a long term basis and provide the institutional improvements needed for sustainability of the GEF IW investments in both IW-1 and IW-3. To successfully succeed in the LMEs requires success in reducing the drivers of threats in all river basins to both LMEs. Therefore, the S2S 2050 is a spirited effort by the 8 governments to tackle this challenge.

### Footnotes:

# [1] at least 66 known hard coral species, 35 mollusks species, more than 500 fish species

[2] the Sistema de Integración Centro Americano includes Beliz, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panamá and the Dominican Republic.



[3] Sensu Dyson et.al., 2008, an environmental flow is the water regime provided within a river, wetland or coastal zone to maintain ecosystems and their benefits where there are competing water uses and where flows are regulated.

[4] including enigmatic species such as, the queen conch (Strombus gigas.), the spotted spiny lobster (P. guttatus.), and the piagua clam (Anadara sp.)

[5] Sensu UNEP-CEP, 2020

[6] shared by Belize, Guatemala, Honduras, and Mexico

[7] Kramer and Kramer 2002, Windevoxhel 2011

[8] GEF,WWF, 2024. Transboundary Diagnostic Analysis. GEF (5765) Integrated Ridge to Reef Management of the Meso-American Reef Ecoregion (MAR2R). URL: https://www.sica.int/documentos/analisis-de-diagnostico-transfronterizo-adt-de-la-ecorregion-del-arrecife-mesoamericano-resumen-ejecutivo\_1\_132281.html

[9] Eretmochelys imbricata., Chelonia midas., Caretta caretta. respectively.

[10] More info: https://www.worldwildlife.org/projects/integrated-transboundary-ridges-to-reef-management-of-the-mesoamerican-reef. See also, https://www.sica.int/MAR2R/inicio.

### [11] UNEP, 2019

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### **B. PROJECT DESCRIPTION**

### **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 PIF guidance document. (Approximately 3-5 pages) see guidance here

### **Project Approach and Theory of Change**

28. The S2S Approach is a continuum within which the project and the baseline actions contribute inputs and strategic investments to address the barriers through (i) good governance and policy, (ii) improved resource management, (iii) technical and financial innovation, and (iv) knowledge management and learning and (v) monitoring and evaluation. As presented in figure 1, an evolving process will define a pathway of mid-term strategic investments that will trigger a long-term catalytic process through which the enabling conditions will develop thereby improving the state of positive environmental flows and ecosystem conservation. The Changes in State will lead to the long-run Impacts as a result of a sustained reduction of contamination and conservation of critical habitats that further support increased future environmental flows and global environmental benefits. This TOC is consistent with the TOCs of the MAR and CLME+, CREW, and other baseline investments mentioned in Section A.

29. The S2S project, together with the second and third phases of the PROCARIBE, CREW, and other related mid-term investments to be promoted by the project and by CCAD will solidify the strategic Intervention stage into the mid-term as illustrated in figure 1. To facilitate that process, the S2S project will develop consensus for a consolidated blueprint or overarching TOC with an articulated investment or action plan needed to move the process towards mid-term outcomes and in decades to come en route to the Impact stage. An adaptive process is necessary to readjust the process as understanding of the barriers and changes in environmental and socio-economic conditions evolves.

30. The MAR2R terminal evaluation recommended the upscaling in multiple forms of the Ridge-to-Reef concept throughout the region to achieve a scale sufficient to conserve and generate GEBs. The evaluation also indicated that in order to facilitate adaptations and the evolution of the process across the illustrated continuum, SICA, CCAD, and all mentioned stakeholders must be prepared to manage a transformational process. Emphasis will therefore be placed on upgrading CCADs capabilities in strategy, program planning implementation, agile execution systems, and the monitoring and evaluation systems needed to manage a complex and coordinated transitional process that requires step- scaling and periodic and consistent reassessment of the overarching TOC with adaptations to 2050. This process will therefore add a layer of strategic and transformational thinking to the existing frameworks. Furthermore, addressing gender gaps and more effectively engaging women have the transformative potential to generate greater results for the global environment by (i) including the unique skills, knowledge, and experiences of women and their roles as the primary users and stewards of many natural resources; and (ii) supporting women's roles that can change the



causal chain of environmental degradation, from their involvement in public and private sector governance, their role in productive sectors, their choices as consumers in the global market, to the investment choices they make.[23]







The Theory of Change (ToC) diagram presented depicts a strategic framework aiming to achieve an environmentally and economically sustainable Central American and Caribbean sub-region with resilient water resources systems. Here's the description of the ToC components and their relationships:

**Current Scenario and Barriers:** The current scenario is challenged by a lack of comprehensive regional coordination to harmonize land and marine-based responses, which are undermined by numerous initiatives that tackle water issues. Governance limitations and policy gaps, as well as financial limitations and technical capacity gaps, are identified as major barriers.

**Components (Inputs):** To address these barriers, five components are identified: Strengthened Policy and Institutional Framework to facilitate S2S Management; Integrated Source-to-Sea management approach for water security and ecosystem stability; Innovative Technologies & Finance; Knowledge Management & Learning; Project Monitoring & Evaluation, and Adaptive Management.

Assumptions: The assumptions underpinning the strategy include sustained engagement from stakeholders (A1), a commitment by regional bodies and member countries to the S2S action plan (A2), stakeholders' willingness to implement new governance mechanisms and policies (A3), the recognition of the economic viability of sustainable practices (A4), and regional bodies and member countries maintain a commitment to the S2S action plan and continue to allocate resources for regional collaboration (A5).

**Intervention Strategies:** The intervention strategies involve strengthening regional implementation and governance capabilities, integrating, and coordinating planning and management across basins, enhancing stakeholder capacity, and ensuring water security through innovation and sustainable financing instruments.

**Project Results/Outcomes:** The expected outcomes are strengthened regional capabilities, integrated, and enhanced planning and management of watersheds, improved water security, and financial commitments to support the S2S 2050 plan.

**Intermediate State:** An intermediate state is aimed to be achieved after the project ended through monitoring and evaluation of the S2S management, adaptive management, and strengthening of processes.

**Impact Drivers/MTO (Mid-Term Outcomes):** These include changes in behavior, such as broader adoption of watershed management practices, and a change in state, characterized by reduced disturbances in primary flows and quality water resources.

Long Term Impact/GEBs (Global Environmental Benefits): The goal is an enhanced water security and a sustained reduction in pollution, leading to the preservation and bolstering of critical habitats. This supports the resilience of marine coastal ecosystems within the Large Marine Ecosystems (LMEs), resulting in widespread global environmental benefits, contributing to ecological balance and sustainability.

Box.1 Theory of Change Diagram Description





Box.2 What is the Source to Sea (S2S) Concept.

### **PROJECT OBJECTIVE AND COMPONENTS**

To secure Global Environmental Benefits, the project will establish a transformational process that 31. builds off the baseline investments with investments in enabling conditions towards the long-term goal of a sustained reduction of contamination and conservation of critical habitats that support the environmental flows and global environmental benefits to the Central American Caribbean coastal-marine sub-region. The CAM project is committed to inclusive and equitable interventions, recognizing and valuing the diverse needs of all stakeholders. During the Project Preparation Grant (PPG) phase, a Gender Specialist will ensure that gender dimensions are integrated across all project phases, from pre-design to monitoring and evaluation, embedding principles of inclusiveness and strategically seizing opportunities to address gender gaps critical to the achievement of global environmental benefits. Through a dedicated analysis and characterization of relevant stakeholders, appropriate engagement strategies will be designed to ensure meaningful and effective participation of all identified groups. Specific attention will be devoted to ensuring that no one is left behind, facilitating a participatory involvement of local communities, indigenous people, youth and women's organizations proactively trying to address potential barriers to their relevant engagement in project activities. CCAD seeks to undertake a full-sized project within the GEF International Waters Focal Area with the objective, "To enhance environmental sustainability, economic prosperity and climate resilience in the Pacific, Central American Coastal and Caribbean Large Marine Ecosystems through a source-to-sea approach that safeguards marine and freshwater resources for ecosystems and livelihoods".

32. Addressing the multifaceted issues at hand, the eight SICA countries (Honduras, Guatemala, Belize, El Salvador, Nicaragua, Costa Rica, Panama, and the Dominican Republic) have joined forces under the institutional umbrella of the Central American Commission for Environment and Development (CCAD) and the implementing capacity of FAO, to design a project that examines the intricate interplay among terrestrial, freshwater, coastal, and marine ecosystems through a Source-to-Sea lens. The initiative stems from a request of the Council of Environmental Ministers of the SICA system recognizing that an integrated vision and coordinated efforts are the only pathways to reverse the decline of terrestrial and marine ecosystems, ensure the



delivery of ecological services and preserve the environmental integrity of the two LMEs. The Council recently also mandated CCAD to begin work on a governance structure for the MAR region as a node to CCAD to make operational the SAP for the MAR. To align the S2S between MAR and non-MAR countries, the Results Framework contains the reference numbers to the strategic actions in the MAR SAP. For reference, the MAR SAP strategic lines are included in the Annexes.

33. To that end, the S2S project will realize strategic investments in 5 components: Strengthened policy and institutional frameworks for S2S management; Integrated S2S management for water security and ecosystem stability; innovative technologies and finance; knowledge management and learning; and project monitoring, evaluation and adaptive management. Overall, the project will be seeking 10 outcomes to be validated, refined or amended through a participatory PPG process. Operationally, the components will have a two-tiered delivery approach: (i) outputs delivered at the regional or system level and (ii) outputs delivered nationally and-or locally within prioritized watersheds. The S2S approach will be implemented and fortified above the baseline established by the MAR2R project in the 3 MAR countries (Belize, Guatemala, and Honduras) and, as mandated, the concept will be extended to 5 new nations (Costa Rica, Dominican Republic, El Salvador, Nicaragua, and Panama). The project recognizes that during the PPG phase and during the implementation of the activities, women-led organizations will be actively involved. This will be done by ensuring participation in the development of management mechanisms, policies, and frameworks in relation to several outcomes such as outcomes 1.1 and 2.1. In addition, women's organizations will be engaged to have a meaningful involvement in the governance systems related to the outcomes such as Outcome 1.2 and Outcome 2.2. An illustrative Results Framework is presented in Table 1.

## <u>Component 1: Strengthened Institutional and Policy Frameworks to facilitate S2S at regional, national and local levels.</u>

34. The project promotes a two-dimensional process to strengthen the policy and institutional framework: a framework understanding between the nations for a long-term S2S process to 2050 and a strengthened regional implementation and governance capability that enables cooperative and adaptive management of the plan. An agreed Regional S2S Action Plan will define a pathway for developing and entry into force harmonized policy instruments, science, and investments needed to generate the long-term impacts as presented in a validated TOC. Output 1.1.1: An endorsed consolidated Regional S2S Action Plan to 2050. Gender mainstreaming is essential for ensuring equitable and sustainable water resource management in the source-to-sea continuum, recognizing the diverse roles, needs, and vulnerabilities of women and men. A Gender Action Plan (GAP) will be considered for inclusion into the Regional S2S Action Plan. The GAP will outline gender-specific targets and milestones that includes the involvement of women and gender experts in the drafting committee, and consultations to ensure that the policy instruments are inclusive and address gender-specific issues. Genderdisaggregated data will be collected and utilized to inform the action plan, ensuring that policy development is responsive to the needs of different genders. During the PPG, lessons/mechanics from the DRIN CORDA process can be taken up in this region to help realize a 2050 vision and action plan.[24] The S2S 2050 will lead to a portfolio of investments after the project intervention that are both transboundary and national in scope. The Action Plan will facilitate international waters and national investments among the eight countries. The S2S Action Plan will be a rigorous multi-dimensional and phased process (not a simple consultancy) that will encompass and will serve as a governing/guiding document for all future basin investments in the SICA region to 2050. Of interest is a process to identify and address the impacts of subsidies on land use and cover change. The policy environment can support positive environmental flows or lead to negative flows. There are several barriers to limiting harmful side effects on the environment and on human well-being, especially where these are commodities or settlement related leading to conversion of ecosystems. A KM process is needed to eventually enable actions on policy harmonization that lower risk of unintended adverse effects. A 3-stage process. First, the KML system (Component 4) will create knowledge products for targeted audiences. These can vary from webinars to short informational videos to in-country presentations. Second, the project will develop a tool for use by the national stakeholders to identify the presence and nature of harmful subsidies and



their consequences. A dedicated working group could also be considered. Finally, an existing IUCN tool for Policy Implementation Planning (PIP) will be adapted to enable a pathway to addressing identified policy issues within the context of each country. The sum of these parts would be the policy action items for the S2S Action Plan and potentially items for financing within the scope of the S2S project. The details surrounding each of these steps will need to be developed during the PPG phase.

35. Both the national and regional actions for SICA will be defined leading to a portfolio of investments. Examples of framework policies to be discussed are a region-wide information sharing agreement/ protocols and region wide minimum standards for wastewater discharge, etc. The PPG phase will identify gaps and prioritize responses to complete the Policy framework in support of S2S 2050.

36. A multi-stakeholder process will be needed to define the pathway for an S2S 2050 Action Plan. To accomplish this task, CCAD and their national representatives will define the working group(s) necessary to inform and advise on the design of a long-term programmatic effort. Cooperation among SICA agencies and national governments and consultations with academia and the private sector will be needed to effectively inform the process. Output 1.2.1: A consolidated inter-sector, inter-agency S2S governance, coordination, and planning mechanism within SICA/CCAD. The governance framework will explicitly include guidance for gender balance in all decision-making bodies and planning committees. This will help in fostering an inclusive approach to environmental governance. Training and capacity-building activities will be organized for stakeholders, focusing on gender sensitivity to empower participants to integrate gender considerations in their respective roles and responsibilities. During the PPG process, sources like the Global Water Partnership will be consulted to define the type of organizational mechanisms and processes needed to design and approve a regional S2S 2050 TOC and Action Plan. Under output 1.2.1 the project will define the types of governance mechanisms needed to guide the implementation of the action plan, the capacities needed, and the need for any institutional reorganization etc. This process will be defined during the PPG phase for implementation during the project. The governance aspects at the regional level and adjustments indicated by the member states at the national level will form part of the Action Plan. During the PPG process, a Gender Specialist in close cooperation with national and regional teams will develop a Gender Action Plan (GAP) based on country profiles and gender analysis at all levels relevant to the project. This analysis will inform the project's framework, budget, and staffing, focusing on the specific gender roles and responsibilities in the targeted basins. Among other actions, the GAP will foster the establishment of a Gender Working Group/Community of Practice at the regional level to address gender-related needs from each country and deliver capacity-building activities. The GAP will incorporate gender-sensitive perspectives into the monitoring and reporting systems, including the collection of sex-disaggregated data and tracking of gender-sensitive indicators. The GAP will build also on gender-related recommendations from the MAR2R SAP. The Gender Action Plan developed during PPG will take into account GEF Gender Implementation Strategy guidance as well as FAO's, CCAD's, and GEF gender policies and propose actions at various levels to mainstream gender equality in line with national and regional policies and norms. [25] [26]

37. Strengthening CCAD's managerial capacity to effectively implement a complex regional S2S planning process and eventually the implementation of the S2S 2050 is a priority that was signaled in the Terminal Evaluation of the MAR2R project. A needs assessment will be completed during the PPG phase to define the CCAD support program including targeted consultancies and investments in efficient management systems and financing structure. To support the S2S 2050 vision, a regional M&E system capable of tracking common indicators will be developed in support of the Action Plan.Output 1.1.2: A regional S2S M&E System with agreed indicators. The Monitoring and Evaluation (M&E) system will include gender-sensitive indicators that track the effectiveness of gender equality inclusion in environmental governance. By integrating gender considerations, the project will enhance water security, promote sustainable development, and improve the wellbeing of all communities in the SICA region. This will involve tracking participation rates, leadership roles held by women, men, youth, indigenous peoples, and the impact of policies on various genders. The system can be wired to also draw lessons learned on the transformational aspects of the project.



transformation of Policy Coherence, Governance, Knowledge Management and Learning will enable scaling up and scaling deep, both enabling conditions. The component 3 injects innovation and financing to the mix. These are additional levers-of-change needed for scaling out.

38. The metric will be a combination of the variables. For example, the S2S 2050 will have a component to develop a suite of projects for 5 year replenishment cycles. The degree to which these are financed and go online to service additional watersheds, or extending the M&E system, will indicate scaling out. Scaling deep can be measured through Knowledge, Attitude and Practice surveys with a consistent metric agreed and measured consistently over a 25 year span of the Plan in 5 year increments. Scaling up can be measured by having the degree of implementation of the policies outlined by the Policy Implementation Plan as a measure for scaling up. The major aspect of transformation will be the integration of planning by the governments of the terrestrial and LME's. This will be an exciting aspect of the design of the M&E system Output 1.2.2: Implementation capacity in Strategy, Planning, Execution, safeguards, stakeholder engagement & gender equality, risk assessment & resource mobilization. Implementation strategies will prioritize the equal inclusion opportunities for women, men, youth, indigenous peoples, and underrepresented groups in leadership and operational roles within the project. We will also develop specific strategies to overcome barriers to gender equality. Engagements and consultations will be structured to ensure equitable participation of all genders, with targeted outreach to women's groups and communities traditionally underrepresented in environmental governance. The M&E System will enable the tracking of multiple results from all relevant projects (CLME+, CReW+, all IW transboundary basins, national basins etc.) and address the barrier relating to a deficit of science in defining contaminants, environmental changes, trends, hotspots, and above all monitoring GEBs, among others. Through the Project GAP, the CCAD will strengthen its policy delivery through the following areas: a) promoting gender-responsive/sensitive approaches and results in its activities and projects executed by CCAD; b) enhancing capacity of CCAD Secretariat and its Partners to address gender equality; c) increasing ability to generate knowledge and contribute to learning on linkages between gender and the environment; and d) enhancing monitoring systems for tracking and reporting on gender equality results. The CAM project will incorporate gender-sensitive M&E and KM frameworks to ensure proper capturing of challenges and successes in mainstreaming gender equality and meaningful participation of all relevant stakeholders. Further technical assistance will be provided in mobilizing additional domestic and non-domestic financial resources for the longterm sustainability of the S2S 2050 and in developing GEF compliant mechanisms, guidance and policies for region wide risk assessment, stakeholder engagement planning, conducting gender analyses, reviewing legislation through a gender lens, and developing strategies to address identified gender gaps.

### Component 2: Integrated Source-to-Sea Management for water security and ecosystem stability

39. The project will invest in building the regional, national and local technical capacity for coordinated, integrated planning and management within a cohesive S2S approach (Outcome 2.1). This outcome seeks to go beyond separate approaches to Integrated Water Resources and Integrated Coastal Zone Resources Management through a holistic planning process that enables stakeholders to envision and scientifically manage environmental flows and the linkage between the land-based processes and benefits generated in the coastal and marine environments. To achieve this, the project will support the development of management plans and water quality monitoring strategies with an S2S approach. To further support the process, the project will support enhanced capacity for Integrated and inclusive, multi-stakeholder resource governance (Outcome 2.2.). The project will promote Gender-Responsive Data Collection: Collaborative efforts to acquire knowledge about relevant sectors and actors across the source-to-sea continuum for the project activities will include gender-disaggregated data and ensure that surveys, field studies, and assessments consider gender-specific water needs, roles, and access patterns. The project will also foster the inclusion and participation of women scientists, academics and other experts in data collection and analysis and field surveys and encourage women's leadership in water committees and monitoring networks.



To promote the S2S approach, each nation has prioritized one or more basins where responses to issues in water balance, contamination, and the need for multi-stakeholder coordination and governance and integrated management of multiple terrestrial, coastal and marine resources is necessary to reduce stressors to both land-based and coastal and marine resources. Within these areas, the integrated S2S process will be showcased, monitored, and evaluated. The basins selected provide a representative range of ecosystems, production situations, and a diversity of coastal and marine habitats united by priority rivers. The basins selected are presented in Table 3. Annex C presents Maps, coordinates, and descriptions of basin characteristics and potential actions to be validated and developed during the PPG phase. In addition to these, a scoping exercise will continue during the PPG phase to seek additional basins with the potential for joint actions between SICA states and additional effort in the Pacific. The following demonstrates the international aspects of several selected basins and presents areas indicative of those that will be evaluated during the PPG process by CCAD and the respective governments. Within the Caribbean Drainage three of the listed basins are shared: a) Rio Mopan(Honduras)/Rio Belize (Belize); b) Rio Motagua (Guatemala & Honduras); and the Rio Chamelecon (Honduras & Guatemala). Additional areas with Pacific drainage are a) Trifinio (El Salvador, Honduras, Guatemala) and the Rio Lempa (El Salvador, Honduras, Guatemala).

LME	Countries	Watershed Area Identified	Area Size (ha)	EZZ Country Area (ha)	Shelf (ha)
	Deline	New River	199,743.30	2 525 100 00	1 017 000 00
	Delize	Belize River	943,420.00	3,535,100.00	1,317,800.00
	Costa Rica	San Carlos River	311,986	57,472,500	1,958,500
	Dominican Republic	Pedernales River	13,829	25,589,800	1,073,800
Caribbeen See LME		Motagua	1,267,000		
Canbbean Sea LME	Guatemala	Rio Sarstun	206,300	11,417,000	1,442,200
		Rio Dulce	13,000		
	Handuna	Chamelecon	400,536	24 072 400	1 771 500
	Honduras	Ulua	2,281,700	24,973,400	1,771,500
	Nicaragua	Cayos Perlas	455,723.74	12,388,100.00	7,087,400.00
	Sub-Total		6,093,238.04	135,375,900.00	14,651,200.00
Desifie Control America Coast I ME	El Salvador	Rio Banderas y Grande de Sonsonate	87,500	9,096,200	1,685,200
Pacific Central America Coast LME	Panama	Tonosi River Basin	71,600	33,564,600	5,340,400
	Sub-Total		159,100	42,660,800	7,025,600
	6,252,338.04	178,036,700.00	21,676,800.00		

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Source: https://www.seaaroundus.org/data/#/eez

40. Respecting that each nation and basin are launching from different baselines, the project will work during the PPG phase with the CCAD country representatives, Ministry officials and stakeholders to understand and coordinate the range of activities and investments needed to establish the enabling conditions for an integrated S2S management planning framework. The PPG needs assessment will take stock of the assets available for key planning aspects, such as spatial planning, completeness and conditions of monitoring systems, and others needed to technically produce integrated basin plans and basic monitoring the state of water resources and environmental flows. In addition to the technical aspects, the project will also take stock of the stakeholder's experience, abilities, roles, interests and potential for collaboration in a participatory basin governance framework. The stakeholders will accompany the governance process of determining the levels of support needed in producing the basin management plans and in developing basin wide governance structures. This process will also require stakeholder engagement in the socialization of the project's concept, which is not widely applied. The PPG phase will therefore develop the pathway for the development, function and sustainability of the basin-level governance structures and dialogue. The information provided will also enable the refinement of CCAD's safeguards tools, such as the requisite gender mainstreaming and action plan, Indigenous Peoples Plan, and stakeholder engagement plan.

### Component 3: Innovative Technologies & Finance



41. Innovations will be approached through two streams, technology, and finance. The first are investments in the prioritized watersheds to demonstrate actions contributing to water security and the second is the creation of sustainable financing instruments to sustainably promote investments in water security. To enhance these efforts, specific budgets will be earmarked for gender-related activities, ensuring the effective implementation of the Project GAP. Partnerships with women-led/owned organizations will be actively pursued to foster inclusivity in project implementations.Under Output 3.1.1, gender activities will include Gender-Responsive Data Collection, ensuring that gender-disaggregated data is gathered during technology assessments, and Encouraging women's leadership in managing these technologies while providing gender-sensitive training to local communities.

42. The project will invest in demand driven requests to invest in water conservation, efficiency, reuse, groundwater technologies, or others geared to lower the water footprint of existing activities thereby increasing the flow of water and reduce contamination of water to coastal and marine ecosystems. These can also include targeted investments in increasing the water yield of local ecosystems in the form of climate resilient technologies (ecosystem restoration, CO2 sequestration, Blue Carbon, clean development, Nature based solutions. etc.). Preference will be given to technologies that, if successfully deployed and evaluated, demonstrate the potential for scaling out. Therefore, the eligibility criteria and the M&E systems must consider both the water and economic attractiveness of the technologies as well as the potential to support businesses owned by or supporting women, activities benefitting indigenous communities, etc. Under Output 3.2.1., the eligibility criteria will be developed during the PPG phase and the procedures for the demand driven process will be determined. The investments will be indicated and vetted through a pre-feasibility study (technical, financial and economic) during the first year of the project allowing sufficient time for consciousness raising, education, and stakeholder engagement and coordination around impact and to facilitate risk, feasibility, and Environment and Social Safeguards analysis. Vetted projects with high potential for success, efficiency and scaling can move into the feasibility stage including detail design and engineering as applicable, a new financial, economic projection and an updated ESS scenario and due diligence on the interested parties. Under Output 3.2.1, the eligibility criteria and demand-driven process will incorporate women scientists, academics, and experts in feasibility studies, ensuring gender-responsive consultations during development.

Under output 3.2.2., the component will also seek to facilitate investments in financial schemes and 43. mechanisms for the sustainable finance of ecosystem conservation and restoration activities. During the PPG phase, criteria will be developed to assess the conditions e.g. potential, risk, and feasibility in the 12 watersheds for sustainable financing with the aim of, during the course of the project, establishing financing mechanisms in at least 4 of the watersheds. Gender activities for Output 3.2.2 will include Encouraging women's leadership in water committees and awareness-raising on gender equality in financial decision-making for water management. As described above, following a period of consciousness raising, partnership and trust building, CCAD/FAO consultants will support the matching of conditions to appropriate financing schemes and finally an economic assessment of alternatives. Actions will be taken once the criteria are met for sustainable financing. These can include creating water funds, PES schemes, improving resource payments, among others. For decision-makers, the project will sponsor refresher workshops in each country with the support of existing water funds, to update experiences from the region, as indicated in the baseline assessment. By the conclusion of the PPG phase, the pre-feasibility analysis of the potential for these mechanisms will be established. A full feasibility analysis of the conditions, risks, and potential for Public Private Partnerships will be undertaken for the basins identified during project implementation. This consists of identification of potential partners, a financial and economic analysis, legal and due diligence. CCAD will also explore the possibility of expanding existing mechanisms, such as, expanding the Belize Project Finance for Performance model to identify financial models and instruments aimed at ensuring long-term funding for conservation activities in inland/middle and upper watersheds that benefit biodiversity, the environment, and society, extending these into the S2S approach.



44. Sustainability of the S2S 2050 program will be supported in part through the development or support of larger national or regional financing mechanisms and in promoting and developing commitments to support a portfolio of projects as outlined in an S2S 2050 Financing Plan. The plan will outline the investments, costs of pre-feasibility studies, and seek commitments both nationally and internationally with integrated private sector support. The plan will outline the investments, costs of pre-feasibility studies, and seek commitments, costs of pre-feasibility studies, and seek commitments both nationally and internationally with integrated private sector support. The plan will outline the investments, costs of pre-feasibility studies, and seek commitments both nationally and internationally with integrated private sector support, ensuring gender activities are prioritized to include women and gender experts in drafting committees and consultations to ensure gender-specific issues are addressed in financial strategies.

### Component 4: Knowledge Management & Learning

45. To facilitate the integration of important projects and initiatives into a consolidated framework, CCAD will need to massively scale the awareness and knowledge of S2S and its benefits to national decision makers and to key stakeholder groups. To do so, the PPG process will evaluate the role and magnitude of KML necessary to support and meet this need and the infrastructure needed. CCAD hosts the Regional Environmental Observatory (REO), a regional digital repository of environmentally relevant information. The MAR2R project implemented by WWF supported CCAD's capacities to operate the Regional Environmental Observatory (REO) to offer reliable, good quality data and solid analysis, whose absence have been a constant barrier preventing well-informed management and decision-making in the MAR. The MAR2R Terminal Evaluation indicated the need for structural improvements to the existing knowledge management regime and in Regional Environmental Observatory's platform to make it more inclusive in the types of information available and interactive. The REO will be assessed and strengthened to optimize its function as a regional information hub. This effort will consider CLME+ efforts related to data management, access, and exchange arrangements to support adaptive management and SAP implementation. To do this, the project will support and help participating countries to collect, systematize, analyze, and share information about biodiversity, forest cover, water quality and quantity, bioaccumulation, coral reef health, climate variability and adaptation options, human health indicators linked to watershed, coast and reef, better management practices, lessons learned, etc. To begin with, an analysis about existing information and gaps will be developed and harmonized protocols and methodologies for data collection and systematization will be prepared incorporating Gender-Responsive Data Collection to ensure that our surveys, field studies, and assessments consider gender-specific water needs, roles, and access patterns.. Based on the analysis, capacity building activities for the national agencies responsible for collecting and systematizing information will be implemented, along with the development of tools for these tasks.Awareness-Raising and Broadening Understanding of Gender Equality will be carried out and incentivized throughout the project, preparing the ground for improved sustainability of project results. The Project will liaise with the GEF Gender Partnership (GGP) to streamline its approach with the GEF gender mainstreaming and gender-responsive programming by contributing to: i) Building knowledge and evidence; ii) Capacity-building for enhanced understanding; iii) Compiling and disseminating of best practice examples; and iv) Enhancing communication efforts. Links for sharing national information with the REO as the regional hub will be established among the 8 countries. The pathway to strengthen information management capacities will be articulated in a Knowledge Management and Learning Plan. The communications needs supporting the S2S outcomes should be articulated in a Strategic Communications Plan. An IT assessment will determine the infrastructure, architecture and technology needed for deployment during project implementation. However, to reach stakeholders that are not connected digitally, a KML Engagement strategy will define for each stakeholder group the learning needs and approaches, digital or analog, to increase the knowledge and attitudes of S2S and related themes. Related to this point, CCAD will require a regional communication strategy updated yearly. To further catalyze interactive learning, the portal should create effective connections to the Key IW platforms, such as IW:Learn, CLME+ Hub, CREW Academy, FAO Aquastat, FAO Restoration Hub, U.N. Decade FERM, among others, ensuring gender-balanced participation in these platforms. This process will also be connecting stakeholder groups to Communities of Practice as well as upstream and downstream connections to national sources and databases. This will be analyzed during PPG together with the SICA national authorities.



46. The project will identify the knowledge and attitudes needed to facilitate the development of the S2S 2050 TOC and indicate the learning needed in the early stages of the project to create the environment and conditions and multiple actors needed to develop a consensus on the TOC, program and actions. To facilitate the transition of the S2S approach from a concept to the accepted management paradigm, the project will seek to increase the baseline knowledge of S2S concepts, practices and elevate the professional capacity to foment regional and national governance and resource management within the S2S approach. Specifically, the KML process will develop knowledge products and widely disseminate the S2S approach and concepts and support the achievement of the project's outcomes and outputs. For example, knowledge products and executive summaries of core S2S themes will be developed, or existing materials updated and distributed through the appropriate policy channels, media, through champions, etc. Synthesis documents and supporting media can be collated from the cornerstone IW projects and key thematic areas, such as the Blue Economy, financing options, should be developed and distributed. Gender-balanced representation in mechanisms for multi stakeholder consultations and knowledge exchange, including also at least one representative from youth, women organizations, civil society, indigenous people, non-state actors (and other key stakeholder groups identified during PPG), will be ensured throughout the project cycle. This will require the development of an interpretive function and a potential partnership between SICA and academic institutions, private sector think tanks, etc. Exchange and dissemination of information will be also facilitated through technology seminars, expos, stakeholder study tours to successful GEF investment IW investment sites and attendance of IW:LEARN regional and global events.

47. Through this venue, training, and professional development in IWRM, ILM, ICRM & thematic areas, to be determined during PPG can be facilitated. Scaling of a successful Wastewater operators' course within the region, certification in the EdX GEF IW MOOC on transboundary water management, and specialized diploma or technical courses per country's needs can be considered. Themes mentioned during the development of the PIF are agrochemical control, precision agriculture, mangrove restoration, among others. This can also include training for journalists in S2S Concepts and local NGOs and CBOs on storytelling and production for streaming, promoting gender equality through these educational platforms among others.

48. The combination of knowledge products and delivery options will be valuable in synthesizing and scaling knowledge from the baseline or foundational projects presented earlier, which will add to the regional impacts of GEF IW investments.

### **Component 5: Monitoring & Evaluation**

49. A multi-country initiative requires an engaged and effective governance structure that is both representative of the national interests and priorities, adequately informed, and a good communicator both upstream and downstream. A governance structure consisting of a Project Steering Committee (PSC) with country representation, a Project Management Unit from within CCAD, and other constructs, such as working groups as defined during the PPG phase. The PSC may authorize adaptations to the project's results framework in response to shocks, unforeseen problems, or new risks. Through the PMUs M&E structure, the PSC will be provided with information needed to determine the direction of the project and, if warranted, the needs and types of changes in course required to achieve the expected results. This process will be informed through a project M&E system based on the project's approved Results Framework and a Project Monitoring and Evaluations. The M&E Plan will be developed during the PPG phase in accordance with FAO-GEF, CCAD, and GEF Policy and Guidance. The effectiveness of this effort will be measured through the feedback between information and analysis produced by the M&E system and the decisions taken by the Project's governing bodies.

### Key Stakeholders' Engagement During PPG Development



50. Stakeholder engagement and cooperation is crucial for delivering the proposed system-wide interventions of the project and is a cornerstone to an IW and S2S approach.

51. The project is implemented by FAO who will assure compliance with GEF Policies and Guidance. SICA has a coordination role with the national governments through CCAD, the project's primary Executing Agency (EA). FAO will coordinate directly with CCAD all execution duties. CCAD coordinates through eight national focal points within the national environment ministries, who formed inter-agency teams and formally nominated the geographies where the S2S approach will be piloted and who coordinate the endorsement of their respective governments. Their engagement in the PIF process is described further in Section D. CCAD is coordinating execution roles for other regional and national partners. WWF Mesoamerica, the IA for the MAR2R project, has supported the development of the PIF and will foreseeably maintain continuity on MAR SAP activities in the MAR countries among other potential roles in non MAR nations. Other NGOs in the environmental financing space and secialized technical organizations will have future roles. Likewise, the role of other executing partners will be determined for advancing the project at the regional, national and local levels to involve in-country entities in executing activities to enhance national capacities, ensuring the project's durability and scalability Through presentations, individual meetings, and in response to a PIF questionnaire, the focal points reported to CCAD the likely stakeholder interest groups to be engaged during the project design process. Complete project execution arrangements will be finalized during the PPG phase and presented to the CCAD's Ministers for endorsement, which will be annexed to the CEO Endorsement Package. To ensure adequate understanding and engagement throughout the project's development and execution and equal access to the project's opportunities and benefits, the PPG process will involve a full stakeholder mapping and biography at each level as part of a comprehensive and inclusive stakeholder engagement plan that defines the roles of each and incorporates their inputs and perspectives into the project's design, budget, and decisionmaking structures. Based on that process, the requisite Stakeholder Engagement Plans, Gender Mainstreaming Plans and Indigenous Engagement will be developed in compliance with national and GEF policies and guidance.

52. The following provides a high-level summary of the stakeholders, their potential participation and benefits that will be further developed during the PPG phase.

53. SICA/CCAD: will benefit directly from institutional building actions, improved management systems, planning, monitoring and evaluation tools, and will have a portfolio of future projects with consensus of the governments to improving the S2S dynamic between their land and coastal-marine areas in an articulated S2S 2050 vision that will provide CCAD with a tool to harmonize the S2S approach with the ministries, implementing portfolios of projects rather than one-off experiences and have better tools to support their member states in financing. The REO will also benefit from investments that will make the improve the experience and quality of information available to member states and the public. Other SICA agencies, in particular the Regional Hydrologic Commission will have benefitted from strengthening of monitoring systems. Other SICA agencies, such as the Council of Women's Ministries of Central America and the Dominican Republic and others will have a consultative role in the requisite gender and stakeholder engagement plans.

54. Regional organizations, such as the Network for Environmental Funds for Latin America and the Caribbean (RED LAC), MARFUND, regional private sector production roundtables and associations, among others, will be consulted and where applicable have service delivery roles or are possible financing agents and channels for additional cofinancing. These organizations will benefit from the S2S action planning process providing them with a long-term vision for developing new projects and financing opportunities.

55. National Governmental Organizations will coordinate national project design efforts, partnerships and activities in the selected watersheds. During the design phase, the CCAD representatives will form an ad hoc Project Steering Committee and have a direct role in supporting and endorsing the final project design. They assure conformity of the project's actions to national priorities and will benefit from the project's information



tools, learning opportunities, improved watershed governance structures and financing, and in the coordinated S2S approach.

56. National non-governmental organizations, such as Academia, relevant not-for-profit organizations, indigenous authorities, among others will vary from country to country but will generally support knowledge management and exchange, learning, technical expertise and support monitoring and evaluation, their relevance and potential roles will be determined during the PPG phase. Some could be service contractors in generating technology in Component 3 while others may directly benefit from the knowledge products and services produced in Component 4. Their role in the national steering body will be determined based on relevance and representativity to the watersheds under execution.

57. Private Sector engagement is essential, focusing on industries such as sugar, coffee, rice, palm oil, fishing, and tourism. The targeted industries will be confirmed during PPG consultations for their role in the watersheds, affectations or potential to invest in innovative technologies. This engagement aims to promote sustainable management practices and identify investment opportunities that align with stakeholder priorities for better management of natural resources within the S2S approach. Local producers will benefit from demonstration projects directly.

58. During PPG formulation, extensive stakeholder mapping will identify the stakeholder engagement complex for each country and for each level from International to local to define the specific roles and levels of engagement and relative benefits. A gender-specific capacity needs assessment and Gender Action Plan will be undertaken during the PPG per the GEF's, FAO's, CCAD's and national policies and guidelines including indigenous and local communities, youth, and disadvantaged stakeholders. The project will seek to extend the benefits regionally and globally through a knowledge management and learning (KML) approach underpins the Project's Theory of Change as one of the key causal pathways designed to address the multidimensional nature of transboundary water cooperation.

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No.	Partner name	Partner's role in the project
1	CCAD	Project's Executing Agency, its Executive Secretary (CCAD ES) is responsible for overseeing the work of the Project Manager, acting as liaison between the PMU and the CCAD Minister Council to ensure regional and national level implementation of project activities, and reporting to GEF implementing agency.
2	Ministers of Environment/Natural Resources of the four MAR countries (Belize, Costa Rica, El Salvador, Guatemala, Honduras Nicaragua, Panamá, Dominican Republic. Individual and CCAD Ministers Council.	As board of CCAD's Council, they provide strategic guidance for regional and national actions. Besides, they provide endorsement of regional instruments and provide political oversight, coordination and support to the project.
3	OSPESCA. Central American Fisheries and Aquaculture Organization	It is the regional institution of SICA, of the fisheries ministries. Coordinates policies, strategies and projects related to the sustainable development of fishing and aquaculture activities. CCAD will coordinate with OSPESCA the coastal planning and blue economy activities.
4	CAC. Consejo Agropecuario Centroamericano. Agriculture Ministries Central America Council.	Regional institution of SICA, of the Ministries of Agriculture. Landscape restoration planning activities will be coordinated with an S2S approach, as well as the intersectoral agriculture-environment agenda for water use. Actions are coordinated in the dry corridor
5	SITCA. Central American Tourism Ministries Council.	SICA regional institution of Ministers of Tourism. Blue economy activities related to tourism will be coordinated
		Intergovernmental technical body of the System of the
6	CRRH. Regional Committee for water resources	Central American Integration (SICA), specialized in the fields of meteorology and climate, hydrology and water and hydraulic resources. The project will coordinate activities related with water quality monitoring, climate change, forecast, water governance.
7	Regional Private Sector Asociations	To coordinate planning and implementing better management practices in sectors such as: sugar cane, banana, oil palm, pineapple, coffee. Each sector has its own national and regional organizations.
8	WWF	As prior implementing agency of MAR2R, WWF will support the implementation of early actions included in the SAP of MAR ecoregion. The actions are in coordination between CCAD and WWF Mesoamerican office.
9	Watersheds Governance bodies.	The current bodies existing in field will be the local governance platforms to consult and implement actions.
	FAO Mesoamerican Sub Regional Office.	FAO coordinate with CCAD the implementation of a projects portfolio supporting watershed management, climate change adaptation projects, food security. (as described in cofinance)
		I hose activities will be enhanced by CAM project.

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Footnotes:



### [23] GEF Gender Implementation Strategy, page 3-4

[24] http://drincorda.iwlearn.org/drin-coordinated-action

[25] GEF Gender Implementation Strategy (2018): https://www.thegef.org/sites/default/files/council-meeting-documents/EN\_GEF.C.54.06\_Gender\_Strategy\_1.pdf

### [26] GEF Policy on Gender Equality: https://www.thegef.org/council-meetingdocuments/policy-gender-equality

### Coordination and Cooperation with Ongoing Initiatives and Project.

Does the GEF Agency expect to play an execution role on this project?

If so, please describe that role here. 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

59. Cooperation with ongoing initiatives is described in Section A. The potential exists for co-sharing of assets with the projects described in Section A. That possibility will be assessed during the PPG phase for FAO, WWF, and national government agencies. CCAD is also integrated into the Steering Committees of the baseline projects, in particular PROCARIBE+ and was the executing agency for the MAR2R project with WWF. The S2S Action Plan proposed will serve to unite the baseline projects in the LMEs with the projects and programs slated for supporting terrestrial ecosystems, hence the S2S approach. There is already a mechanism in place within SICA for exchange between GEF projects. A specific linkage, through perhaps a working group or other structure within CCAD, or attached to the Project Steering Committee, is proposed for dialogue in Component 1, par. 34. It is expected that the other baseline projects be integrated into that framework. Finally, as described in Par. 5, 4th bullet, CCAD recognizes the importance of ensuring synergies and avoiding duplication with any of the mentioned baseline projects, including the Mesoamerican Critical Forest Integrated Program (IP) during the PPG phase. Formal discussions will be a priority, and CCAD will document these interactions to ensure transparency and accountability. CCAD will also establish mechanisms for ongoing collaboration and leverage, which will be clearly articulated in the PPG materials.

### **Core Indicators**

### 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)
1679874	0	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	WDPA	IUCN	Total Ha	Total Ha (Expected at	Total Ha	Total Ha
Protected Area	ID	Category	(Expected at	CEO Endorsement)	(Achieved at	(Achieved at
			PIF)		MTR)	TE)



	renestina		cus onaci i			agement	chicothrend				
Ha (Expe PIF	cted at	Ha (Ex Enc	pected at Cl dorsement)	EO		Total Ha N	(Achieved MTR)	at	Tota	al Ha (Ach TE)	ieved at
1679874		0	/		0		/		0	/	
									1		
Name of the Protected Area	WDPA ID	IUCN Category	Ha (Expecte d at PIF)	Ha (Expected at CEO Endorsem nt)	d	Total Ha (Achiev ed at MTR)	Total Ha (Achiev ed at TE)	MI sc (Bas at C Endo	ETT ore seline CEO rseme (t)	METT score (Achiev ed at MTR)	METT score (Achiev ed at TE)
Azul Meambar	18807	National Park	940,173. 00								
Cocksbom b Basin	10579	Habitat/Spe cies Managemen t Area	10,601.0 0								
Crooked Tree Wildlife Sanctuary	5556237 08	Others	1,991.00								
Cuenca del Lago de Yoboa	902693	Others	13,092.0 0								
La Tronosa	12699	Protected area with sustainable use of natural resources	4,854.00								
Maquenqu e	115179	Protected area with sustainable use of natural resources	15,556.0 0								
Plan de Amayo	302035	Others	52.00								
Reserva de Biosfera Rio San Juan Nicaragua	901253	Others	550,118. 00								
Reserva de Usos Múltiples Río Sarstún	903037	Others	10,588.0 0								
Rio Bravo Conservat ion & Managem ent Area	20224	Habitat/Spe cies Managemen t Area	31,469.0 0								

### Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness



Santa	107455	Others	30.00			
Marta Las						
Trincheras						
Sierra de	5556242	National	34,533.0			
Bahoruco	21	Park	0			
Sierra de	67744	Others	66,315.0			
Las Minas			0			
Tonosi	107379	Protected area with sustainable use of natural	502.00			
		resources				

### Indicator 2 Marine protected areas created or under improved management

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
166540	0	0	0

### Indicator 2.1 Marine Protected Areas Newly created

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

Name of the	WDPA	IUCN	Total Ha	Total Ha (Expected at	Total Ha	Total Ha
Protected Area	ID	Category	(Expected at	CEO Endorsement)	(Achieved at	(Achieved at
			PIF)		MTR)	TE)

### Indicator 2.2 Marine Protected Areas Under improved management effectiveness

Total Ha (Expected at	Total Ha (Expected at CEO	Total Ha (Achieved at	Total Ha (Achieved at
PIF)	Endorsement)	MTR)	TE)
166540	0	0	0

Name of	WDPA ID	IUCN	Total	Total Ha	Total	Total	METT	METT	METT
the		Category	На	(Expected	На	На	score	score	score
Protecte			(Expect	at CEO	(Achiev	(Achiev	(Baseline	(Achiev	(Achiev
d Area			ed at	Endorseme	ed at	ed at	at CEO	ed at	ed at
			PIF)	nt)	MTR)	TE)	Endorseme	MTR)	TE)
							nt)		
Belize Barrier Reef Reserve System	124383	Others	28,890. 00						
Cayos Perlas	5556981 73	Habitat/Spe cies Managemen t Area	44,084. 00						



Complej o Los Cobanos	5557033 92	Others	6,394.0 0			
Jaragua	5556242 20	National Park	47,302. 00			
Punta de Manabiq ue	198322	Others	39,870. 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)
300	0	0	0

### Indicator 3.1 Area of degraded agricultural lands under restoration

Disaggregation	Ha (Expected at	Ha (Expected at CEO	Ha (Achieved at	Ha (Achieved at
Туре	PIF)	Endorsement)	MTR)	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)

### Indicator 3.3 Area of natural grass and woodland under restoration

Disaggregation	Ha (Expected at	Ha (Expected at CEO	Ha (Achieved at	Ha (Achieved at
Туре	PIF)	Endorsement)	MTR)	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)
300.00			

### 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)
353881	0	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)
353,881.00			

### 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)
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	1	

### 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)

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

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

### **Indicator 4.5 Terrestrial OECMs supported**

Name of the	WDPA-	Total Ha	Total Ha (Expected at CEO	Total Ha	Total Ha
OECMs	ID	(Expected at PIF)	Endorsement)	(Achieved at MTR)	(Achieved at TE)

### Documents (Document(s) that justifies the HCVF)

Title		

### Indicator 5 Area of marine habitat under improved practices to benefit biodiversity (excluding protected areas)

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

### Indicator 5.1 Fisheries under third-party certification incorporating biodiversity considerations

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

### Type/name of the third-party certification

#### Indicator 5.2 Large Marine Ecosystems with reduced pollution and hypoxia

Number (Expected at	Number (Expected at CEO	Number (Achieved at	Number (Achieved at
PIF)	Endorsement)	MTR)	TE)
2	0	0	0

LME at PIF	LME at CEO Endorsement	LME at MTR	LME at TE
Caribbean sea			
Pacific Central American Coastal			

### Indicator 5.3 Marine OECMs supported



	1				
Name of the	WDPA-	Total Ha	Total Ha (Expected at CEO	Total Ha	Total Ha
OECMs	ID	(Expected at PIF)	Endorsement)	(Achieved at MTR)	(Achieved at TE)

### Indicator 7 Shared water ecosystems under new or improved cooperative management

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Shared water	Caribbean sea, Pacific Central American Coastal			
Count	2	0	0	0

### Indicator 7.1 Level of Transboundary Diagonostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation (scale of 1 to 4; see Guidance)

Shared Water	Rating (Expected	Rating (Expected at CEO	Rating (Achieved	Rating (Achieved
Ecosystem	at PIF)	Endorsement)	at MTR)	at TE)
Caribbean sea	4			
Pacific Central	1			
American Coastal				

### Indicator 7.2 Level of Regional Legal Agreements and Regional management institution(s) (RMI) to support its implementation (scale of 1 to 4; see Guidance)

Shared Water	Rating (Expected	Rating (Expected at CEO	Rating (Achieved	Rating (Achieved
Ecosystem	at PIF)	Endorsement)	at MTR)	at TE)
Caribbean sea	4			
Pacific Central	1			
American Coastal				

### Indicator 7.3 Level of National/Local reforms and active participation of Inter-Ministeral Committees (IMC; scale 1 to 4; See Guidance)

Shared Water	Rating (Expected	Rating (Expected at CEO	Rating (Achieved	Rating (Achieved
Ecosystem	at PIF)	Endorsement)	at MTR)	at TE)
Caribbean sea	3			
Pacific Central	1			
American Coastal				

### Indicator 7.4 Level of engagement in IWLEARN throgh participation and delivery of key products(scale 1 to 4; see Guidance)

Shared Water	Rating (Expected	Rating (Expected at CEO	Rating (Achieved	Rating (Achieved
Ecosystem	at PIF)	Endorsement)	at MTR)	at TE)
Caribbean sea	4			
Pacific Central	1			
American Coastal				

### 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	175,000			
Male	175,000			
Total	350,000	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)

Each selected indicator and sub-indicator are justified based on its relevance to the outcomes of the specific project. The target levels will be determined during the PPG phase. The preliminary targets for the Project Identification Form (PIF) Stage are estimated at 30% of the baseline values.

Core Indicator (CI) 1, with Sub-indicators 1.2 (Terrestrial Protected Areas under improved management) have been chosen based on the watersheds selected by the participating countries where pilot projects will be defined during the PPG phase. These watersheds represent significant global attributes such as the Crooked Tree Wildlife Sanctuary in Belize, which is Ramsar site No. 946 and managed by the Belize Audubon Society on behalf of the government; Sierra de las Minas in Guatemala, designated a UNESCO-MAB Biosphere Reserve and managed by the Junta Directiva Sierra de las Minas; among others. These sites encompass a total of 5.5 million hectares of terrestrial and inland waters protected area coverage. An indicative target is based on a 30% improvement in the area over the baseline, to be confirmed during the PPG phase.

Core Indicator 2, sub indicator 2.2 Of the 555,131 hectares of marine protected area coverage within the project area, an estimated 30% will be under improved management effectiveness. Presently, 5 Marine protected areas are identified as part of the Sea components of the selected watershed. The areas are: the Belize Barrier Reef Reserve System (28,890 ha.); Jaragua (47,302 ha.); Complejo Los Cobanos (6,394ha.); Punta de Manabique (39,870ha.); and Cayos Perlas (44,084ha.). However, the level of intervention on the management of these areas needs to be validated at PPG

Core Indicator 3, with Sub-indicator 3.4 (Area of wetlands under restoration), has been selected specifically for mangrove restoration activities in countries contributing to the Mesoamerican Barrier Reef System (Belize, Guatemala, and Honduras), with development support from WWF. During the PPG phase, the project will design a Watersheds Monitoring System (Output 2.1.2) to be implemented in various selected watersheds.

Core Indicator 4, with Sub-indicator 4.1 (Area of landscapes under improved management to benefit biodiversity), is determined by watershed areas that are outside of protected zones but still possess high ecosystemic value. The value was extrapolated form from an estimate of the areas that will be under an agreed management paradigm as indicated in the watershed management plans. This number will be updated through the PPG process as the scope of the planning exercise indicates green areas to be restored or conserved.

Core Indicator 5, with Sub-indicator 5.2 (Large marine ecosystems with reduced pollution and hypoxia), will assess the type and extent of pollution reduction achieved through policy and infrastructure investments addressing both point and non-point sources, as outlined by STAP in 2011, an effect is expected in both the Caribbean Sea LME and the Pacific Central America Coastal LME. Furthermore, during the PPG phase, this aspect will be validated and defined.

Core Indicator 7, The shared water ecosystems under improved management are the Caribbean LME and the Pacific Central American Coastal LME. Under sub-indicator 7.1., only the Caribbean LME has a TDA and SAP under implementation. A parallel project will work on the basic foundational analysis for the Pacific Central American Coastal region. Under Sub-indicator 7.2 (Level of Regional Legal Agreements and Regional Management Institutions to support its implementation) directly correlates with the



Outcome 1.2 of the Regional Strategic S2S Action Plan 2050. The SAP for the Caribbean is the lone agreement in place which aligns with the Cartagena convention, the RLA in-force. No similar agreements for the pacific are in-force. For sub-indicator 7.3, No regional interministerial committees (intersectoral) exist Sub-indicator 7.4 (Level of engagement in IW: LEARN through participation and delivery of key products) has been high for CCAD and associates. Funds for continued participations are considered in Outcome 4.1 (Environmental Regional Environmental Observatory catalyzes interactive knowledge exchange and learning) and Output 4.1.4 (Partnership agreements for Hub interconnectivity with IW:Learn, CLME+ Hub, CReW Academy, FAO TRI, FERM).

Lastly, Core Indicator 11, which relates to People benefiting from GEF financed investments, sets an indicative target based on the observation that some of the selected watersheds have low populations due to their significant environmental status. Preliminary statistics, to be confirmed during the PPG phase, suggest that the population distribution in the region is balanced (50/50 between men and women). The watersheds selected by the proponents were evaluated using provincial data and the number of persons per km2 combined with the distribution of men and women for those provinces. Interestingly, when rounded, the estimate across all countries was 50-50. That will change as socio-economic surveys adjust the balance.

The formula to calculate the target was:

Population of the province (people per km2) \* size of the site selected at the PIF stage \* statistical distribution of men and women = approx. 350,000 people (with a rounded 50/50 representation of men and women).

### **Key Risks**

	Rating	Explanation of risk and mitigation measures			
CONTEXT	CONTEXT				
Climate	High	Risk: Both Atlantic and Pacific Hurricanes/cyclones can affect the delivery of the project in any of the 8 selected watersheds, all of which have coastal exposure. The possibility is moderate, the impact is severe. Mitigation: Project design. CCAD will avoid field work and plan more desk and virtual review activities during critical high season in Mid- august to early October. The team will have an adaptive contingency plan in place for the PPG enabling an affected country to pursue a modified project timeline. The projects M&E system will account for adaptations to the project and decisions logged in the PSC meetings.			
Environmental and Social	Low	Risk: A pandemic is possible and could cause lower engagement and delay in project delivery due to restrictions and low availability of staff. Environmental shocks, such as catastrophic coral bleaching, sargassum, diseases such as spiny lobster disease or other unforeseen phenomena could cause shifts in national and/or local priorities. The possibility is moderate as some of these are already happening. The impact on the total project is moderate and localized. Mitigation: The project formulation team will have a virtual Plan B in the event of staff/travel interruptions. Interruptions due to environmental factors will force project adaptations to provide science and technical support to alleviate the immediate			



		threats. The CCAD has prior experience in executing GEF IW projects through COVID-19 and in adaptive management of that situation. In the worst case, changes to the Project Results Framework would require PSC authorization. *NOTE: This rating indicates the level of risk that the environment or society can have on project implementation. This is not an ESS rating, which indicates the impact the project on the environment and/or society. Per GEFSEC recommendation, water security and gender dimension risks are thoroughly assessed during the PPG phase and documented (including mitigation measures) in the CEO endorsement document.
Political and Governance	Low	Risk: The design or implementation process of the project will not be affected by any inter-state interruptions. The possibility of low commitment and engagement in project execution, e.g., low support, staffing, co-financing, is low as the project is mandated from the council of ministers and the governments selected areas that respond to their priorities. S2S is a new concept that will take time to transfer. Furthermore, the project supports the SAPs of the MAR, CLME+ and the CREW action plan and complements the development of the PACA ADT and SAP, all policy instruments endorsed by the governments. Refreshing those concepts as part of the S2S context is considered in Component 3: KML. Mitigation: Through changes in political administration CCAD acts as a buffer. CCAD has experience in working across administrations. The design phase will continue to focus on activities that are directly linked to national priorities. The CCAD is a mitigating factor. Also, long-term governance is a cornerstone of the S2S approach and a full component within this project.
INNOVATION		
Institutional and Policy	Moderate	Risk: as the S2S concept builds upon the R2R work in MAR and within the mentioned SAPs, and given the mandate for this project, rejection is unlikely. The risk of passage of new unforeseen policies that could reverse gains in GEBs will be further assessed. The current reality, the participating nations are taking strong efforts to increase the the volumes of their economies and, hence, economic development. The need to address counter-productive policies is not clearly established for all participating nations. Therefore, a strong consciousness-raising effort is needed. If the PPG process yields the possibility of pressing policy needs, these will be indicated with the risk analysis in the Project Document. To the contrary, the rating could be lowered. Mitigation: The commitment of the governments is cemented in the mandate of the Ministers for this project and in the mentioned endorsed SAPs.
Technological	Moderate	Risk: There is a risk that innovative technologies can fail. Unless these risks are taken, scaling will not be possible. Many of the possible technologies that could be considered to increase efficiency or reduce waste or contamination have been tested, just not in the area being considered. Innovations can be confusing because of differences in



		terminology, conformity to the status quo etc. The same is true for innovative financing. Mitigation: as the need and innovative actions are identified during the PPG phase, CCAD and project partners will include risk assessment and mitigation in the planning process. Several alternatives for priority areas have been discarded because of risks, in favor of options with equal potential for promoting S2S at a much lower risk profile. That process will continue throughout the design process and extend, as indicated earlier, through the implementation phase.
Financial and Business Model	Low	Risk: Global macro-economic perturbations could affect incremental financing (C2) and/or change national priorities and increase negative externalities. In lieu of such an event, IMF and WB indicate steady short- term economic growth across the region. The design process will not be affected by any large shifts in global commodity prices. However, the Project itself will be exposed to commodity and financing shifts. These will be studied during the PPG phase and reported in the Project Document. Mitigation: As mentioned earlier, a M&E system with adaptive responses including an annual risk review process will be incorporated into the project's governance process.
EXECUTION		
Capacity	Low	Risk: Lack of institutional expertise on the national and regional level to deliver capacity building activities. Mitigation: Assessments of institutional (both national and local) expertise and resources will be undertaken during the PPG phase with recommendations to address any issues. CCAD and all participating nations have GEF IW experience and capacity building is a core aspect of the project through KML. In addition, FAO and WWF will provide capacity support to the project through their technical divisions.
Fiduciary	Low	Risk: Mismanagement of project assets. Mitigation: SICA/CCAD and FAO have tested and audited financial management and procurement systems compliant to GEF policy and guidance for fiduciary responsibility and in accordance with UN standards.
Stakeholder	Low	Risk: CA and the Dominican Republic has wide experience from GEF IW and similar projects and in the development and implementation of gender and other engagement plans, activities and budgets to facilitate the participation and equal sharing of project benefits of women, indigenous peoples, local communities, and of underserved minority groups. However, within what are still traditional societies, especially at the community level, assuring diversity in the governance mechanisms requires facilitation, especially where these roles involve historically male dominated sectors, such as agriculture. The predecessor projects, such as MAR2R executed activities specifically targeted to women and indigenous communities. FAO and CCAD have policies and instruments compliant with GEF protocols and guidance. Mitigation: Special attention will be paid to ensuring that social and cultural barriers do not



restrict any group or sector from effectively participating in the project.
The project will focus on promoting and facilitating participation of
women in the design of the outcomes and outputs, through KML, and in
executing activities at the local level. A project-specific Gender Action
Plan, Stakeholder Engagement Plans, etc. will be developed during the
PPG phase in coordination with regional and local actors and the council
of ministries of women. A gender specialist will inform the project
management team.

Other	

Overall Risk Rating	Moderate	The "moderate" rating could be adjusted product of the completion of the design process and the various engagement plans.

### C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Describe 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.

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this.

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. (max. 500 words, approximately 1 page)

61. The project focuses on mitigating environmental degradation through the protection of marine and coastal biodiversity, increasing resilience against climate change in coastal areas, and preserving diverse coastal zones. It targets the reduction of land-based pollutants and enhancement of transboundary freshwater systems and river conditions, aligning with GEF-8 directives and supporting global environmental objectives and multilateral environmental agreements. In line with the commitments of the SICA region countries, the project aligns with several multilateral environmental agreements such as UNCLOS, CBD, and the UNFCCC. The engagement in the High Ambition Coalition [30] underlines the collective regional commitment to protect 30% of land and oceans.

62. In advance of the Third UN Ocean Conference (UNOC), Costa Rica will host a stakeholder meeting in June 2024 [31] that will serve as a platform for the exchange of best practices and successful experiences related to ocean governance and health, thus aligning with this project's objectives and SDG 14 (life below water). All participating countries are parties to the Ramsar Convention on Wetlands supporting the project's efforts in maintaining the ecological character of critical wetlands. The recognition of various Ramsar Sites within the project locations, such as The Belize Barrier Reef Reserve System, the 'Humedal Caribe Noreste,' a Wetland of International Importance that contributes to the Caribbean Sea in Costa Rica; in El Salvador, the Ramsar site 'Complejo Los Cóbanos' and the designation of the sub-basin of Lake Yojoa as a Ramsar site in Honduras, showcases direct actions towards maintaining biodiversity and ecological balance. The Leaders' Pledge for Nature [32] , endorsed by Belize, Costa Rica, Guatemala, Honduras, and Panama and the participation in the Inter-American Convention for the Protection and Conservation of Sea Turtles (IAC) further indicates regional commitment to biodiversity and sustainable ocean management. The commitment of the governments to this project is based on the mandate of the Ministers and in the endorsed SAPs. This commitment to expand the MAR2R project experience and scale to a S2S approach illustrates a regional



policy alignment with the project's outcomes. During the PPG, a policy assessment will be developed to identify and address any potential risks or undetermined gaps to be addressed for project implementation.

63. The project aligns with GEF-8 IW strategies by enhancing Integrated Water Resources Management (IWRM) and Integrated Coastal Zone Management (ICZRM), fostering regional investments, and mitigating anthropogenic impacts in Large Marine Ecosystems (LMEs), supporting the Sustainable Blue Economy under IW-1. This is achieved through improved coordination and technical skills (Outcome 1.1), developing Strategic Action Programs, and promoting a sea-to-sea (S2S) approach (Outcome 1.2). Additionally, IW-3. Enhance water security in shared freshwater ecosystems through innovative water conservation, treatment, and reuse strategies (Outcome 2.1) and by integrating scientific and local knowledge, updating Transboundary Diagnostic Analyses, and strengthening regional governance (Outcomes 3.1 and 3.2). Furthermore, the alignment with the Global Biodiversity Framework Action Targets demonstrates the project's commitment to biodiversity-inclusive spatial planning and conserving significant land and sea areas (Targets 1 and 3). The Regional Environmental Observatory and training initiatives under Outcomes 3.1 and 3.2 promote sustainable management practices, aligning with the enhancement of biodiversity conservation and sustainable use within different ecosystems, also contributing to Target 10

\_\_\_\_\_

Footnotes:

[27] these targets are indicative based on the total area under each category, estimating a 30% of the area improved.

- [28] To be updated during PPG
- [29] Note: Make this into a pop-up which appears only if "NGI" was selected in the "General project Information"
- [30] https://www.hacfornatureandpeople.org/#:~:text=The%20High%20Ambition%20Coalition%20for%20Nature%20a
- [31] Immersed in Change https://sdg.iisd.org/events/stakeholder-meeting-for-the-third-un-ocean-conference

### [32] https://www.leaderspledgefornature.org/

### D. POLICY REQUIREMENTS

### **Gender Equality and Women's Empowerment:**

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

Yes

### **Stakeholder Engagement**

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

Yes



### Were the following stakeholders consulted during project identification phase:

Indigenous Peoples and Local Communities: No

Civil Society Organizations: No

 ${\sf Private \ Sector: } No$ 

### Provide a brief summary and list of names and dates of consultations

During the PIF process, the focus was on selecting the geographic area of the project and performing 65. an initial scoping exercise including stakeholder identification to enable a detailed consultation process during the PPG phase. The stakeholder-related information presented in Sections A and B is derived from several sources. First, The Terminal Evaluation for the MAR2R project, involving WWF and three participating nations, recently concluded this project that ended in November 2023. The TE process included interviews with all stakeholder groups, involved consultations with a range of stakeholders, including indigenous peoples, local communities, civil society organizations, and the private sector industries in aquaculture (shrimp), sugar, palm oil, and tourism. In addition, the stakeholder engagement instruments, e.g. gender planning, stakeholder engagement, and grievance mechanisms were also analyzed across different sectors and countries. The feedback and insights gained from these diverse groups during the TE have informed the development of the current project and presentations in Sections A and B. Second, to complement that process, CCAD hosted a PIF workshop and dialogue during the recent workshop in San Salvador from 31 on January to 2 February 2024 with virtual participation of CCAD Focal Points and national teams, including the participation of experts on gender and indigenous issues. To complement that process, alongside other stakeholders that participated in a series of bilateral meetings took place during the month of February 2024. Once the geographic areas were determined, a PIF questionnaire including stakeholder identification was completed by each country. This process concluded with a s, and reviews of the draft PIF. A PIF validation workshop with country representatives took place on March 13, 2024, where all comments and inputs were discussed and integrated into the final PIF document.

66. The direct engagement of stakeholders in the targeted watersheds and regional private sector consultation is scheduled for the PPG phase. Collaborative efforts to acquire knowledge about relevant sectors and actors across the source-to-sea continuum for the project activities will include gender-disaggregated data and ensure that surveys, field studies, and assessments consider gender-specific water needs, roles, and access patterns. The information presented in Sections A and B is based on and informed process as described and not on direct engagement of Indigenous Peoples and Local Communities, CSOs or the Private Sector at this juncture. For that reason, the PIF form check boxes have been set to "YES." Key stakeholders' engagement during PIF development has been further described in Section B. The project document development will include direct consultation with the mentioned stakeholder groups in each targeted watershed, dialogue on their inclusion in governance structures, and validation of equitable access and distribution of project benefits. The project document process will produce a feedback loop for project design, the requisite gender mainstreaming and action plan, stakeholder engagement plans and an accessible grievance mechanism.

### Participants in the Seas and Biodiversity Technical Committee meeting on January 16, 2023

- CCAD Executive Secretary: Jair Urriola.
- Belice (PPT): Carlos Moreno, Hanna Martínez.
- República Dominicana: Nina Lysenko.
- Guatemala: Regina Sánchez.
- Honduras: Francisco Aceituno.
- Nicaragua: Fernando Palacios e Indiana Montoya.
- Costa Rica: Ángela González.
- Panamá: José Julio Casas.
- El Salvador: Carlos Rivera.



Participants in the Water Resources Technical Committee meeting on January 17, 2023

- Belice: Tennielle Williams
- Guatemala: Jorge Eduardo Fernández Cardona
- El Salvador: Sol Muñoz
- Honduras: Fanny Vindel Rosales
- Nicaragua: Juan Bautista Reyna Martínez
- Costa Rica: María Gabriela Páez Vargas
- Panamá: Karima Rosario Lince Jaramillo /Suplente: Emet Herrera)
- República Dominicana: Lidibert González

Participants in the Environmental Quality Technical Committee meeting on January 19, 2023

- Belice: Edgar Ek
- Guatemala: Carlos Guillermo Castañeda Acevedo
- El Salvador: Mayra Lourdes Argueta
- Honduras: César Edgardo Flores Rodas
- Nicaragua: Uriel Morales
- Costa Rica: Shirley Soto Montero
- Panamá: Miguel Flores
- República Dominicana: Silmer González

N°	Nombre	Institución	Cargo	País	
30 d	30 de enero, 2024				
1	Carlos Moreno	Ministerio de Desarrollo Sostenible	Oficial de Enlace CCAD	Belice	
2	Edgar Ek	Ministerio de Desarrollo Sostenible	Deputy Chief Environmental Officer	Belice	
3	Tenielle Hendy	Coastal Zone Management Authority & Institute	Jefe de Hidrología, Servicio Hidrológico Nacional de Belice.	Belice	
4	Fausto Díaz	SERNA	Oficial de Enlace CCAD	Honduras	
5	Skarleth Inestroza	Dibio		Honduras	
6	David Ortega	Dibio	Director de Biodiversidad	Honduras	
7	Skarleth Pineda	Dibio	Analista Ambiental	Honduras	
31 d	31 de enero, 2024				
11	Fabiola Vega	MiAmbiente	Oficial de Enlace CCAD	Panamá	
12	Israel Torres	MiAmbiente	Asesor de la Dirección de Cambio Climático	Panamá	
13	Jhonny Pardo	MiAmbiente	Técnico en el Departamento de Manejo y Conservación de Recursos Marino Costeros, Dirección de Costas y Mares	Panamá	
14	Egniz Ramsey	MiAmbiente	Jefa de Sección de Monitoreo Ambiental, Dirección de Verificación de Desempeño Ambiental.	Panamá	
15	Yarid Guevara	MiAmbiente	Jefa de Manejo Integrado de Cuencas, MiAmbiente	Panamá	
16	María José Iturbide	MARN	Ex Ministra de Ambiente y Recursos Naturales	Guatemala	
17	Ana Cristina Bailey	MARN	Viceministra de Recursos Naturales y Cambio Climático	Guatemala	
18	Jaime Luis Carrera Campos	MARN	Viceministro del Agua	Guatemala	

### Participants at the PIF Preparation Workshop on January-February 2024



19	Rodrigo Rodas	MARN	Viceministro de Ambiente.	Guatemala	
20	Joaquín Arango	MARN	Director de Monitoreo y Vigilancia del Agua, Viceministerio del Agua.	Guatemala	
21	María Elena Tayún	MARN	Oficial de Enlace CCAD	Guatemala	
22	Regina Sánchez Castañeda	MARN	Asesora, Departamento de Ecosistemas	Guatemala	
23	Jorge Eduardo Fernández Cardona	MARN	Ex Director de Cuencas	Guatemala	
24	Francisco Zurita	MARN	Coordinador de Proyecto Motagua	Guatemala	
25	Enrique Barraza	MARN	Coordinador de Unidad de Humedales	El Salvador	
	Claudia Rodríguez	MARN	Técnico en Gestión de Áreas Naturales Protegidas.	El Salvador	
26	Patricia Campos	MINAE	Oficial de Enlace CCAD	Costa Rica	
1 de	1 de febrero 2024				
	Rosa Otero	MiAmbiente	Oficial de Enlace CCAD	República Dominicana	
	Elpidio Tineo	MiAmbiente	Director de Cuencas, Viceministerio de Suelos y Agua.	República Dominicana	
	Sara Díaz	MiAmbiente	Técnico, Viceministerio de Suelos y Agua.	República Dominicana	
	Iván Cruz	MiAmbiente	Técnico, Viceministerio de Suelos y Agua.	República Dominicana	
	Indiana Montoya	MARENA	Directora General de Patrimonio Natural y Biodiversidad	Nicaragua	
Par	Participants in the PIF Validation Workshop, March 2024				

N°	Nombre	Institución	Cargo	País
1	Carlos Moreno	Ministerio de Desarrollo Sostenible	Oficial de Enlace CCAD	Belice
2	Edgar Ek	Ministerio de Desarrollo Sostenible	Deputy Chief Environmental Officer	Belice
3	Arlene Young	Coastal Zone Management Authority & Institute	Director-Coastal Zone Management Authority and Institute	Belice
4	María Elena Tayún	MARN	Oficial de Enlace CCAD	Guatemala
5	María Ángela Escobar	MARN	Asesora Cooperación Internacional	Guatemala
6	Cristian Javier Mendoza	MARN	Unidad de Proyectos del MARN	Guatemala
7	Valeria Delgado	SERNA	Directora de Cooperación	Honduras
9	Fausto Díaz	SERNA	Oficial de Enlace CCAD	Honduras
10	Skarleth Inestroza	Dibio		Honduras
11	David Ortega	Dibio	Director de Biodiversidad	Honduras
12	Enrique Barraza	MARN	Jefe de Proyectos y Monitoreo de Biodiversidad	El Salvador
13	Indiana Montoya	MARENA	Directora General de Patrimonio Natural y Biodiversidad	Nicaragua
14	Luis García	Dirección de Agua - MINAE	Asesor Técnico	Costa Rica
15	Jaime Pimentel	Dirección de Seguridad Hídrica - MiAmbiente		Panamá
16	Fabiola Vega	MiAmbiente	Oficial de Enlace CCAD	Panamá
17	Elpidio Tineo	Ministerio de Medio Ambiente y Recursos Naturales	Director de Aguas	República Dominicana
18	Robert Crowley	Consultor		
19	Sara Marchena	Consultor		



20	Jair Urriola	SE CCAD	
21	Mario Escobedo	SE CCAD	
22	Marcela Servano	SE CCAD	
23	Gandhi Montoya	SE CCAD	
24	Jorge Garza	SE CCAD	
25	Julio Lazo	SE CCAD	
26	Otty Ramos	SE CCAD	

(Please upload to the portal documents tab any stakeholder engagement plan or assessments that have been done during the PIF development phase.)

### **Private Sector**

Will there be private sector engagement in the project?

Yes

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

Yes

### **Environmental and Social Safeguard (ESS) Risks**

We confirm that we have provided indicative information regarding Environmental and Social risks associated with the proposed project or program and any measures to address such risks and impacts (this information should be presented in Annex D).

Yes

### Overall Project/Program Risk Classification

PIF	CEO	MTR	TE
	Endorsement/Approval		
Low	I	I	I

### E. OTHER REQUIREMENTS

### **Knowledge management**

We confirm that an approach to Knowledge Management and Learning has been clearly described in the Project Description (Section B)

### Yes

### ANNEX A: FINANCING TABLES

### **GEF Financing Table**

Indicative 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 (\$)
---------------	---------------	---------------------------------	------------	-------------------------	--------------------------	--------------------------	-------------------	-----------------------------



FAO	GET	Regional	International Waters	International Waters: IW-1	Grant	9,024,312.00	812,188.00	9,836,500.00
FAO	GET	Regional	International Waters	International Waters: IW-3	Grant	9,024,312.00	812,188.00	9,836,500.00
Total GEF Resources (\$)				18,048,624.00	1,624,376.00	19,673,000.00		

### **Project Preparation Grant (PPG)**

Is Project Preparation Grant requested?

true

PPG Amount (\$)

300000

### PPG Agency Fee (\$)

27000

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non- Grant	PPG(\$)	Agency Fee(\$)	Total PPG Funding(\$)
FAO	GET	Regional	International Waters	International Waters: IW-1	Grant	150,000.00	13,500.00	163,500.00
FAO	GET	Regional	International Waters	International Waters: IW-3	Grant	150,000.00	13,500.00	163,500.00
Total PPC	G Amount	(\$)				300,000.00	27,000.00	327,000.00

Please provide justification

### Sources of Funds for Country Star Allocation

Total GEF Resources								
GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total(\$)			

### **Indicative Focal Area Elements**

Programming Directions	Trust Fund	GEF Project Financing(\$)	Co-financing(\$)
IW-1-1	GET	9,024,312.00	74166427



IW-3	GET	9,024,312.00	74166428
Total Project Cost		18,048,624.00	148,332,855.00

### Indicative Co-financing

Sources of Co- financing	Name of Co-financier	Type of Co- financing	Investment Mobilized	Amount(\$)
Recipient Country Government	Ministerio de Ambiente - Panama	In-kind	Recurrent expenditures	352000
Recipient Country Government	Ministerio de Medio Ambiente y Recursos Naturales - El Salvador	In-kind	Recurrent expenditures	2165000
Recipient Country Government	Ministerio de Desarrollo Sostenible y Cambio Climático - Belize	In-kind	Recurrent expenditures	3500000
Recipient Country Government	Ministerio de Ambiente y Recursos Naturales - Guatemala	In-kind	Recurrent expenditures	2500000
Recipient Country Government	Secretaría de Recursos Naturales y Ambiente - Honduras	In-kind	Recurrent expenditures	1944255
Recipient Country Government	Ministerio de Ambiente y Energía - Costa Rica	In-kind	Recurrent expenditures	231600
Private Sector	Ingenio Azucarero CASSA, DECAMERON	In-kind	Recurrent expenditures	1300000
GEF Agency	WWF	In-kind	Recurrent expenditures	1000000
Private Sector	Biodiversidad y Negocios.	In-kind	Recurrent expenditures	2260000
GEF Agency	FAO	In-kind	Recurrent expenditures	3900000
Others	Inversiones de Fondo Acuerdo Deuda Externa por Medio Ambiente, USA-El Salvador	In-kind	Recurrent expenditures	2500000
Others	Selva Maya (GIZ y KfW)	Grant	Investment mobilized	11600000
Others	Ecorregion Arrecife Mesoamericano (Recursos Maritimos de Centroamerica)	Grant	Investment mobilized	17400000
Others	Cooperacion de Union Europea: Grandes Bosques de Mesoamerica	Grant	Investment mobilized	17500000



Others	Manejo de Biodiversidad JICA-CCAD	Grant	Investment mobilized	3000000
Others	Central American Bank for Economic Integration (CABEI) - Corredor Seco	Grant	Investment mobilized	69600000
Others	Proyecto SICA AZUL. Cooperación Taiwán	Grant	Investment mobilized	2000000
Others	Programa Enlazando el Paisaje Mesoamericano. CCAD, KFW, UICN	Grant	Investment mobilized	3780000
Others	Proyecto Centro de Transparencia Climática para la Región SICA	Grant	Investment mobilized	1800000
Total Co-financing				148,332,855.00

Describe how any "Investment Mobilized" was identified

-Selva Maya (GIZ and KfW): \$11,600,000.00 mobilized for forest management, landscape restoration, and value chains with a Source-to-Sea (S2S) approach.

-Mesoamerican Reef Ecoregion (Maritime Resources of Central America): \$17,400,000.00 mobilized for direct investments in managing coastal marine protected areas.

-European Union Cooperation: Great Forests of Mesoamerica: \$17,500,000.00 allocated for forest management, landscape restoration, and value chains with an S2S focus.

-Biodiversity Management JICA-CCAD: \$3,000,000.00 for managing transboundary protected areas and conserving biodiversity.

-Dry Corridor: \$69,600,000.00 for water resource management and ecosystem-based adaptation actions. The project funds are managed by the Central American Bank for Economic Integration (CABEI) as GCF's accredited entity. FAO executes this part of the investment.

-SICA BLUE Project. Taiwan Cooperation: \$2,000,000.00 aimed at supporting the Blue Economy and managing environmental challenges in the SICA region.

-Linking the Mesoamerican Landscape Program (CCAD, KFW, IUCN): \$3,780,000.00 for connectivity of protected areas and biodiversity management.

-Climate Transparency Center Project for the SICA Region: \$1,800,000.00 for building climate governance capacities



### ANNEX B: ENDORSEMENTS

### **GEF Agency(ies) Certification**

GEF Agency Type	Name	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	Jeffrey Griffin	3/18/2024	Lorenzo Paolo Galbiati	+393333981370	lorenzo.galbiati@fao.org

### Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Name	Position	Ministry	Date (MM/DD/YYYY)
Dr. Kenrick Williams	GEF Operational Focal Point	Ministry of Sustainable Development, Climate Change and Disaster Risk Management-Belize	3/13/2024
Raul Pinedo	GEF Operational Focal Point	Ministry of Environment-Panama	3/7/2024
Lourdes Maria Fernandez Balconi	GEF Operational Focal Point	Ministry of Environment and Natural Resources- Guatemala	3/8/2024
Malcolm Bryan Stufkens Salgado	GEF Operational Focal Point	Secretaría de Energía, Recursos Naturales, Ambiente y Minas-Honduras	3/13/2024
Enid Chaverri-Tapia	GEF Operational Focal Point	Ministry of Environment and Energy-Costa Rica	3/15/2024
Milagros De Camps	GEF Political Focal Point	Ministro de Medio Ambiente y Recursos Naturales- Dominican Republic	3/14/2024
Eva Maria Colorado Panameño	GEF Political Focal Point	Ministry of Environment and Natural Resources-El Salvador	4/2/2024
Edwardo José Flores Coca	GEF Political Focal Point	Ministerio del Ambiente y los Recursos Naturales (MARENA)-Nicaragua	4/4/2024

### ANNEX C: PROJECT LOCATION

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



Location Name	Latitude	Longitude	Geo Name ID
Caribbean Sea LME	15°08'35"N	81°12'40"W	Caribbean Sea
Pacific Central America Coastal LME	11° 31' 27" N	92° 58' 22" W	Pacific Central America
Polizo	18°20'38"N	88°23'01"W	New River
Belize	17°32'15"N	88°14'42"W	Belize River
Costa Rica	10°47'05"N	84°11'50"W	San Carlos River
Dominican Republic	18°01′56″N	71° 45′ 31''W	Rio Pedernales
El Salvador	13°32'48"N	89°43'02"W	Rio Banderas
	15°43′39.20″ N	88°14′20″ W	Rio Motagua
Guatemala	15°53′54″N	88°54′52″W	Rio Sarstun
	15°48′52″ N	88°45′14″ W	Rio Dulce
Handuras	15°54'00"N	87°48'00"W	Rio Chamelecon
Honduras	15°55'07"N	87°43'06"W	Rio Ulua
Nicaragua	12°28′00″ N	83°23'00" W	Pearl Cays
Panama	7°21'37"N	80°21'59"W	Rio Tonosi

The project is regional and at the PIF stage selected sites for pilot activities have not been agreed with the countries. The indicate project sites are:

**Belize:** will work in 2 Basins. Follow-on activities to the MAR2R project will be undertaken in the New River and the S2S concept will be extended to the Belize River with integrated management of the coastal areas uniting them. The New River Basin is the longest entire Belizean river system spanning 90 miles with a unique south-to-north flow. This basin has little gradient and is surrounded by flat terrain from headwaters to sea resulting in relatively weak flows from the 199,743 ha. drainage. The basin has a variety of ecologic assets. It includes parts of the Rio Bravo Conservation Area, the Lamanai Archeological Reserve and includes the New River Lagoon draining into the Corozal Bay, a noted Wildlife (Manatee) Reserve. In contrast, the Belize River Basin is Belize's largest watershed (943,420 ha), 31% of which is shared with Guatemala (Rio Mopan). It is susceptible to major flood events through its complex hydrographic network of creeks and lagoons draining into the Caribbean Sea near Belize City. Both basins are integral to the Meso-American Barrier Reef System. However, Belize has not yet endorsed any Strategic Action Plan/Program for the region, a point of interest for this project. Given their extensive coverage, environmental significance, and socio-economic implications, the New River and Belize River Basins represent prime conditions for promoting the S2S approach.

**Guatemala:** will develop the S2S approach across 3 river basins draining to the MAR. The Rio Motagua is Guatemala's highest priority watershed. Within this area, the government is concurrently executing numerous projects seeking to establish a coordinated and effective management of their portion of the river by establishing control systems and an upgraded institutional management framework. Motagua originates central-western Guatemala. Spanning a length of 486 kilometers and covers 12,670 square kilometers. It traverses diverse ecological zones, flowing through 10 life zones and seven ecoregions, including diverse forest types such as, oak-pine associations, tropical and subtropical broadleaf humid forests, dry and xeric forests, as well as mangroves along its path. The Motagua River crosses three significant mountain ranges: the Sierra del Merendón, Sierra de las Minas, and Sierra Chuacús playing a critical role in the region's natural landscape and biodiversity as well as ecosystem services. The Sarstun River Basin is It is located between the



Sierra de Santa Cruz and the Sarstun River and marks the border between Belize and Guatemala. The Sarstun River meanders and forms a floodplain the Bay of Amatique. As a result of the high sediment load, there is an area of sediment accumulation near the mouth of the river, which is modified by the movement of waves, tides, currents and wind action. The Rio Dulce Basin is divided into three sections, a 10.5 km long canal that connects Lake Izabal with a wide area in the middle section that forms El Golfete, which in turn connects to Amatique Bay by means of another channel. These diverse watercourses drain into a 148 km coast with multiple and varied wetlands, coastal and marine ecosystems within the MAR. Collectively, these regions suffer from all anthropogenic pressures listed previously. Guatemala seeks to build upon their baseline coordination mechanisms to assist the Technical Coastal & Marine Board to develop action plans, regional S2S planning and pilot projects in reducing contamination through pilot projects, training in wastewater treatment and management capabilities and investments in regional governance, in addition to investments in a control system for project execution.

**Honduras** will also develop the S2S approach in two watersheds and their common and connecting coastal and marine environs. The project will extend that approach to an additional sub-watershed of the Rio Chamelecon, extending the process promoted in the MAR2R project and concurrently extend the basin planning process to the Ulua Watershed, the site of diverse industrial, agro-industrial, and port infrastructure. The Ulua Watershed is a significant source of contamination of the MAR. The Chamelecon River Basin covers 4,005.36 km<sup>2</sup>, originating at 1800 MASL in the Copan mountains, it extends 200 km north ultimately reaching the lowlands of the Sula Valley at 300 MASL. The upper region is characterized by steep slopes, highly erodible soils, significant land-use changes, transitioning from forests to agriculture and urban areas. Home to over 2,136,000 people, 21% of Honduras' population, the basin is under considerable strain from deforestation, land degradation, and extensive pollution from agricultural and industry. Consequently, the Chamelecon is a major contributor of sediments, nutrients, and agro-chemicals to the MAR, underscoring the urgent need for integrated watershed, coastal and marine management. Honduras will develop governance structures, invest in reducing contamination from wastewater.

**Costa Rica:** The Rio San Carlos is the major tributary of Rio San Juan with drainage to the Caribbean Sea LME. The San Carlos River Basin is primarily located in Costa Rica and encompasses 3,120 km<sup>2</sup>, or 6% of the national territory. It plays a vital role in the Caribbean LME supporting wildlife refuges like Barras del Colorado part of the internationally recognized Northeast Caribbean Wetland and contributes water to Nicaragua's Indio Maíz biological reserve. The Rio San Carlos represents 8% of the binational San Juan River basin. The basin includes diverse environments including coral reefs and seagrass beds and incorporates within its highland's important reservoirs, like Lake Arenal, crucial for hydroelectric power and an important source of irrigation for the Dry Corridor. It is also home to various protected areas, including the Costa Rica-Nicaragua Border Corridor and Tenorio Volcano National Park, part of the Mesoamerican Biological Corridor protecting globally significant biodiversity. The project site is significant for long-term water budgeting, control of agrochemicals, water overuse, and integrated planning and governance.

**El Salvador:** The Rio Banderas Basin spans 441.5 km<sup>2</sup> from the Apaneca-Ilamatepec mountains to the Pacific Ocean, including key tributaries draining into the Sensunapán-Chilama and Los Cóbanos conservation areas. It is not part of any transboundary hydrographic systems nor is it covered by any management plan. This area contributes water resources to the Pacific Central American Coastal LME supporting vital microhabitats mangroves and coral reefs. The project aims to integrate sustainable practices across varying landscapes to enhance biodiversity, reduce erosion, pollution, and improve water management. It focuses on sustainable provision of ecosystem services benefitting local communities to holistically improve the environment, environmental health and community well-being.

**Nicaragua:** The Refugio de Vida Silvestre del Sistema de Cayos Perlas (RVSCP) is a critical conservation area in the Nicaraguan Caribbean Sea, fronting the Laguna de Perlas. Spanning 455,723.74 hectares, it includes 176,189.031 hectares of protected core and 279,534.716 hectares of buffer zones, covering marine, insular, and wetland systems from Punta de Perlas and Set Net Point to Tasbapauni. This area, part of the



South Atlantic Autonomous Region's hydrographic basin, encompasses three significant rivers: Kurinwás, Wawashang, and Ñari, distributed across five sub-basins and draining into the Laguna de Perlas. The refuge is noted for its ecological vulnerability due to its physical condition of small islands and includes vital ecosystems such as coral reefs, seagrass areas, and macroalgae communities significant for regional fisheries. The local economy, primarily based on artisanal fishing, faces challenges such as improper waste management and threats like deforestation, pollution, and climate change affecting water quality, biodiversity, and coral reef health. The RVSCP is also a significant tourist attraction. The project aims to address environmental challenges through several key activities such as implementing systems for appropriate management of solid and liquid waste, regulating and promoting sustainable fishing practices, protecting biodiversity and strengthening management efforts in the RVSCP, and conducting scientific research to monitor ecosystems and species populations, ensuring the conservation and sustainability of this vital area.

**Panama:** The Rio Tonosí is an important watershed since it is located within the western drainage water current with intense pressure on the land and bodies of water near national forests, cattle raising, aquaculture and agricultural production. There is a watershed committee created by law of the Republic that supports water governance. This committee needs technical assistance for planning and financing its activities. It is a site of high-water consumption with uncontrolled water extractions, no water quality and quantity baseline assessment or complete monitoring system. The Rio Tonosí Basin provides water to several communities within the basin, as well as to the coastal-marine area of Bucaro, which is a fishing community and establishes connectivity with Caña Island, a Wildlife Refuge vital for the arrival of sea turtles, and an important area to the ecology of the PACA and biological flows to Cana Island. The project will invest in the integrated management of the Basin to restore and conserve terrestrial and marine ecosystems and improve hydrological, socio-economic, and environmental dynamics. The project will invest in technologies to support the local economy, mainly agricultural crops, while mitigating risks such as chemical runoff, floods, and extreme droughts, thereby improving the quality of life for over 4,801 inhabitants while preserving critical habitats for marine wildlife.

**Dominican Republic:** The Rio Pedernales is a shared basin with Haiti. It is located at the southern end of the border with an extension of 373 km<sup>2</sup>, of which 183 km<sup>2</sup> (49%) are in the Haitian part and 190 km<sup>2</sup> (51%) are situated in the Dominican part. It marks the border between the two countries, which has a north-south direction. It flows into the Caribbean Sea. The area on the DR side is under a fast and total development process that is transforming the previously virgin beaches into large tourism installations. With the recently installed cruise dock, airport, and 5 hotels contracted with 2 under construction, there is a rapidly changing social dynamic. The area is the site of the Sierra de Bahoruco biosphere reserve with globally significant biodiversity, one of the country's sites of high endemism, cultural and archeological assets and has fishing, agriculture and mining assets. There is a management plan for the biosphere reserve and for the economic development of the zone. There is a local governance structure in need of support and a subregional need for holistic water planning, measuring, and local stakeholder engagement. The basin faces the challenge of social and economic instability in the neighboring country and being located in one of the three poorest provinces of the country.





### ANNEX D: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

(PIF level) Attach agency safeguard screen form including rating of risk types and overall risk rating.

Title

#### Full ES Risk Screening Checklist

Full ES Risk Screening Certificate

### ANNEX E: RIO MARKERS

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
No Contribution 0	Significant Objective 1	Significant Objective 1	No Contribution 0

### ANNEX F: TAXONOMY WORKSHEET

Level 1	Level 2	Level 3	Level 4
Influencing models			
	Transform policy and regulatory environments		



I		I	1
	Strengthen institutional		
	capacity and decision-		
	making		
	Convene multi-		
	stakeholder alliances		
	Demonstrate innovative		
	approaches		
	Deploy innovative		
	financial instruments		
<b>Stakeholders</b>			
	Indigenous Peoples		
	Private Sector		
		Capital providers	
		Financial intermediaries and	
		market facilitators	
		Large corporations	
		SMEs	
		Individuals/Entrepreneurs	
		Non-Grant Pilot	
		Project Reflow	1
	<b>Beneficiaries</b>	5	
	Local Communities		
	Civil Society		
		Community Based Organization	
		Non Governmental Organization	
	<mark>-</mark>	A andomin	
		The de Llaise and Western	
		Linions and Workers	
	True of European ant		
	I ype of Engagement		
		Information Dissemination	
		Partnership	
	<mark> </mark>	Consultation	
		Participation	
	Communications		
		Awareness Raising	
		Education	
		Public Campaigns	
		Behavior Change	
Capacity, Knowledge and			
Kesearch	Tra-1.1:		
	Enabling Activities		
	Capacity Development		
	Knowledge Generation		
	and Exchange		
	Targeted Research		
	Learning		
		Theory of Change	



	Adaptive Management	
	Indicators to Measure Change	
Innovation		
Knowledge and		
Learning		
	Knowledge Management	
	Innovation	
	Capacity Development	
	Learning	
Stakeholder Engagemen Plan	it	
Gender Equality		
Gender Mainstreaming		
	Beneficiaries	
	Women groups	
	Sex-disaggregated indicators	
	Gender-sensitive indicators	
Gender results areas		
	Access and control over natural	
	resources	
	Participation and leadership	
	Access to benefits and services	
	Capacity development	
	Awareness raising	
	Knowledge generation	
Focal Areas/Theme		
Integrated Programs		
	Commodity Supply Chains (111)Good Growth	
	Partnership)	
		Sustainable
		Commodities Production
		Deforestation-free Sourcing
		Financial Screening Tools
		High Conservation Value Forests
		High Carbon Stocks Forests
		Sovbean Supply Chain
		Oil Palm Supply Chain
		Beef Supply Chain
		Smallholder Farmers



		Adaptive Management
	Food Security in Sub-Sahara	
	Africa	
		Resilience (climate and
		shocks)
		Sustainable Production
 		Systems
		Agroecosystems
		Land and Soil Health
		Diversified Farming
		Integrated Land and
		Water Management
		Smallholder Farming
		Small and Medium
		Enterprises
		Crop Genetic Diversity
		Food Value Chains
		Gender Dimensions
		Multi-stakeholder
		Platforms
	Food Systems, Land Use and	
	Restoration	
		Sustainable Food
		Systems
		Landscape Restoration
		Sustainable Commodity
		Production
		Comprehensive Land
		Use Planning
		Integrated Landscapes
		Food Value Chains
		Deforestation-free
		Sourcing
		Smallholder Farmers
	Sustainable Cities	
		Integrated urban
		planning
		Urban sustainability
		framework
		Transport and Mobility
		Ruildings
		Municipal waste
		management
		Graan graag
		Urben Die dimension
		Urban Blodiversity
		Urban Food Systems
		Energy efficiency
		Municipal Financing



l		I	Global Platform for
			Sustainable Cities
			Urban Resilience
	Biodiversity		
		Protected Areas and Landscapes	
			Terrestrial Protected
			Areas
			Coastal and Marine
			Protected Areas
			Productive Landscapes
			Productive Seascapes
			Community Based
			Natural Resource
			Management
		Mainstreaming	
			Extractive Industries
			(oil, gas, mining)
			Forestry (Including
			HCVF and REDD+)
			Tourism
			Agriculture &
			agrobiodiversity
			Fisheries
			Intrastructure
			Certification (National Standards)
			Certification
			(International Standards)
		Species	
			Illegal Wildlife Trade
			Threatened Species
			Wildlife for Sustainable
			Development
			Crop Wild Relatives
			Plant Genetic Resources
			Animal Genetic
			Kesources
			Polativos
			Invasive Alien Species
			(IAS)
		Biomes	
			Mangroves
			Coral Reefs
			Sea Grasses
			Wetlands
			Rivers
			Lakes



		Tropical Rain Forests
		Tropical Dry Forests
		Temperate Forests
		Grasslands
		Paramo
		Desert
	Financial and Accounting	
		Payment for Ecosystem
		Services
		Natural Capital
		Assessment and
		Accounting
		Conservation Trust
		Funds
		Conservation Finance
	Supplementary Protocol to the CBD	
		Biosafety
		Access to Genetic
		Resources Benefit
		Sharing
Forests		
	Forest and Landscape Restoration	
		REDD/REDD+
	Forest	
		Amazon
		Congo
		Drylands
Land Degradation		
	Sustainable Land Management	
		Restoration and
		Rehabilitation of
		Degraded Lands
		Ecosystem Approach
		Integrated and Cross-
 		sectoral approach
		Community-Based
		NRM
		Sustainable Livelihoods
		Income Generating
		Activities
		Sustainable Agriculture
		Sustainable Pasture
		Management
		Sustainable
		Forest/Woodland
		Management



	1	1	Improved Soil and
			Water Management
			Techniques
			Sustainable Fire
			Management
			Drought
			Mitigation/Farly
			Warning
		I and Degradation Neutrality	
			I and Productivity
			Land Coven and Land
			Land Cover and Land
			Cover change
			Carbon stocks above or
	1		below ground
	T ( ) 1 TT (	rood Security	
	International Waters		
		Ship	
		Coastal	
		Freshwater	
			Aquifer
			River Basin
			Lake Basin
		Learning	
		Fisheries	
		Persistent toxic substances	
		SIDS · Small Island Dev States	
		Targeted Research	
		Pollution	
			Persistent toxic
			substances
			Diastias
			Nutrient a cllution from
			Nutrient pollution from
			all sectors except
			Wastewater
			Wastewater
		Transboundary Diagnostic	
		Analysis and Strategic Action	
		Plan preparation	
		Strategic Action Plan	
		Implementation	
		Areas Beyond National	
		Jurisdiction	
		Large Marine Ecosystems	
		Private Sector	
		Marine Protected Area	
		Biomes	
			Mananazza
		I	L MIANOTOVA



l		1	Coral Reefs
			Seagrasses
			Polar Ecosystems
			Constructed Wetlands
	Chamicals and Wasta		Constructed wettands
	Chemicals and waste	Morouwy	
		Artigonal and Soala Cold Mining	
		Arusanar and Scale Gold Mining	
		Coal Fired Power Plants	
		Coal Fired Industrial Bollers	
		Cement	
		Non-Ferrous Metals Production	
		Ozone	
		Persistent Organic Pollutants	
		Unintentional Persistent Organic Pollutants	
		Sound Management of chemicals	
		Waste Management	
			Hazardous Waste
			Management
			Industrial Waste
			e-Waste
		Emissions	
		Disposal	
		New Persistent Organic Pollutants	
		Polychlorinated Biphenyls	
		Plastics	
		Eco-Efficiency	
		Pesticides	
		DDT - Vector Management	
		DDT - Other	
		Industrial Emissions	
		Open Burning	
		Best Available Technology / Best	
		Environmental Practices	
		Green Chemistry	
	Climate Change		
		Climate Change Adaptation	
			Climate Finance
			Least Developed
			Countries
			Small Island Developing
			States
			Disaster Risk
			Management
			Sea-level rise
			Climate Resilience
			Climate information



		Ecosystem-based
		Adaptation
		Adaptation Tech
		Transfer
		National Adaptation
		Programme of Action
		National Adaptation
		Plan
		Mainstreaming
		Adaptation
		Private Sector
-		Innovation
-		Complementarity
		Community-based
		Adaptation
		Livelihoods
	Climate Change Mitigation	
		Agriculture, Forestry,
		and other Land Use
		Energy Efficiency
		Sustainable Urban
		Systems and Transport
		Technology Transfer
		Renewable Energy
-		Financing
		Enabling Activities
-	Technology Transfer	
		Poznan Strategic
		Programme on
		Technology Transfer
		Climate Technology
		Centre & Network
		(CTCN)
		Endogenous technology
		Technology Needs
		Assessment
		Adaptation Tech
		Transfer
	United Nations Framework on	
	Climate Change	
		Nationally Determined
		Contribution

