



## **Enhancing capacity for the adoption and implementation of EAF in the shrimp and groundfish fisheries of the North Brazil Shelf Large Marine Ecosystem (EAF4SG)**

### **Part I: Project Information**

#### **GEF ID**

10919

#### **Project Type**

MSP

#### **Type of Trust Fund**

GET

#### **CBIT/NGI**

**CBIT No**

**NGI No**

#### **Project Title**

Enhancing capacity for the adoption and implementation of EAF in the shrimp and groundfish fisheries of the North Brazil Shelf Large Marine Ecosystem (EAF4SG)

#### **Countries**

Regional, Guyana, Suriname, Trinidad and Tobago

#### **Agency(ies)**

FAO

#### **Other Executing Partner(s)**

Caribbean Regional Fisheries Mechanism (CRFM) and Western Central Atlantic Fishery Commission (WECAFC).

#### **Executing Partner Type**

#### **GEF Focal Area**

International Waters

#### **Taxonomy**

Focal Areas, International Waters, Pollution, Plastics, Strategic Action Plan Implementation, Learning, Fisheries, Large Marine Ecosystems, SIDS : Small Island Dev States, Marine Protected Area, Coastal, Biomes, Influencing models, Strengthen institutional capacity and decision-making, Demonstrate innovative approaches, Transform policy and regulatory environments, Convene multi-stakeholder alliances, Stakeholders, Beneficiaries, Local Communities, Type of Engagement, Consultation, Participation, Information

Dissemination, Partnership, Civil Society, Community Based Organization, Non-Governmental Organization, Private Sector, Individuals/Entrepreneurs, SMEs, Communications, Awareness Raising, Education, Public Campaigns, Gender Equality, Gender results areas, Knowledge Generation and Exchange, Participation and leadership, Capacity Development, Access to benefits and services, Gender Mainstreaming, Sex-disaggregated indicators, Gender-sensitive indicators, Women groups, Capacity, Knowledge and Research, Innovation, Theory of change, Adaptive management, Indicators to measure change, Knowledge Exchange, Enabling Activities, Knowledge Generation

**Sector**

**Rio Markers**

**Climate Change Mitigation**

Climate Change Mitigation 0

**Climate Change Adaptation**

Climate Change Adaptation 2

**Duration**

48 In Months

**Agency Fee(\$)**

168,766.00

**Submission Date**

1/21/2022

**A. Indicative Focal/Non-Focal Area Elements**

<b>Programming Directions</b>	<b>Trust Fund</b>	<b>GEF Amount(\$)</b>	<b>Co-Fin Amount(\$)</b>
IW-1-1	GET	888,242.00	3,906,761.00
IW-1-2	GET	888,242.00	3,906,760.00
<b>Total Project Cost (\$)</b>		<b>1,776,484.00</b>	<b>7,813,521.00</b>

**B. Indicative Project description summary**

**Project Objective**

To advance adoption and implementation of the Ecosystem Approach to Fisheries (EAF) in the shrimp and groundfish fisheries in the North Brazil Shelf Large Marine Ecosystem, supporting country implementation of the CLME+ SAP.

<b>Project Component</b>	<b>Financing Type</b>	<b>Project Outcomes</b>	<b>Project Outputs</b>	<b>Trust Fund</b>	<b>GEF Amount(\$)</b>	<b>Co-Fin Amount(\$)</b>
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Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
Component 1: Enhancing or developing national and sub-regional EAF-based fisheries management information systems, supporting countries implementation of CLME+ SAP priorities. Note: this component will address SAP priorities by enhancing capacity for implementation of management and conservation measures (Strategy 6 - Implement EBM/EAF of the Guianas-Brazil continental shelf with special reference to the shrimp and groundfish fishery).	Technical Assistance	<p><u>Outcome 1.1:</u> Improved national and sub-regional data and data management systems supporting EAF fisheries management</p> <p><i>Outcome Indicator 1: Number (tbd during PPG phase) of fisheries/countries with functional information systems supporting technical fisheries management advice, including socio-economic data.</i></p> <p><i>Outcome Indicator 2: Number (tbd during PPG phase) of updated stock assessments prepared in support of national and subregional management plans.</i></p> <p><b><u>Outcome Indicator 1 and 2 contributes to target set for GEF Core Indicator 8</u></b> Globally over</p>	<p><u>Output 1.1.1:</u> Analysis of existing fisheries management information systems (FMIS) and data in the three target countries and sub-regional level undertaken and recommendations for improvement developed.</p> <p><u>Output 1.1.2:</u> Technical capacity building for the application of EAF-based fisheries management information systems among key fisheries stakeholders delivered, including data collection, fisheries statistics, analyses of fisheries data and interpretation.</p> <p><u>Output 1.1.3:</u> Improved national and sub-regional fish stock identification and stock assessments of selected priority species developed with relevant management recommendations.</p> <p><u>Output 1.1.4:</u> Improved fisheries-related socio-economic data for selected fisheries within national</p>	GET	484,496.00	2,130,960.00

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
Component 2: Strengthening national and sub-regional governance arrangements for EAF fisheries management, supporting countries implementation of CLME+ SAP priorities. Note: this component will particularly address the SAP priorities through improving regional governance arrangements for sustainable fisheries (Strategy 2), the regional policy coordination mechanisms for governance of the marine environment (Strategy 3) and implementation of sub-regional EAF management plans (Strategy 6).	Technical Assistance	<p><u>Outcome 2.1: Strengthened stakeholder engagement in national decision-making for EAF fisheries management</u></p> <p><i>Outcome Indicator 3: Number (tbd during PPG phase) of fisheries/countries with operational inter-sectoral coordination mechanisms for management advice.</i></p> <p><i>Outcome Indicator 4: Number (tbd during PPG phase) of updated management recommendations emanating from co-managed fisheries.</i></p> <p><b><u>Outcome Indicators 3 and 4 contribute to target set for GEF Core Indicator 8 Globally over-exploited fisheries Moved to more sustainable levels, i.e. 22,000 tons</u></b></p>	<p><u>Output 2.1.1:</u> National inter-sectoral coordination mechanisms for EAF in three participating countries improved and fully operational.</p> <p><u>Output 2.1.2:</u> Capacity of SSF stakeholders from target communities/fisheries for co-management in EAF fisheries management improved, including though enhanced Information, Communication and Technology (ICT) skills and resources and enabling legislation.</p> <p><u>Output 2.2.1:</u> Updating of national and sub-regional Fisheries Management Plans (FMPs) as part of EAF management cycle.</p> <p><u>Output 2.2.2:</u> Capacity for monitoring of implementation of Fisheries Management Plans for national Shrimp and Groundfish fisheries improved.</p>	GET	403,745.00	1,775,800.00

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
Component 3: Encouraging SSFs to adopt more sustainable fishing practices through new business opportunities, supporting the implementation of the CLME+ SAP priorities. Note: this component will particularly address the SAP priorities through actions to encourage more responsible fisheries practices (Strategy 2) and by sustainably enhancing livelihoods (Strategy 6).	Technical Assistance	<p><u>Outcome 3.1:</u> New businesses ventures to promote EAF management in target SSF communities developed and widely available in target NBSLME fisheries</p> <p><i>Outcome Indicator 10: Number (tbd during PPG phase) of income-generating opportunities supporting EAF management provided at selected pilot sites (to be identified in the PPG phase)</i></p> <p><i>Outcome Indicator 11: Number of direct male and female beneficiaries working in the harvesting and post-harvest sectors benefiting directly and indirectly from the project.</i></p> <p><b><u>Outcome Indicators 10 and 11</u></b> contribute to</p>	<p><u>Output 3.1.1:</u> Socio-economic (including cost-benefit) analyses associated with adoption of EAF management undertaken and promoted in target communities, with results communicated to key fishery industry stakeholders in target NBSLME fisheries.</p> <p><u>Output 3.1.2:</u> Value chain assessments (VCAs) for SSF value chains developed for target species and communities, and business opportunities identified.</p> <p><u>Output 3.1.3:</u> Capacity building for target fishers communities to take advantage of new EAF management related business opportunities identified through VCAs delivered.</p> <p><u>Output 3.2.1:</u> Review of policies and financial frameworks that can support investments in SSF.</p> <p><u>Output 3.2.2:</u> Strategies and measures to</p>	GET	565,245.00	2,486,119.00

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
<p>Component 4: Supporting Knowledge Management and lesson learning, and implementation of associated CLME+SAP priorities. Note: this component will particularly address the SAP priorities through actions to enhance knowledge management at the national and sub-regional level (Strategy 2).</p>	Technical Assistance	<p><u>Outcome 4.1:</u> Knowledge of processes, measures, options and incentives for effective EAF management to improve sustainability of fisheries increased among key stakeholder groups (individual fishers, fishing industry and fish-buying public).</p> <p><i>Indicator 14: Number of webinars/reports / publications/local awareness-raising events and other knowledge products delivered to disseminate knowledge from the project (results, good practice and lessons learned).</i></p> <p><u>Outcome 4.2:</u> Effective project implementation based on adaptive management.</p> <p><i>Indicator 15: Recommendations from</i></p>	<p><u>Output 4.1.1:</u> Knowledge Management, awareness-raising and communication strategy and action plan to promote greater understanding of EAF management developed and implemented.</p> <p><u>Output 4.1.2:</u> Project lessons learned and recommendations for successful implementation of EAF management measures identified and disseminated.</p> <p><u>Output 4.1.3:</u> Roadmap for scaling successful solutions for implementation of EAF management in NBSLME fisheries and beyond to wider CLME region developed and promoted by relevant stakeholders.</p> <p><u>Output 4.2.1:</u> A gender-sensitive project Monitoring and Evaluation (M&amp;E) system designed and operational.</p> <p><u>Output 4.2.2:</u> Mid-term Review and Final Evaluation carried out.</p>	GET	161,500.00	710,320.00

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
				<b>Sub Total (\$)</b>	<b>1,614,986.00</b>	<b>7,103,199.00</b>
					<b>0</b>	<b>0</b>
<b>Project Management Cost (PMC)</b>						
		GET	161,498.00		710,322.00	
		<b>Sub Total(\$)</b>	<b>161,498.00</b>		<b>710,322.00</b>	
<b>Total Project Cost(\$)</b>			<b>1,776,484.00</b>		<b>7,813,521.00</b>	

Please provide justification

**C. Indicative sources of Co-financing for the Project by name and by type**

<b>Sources of Co-financing</b>	<b>Name of Co-financier</b>	<b>Type of Co-financing</b>	<b>Investment Mobilized</b>	<b>Amount(\$)</b>
Recipient Country Government	Fisheries Department, Government of the Cooperative Republic of Guyana	In-kind	Recurrent expenditures	600,000.00
Recipient Country Government	Fisheries Department, Ministry of Agriculture, Animal Husbandry and Fisheries, Government of the Republic of Suriname	Grant	Investment mobilized	215,000.00
Recipient Country Government	Fisheries Department, Ministry of Agriculture, Animal Husbandry and Fisheries, Government of the Republic of Suriname	In-kind	Recurrent expenditures	1,085,000.00
Recipient Country Government	Institute of Marine Affairs, Trinidad and Tobago	In-kind	Recurrent expenditures	36,000.00
GEF Agency	Food and Agriculture Organization of the United Nations (FAO) - HQ	In-kind	Recurrent expenditures	80,000.00
GEF Agency	Food and Agriculture Organization of the United Nations (FAO) - Sub-Regional Office for the Caribbean	In-kind	Recurrent expenditures	180,000.00
GEF Agency	Food and Agriculture Organization of the United Nations (FAO) ? Country Office Guyana	In-kind	Recurrent expenditures	726,120.00
GEF Agency	Food and Agriculture Organization of the United Nations (FAO) ? Country Office Suriname	In-kind	Recurrent expenditures	100,000.00
GEF Agency	Food and Agriculture Organization of the United Nations (FAO) ? Country Office Trinidad and Tobago	In-kind	Recurrent expenditures	100,000.00
Other	Caribbean Regional Fisheries Mechanism (CRFM)	In-kind	Recurrent expenditures	200,000.00

<b>Sources of Co-financing</b>	<b>Name of Co-financier</b>	<b>Type of Co-financing</b>	<b>Investment Mobilized</b>	<b>Amount(\$)</b>
Other	Western Central Atlantic Fishery Commission (WECAFC)	In-kind	Recurrent expenditures	120,000.00
Other	Western Central Atlantic Fishery Commission (WECAFC)	Grant	Investment mobilized	100,000.00
Donor Agency	International donors (such as NOAA, WWF, IRFEMER, Conservation International, Caribbean Development Bank, Inter-American Development Bank)	In-kind	Recurrent expenditures	500,000.00
Civil Society Organization	Future Fishers, Trinidad and Tobago	In-kind	Recurrent expenditures	1,200,000.00
Other	Academic Institutions (such as UWI-CERMES)	In-kind	Recurrent expenditures	200,000.00
Private Sector	Private sector fisheries operators, including for Guyana - Guyana Association of Trawler Owners and Seafood Processors (GATSOP and Gopie Investments; for Suriname Heiploeg Suriname N.V. (seabob shrimp trawling, MSC certified), Marisa Fisheries (finfish trawling), Deep Sea Atlantic (finish trawling and gillnet); and in Trinidad and Tobago - Trinidad and Tobago Industrial Fishing Association Limited	In-kind	Recurrent expenditures	1,500,000.00

<b>Sources of Co-financing</b>	<b>Name of Co-financier</b>	<b>Type of Co-financing</b>	<b>Investment Mobilized</b>	<b>Amount(\$)</b>
Other	Fisher organizations (Trinidad and Tobago, and Guyana) (depending on final selection of target communities), which likely to include: Orange Valley Pirogue Association, Claxton Bay Fishing Association Ltd., Dow Village/South Oropouche Fishing Association (Otaheite), San Fernando Cooperative Society Limited, Carli Bay Fishing Association, Charlieville/Felicity Fishing Association, Moruga/La Rufin Fishing Association, Grand Chemin Fishing Association, Erin Fishing Cooperative Limited, Trinidad and Tobago United Fishers, Guyana National Fisherfolk Organization)	In-kind	Recurrent expenditures	100,000.00
Recipient Country Government	Fisheries Division, Ministry of Agriculture, Land and Fisheries, Government of the Republic of Trinidad and Tobago	In-kind	Recurrent expenditures	573,471.00
Recipient Country Government	Fisheries Division, Ministry of Agriculture, Land and Fisheries, Government of the Republic of Trinidad and Tobago	Grant	Investment mobilized	197,930.00
<b>Total Project Cost(\$)</b>				<b>7,813,521.00</b>

**Describe how any "Investment Mobilized" was identified**

The figures for co-financing in Table C is based on initial discussions with the Fisheries Departments of the three participating Governments, the Institute of Marine Affairs (Trinidad & Tobago), corresponding FAO Country Offices, regional fisheries bodies, and fishing industry sources. In addition, there are non-governmental organizations, fisher associations and/or cooperatives in at least two of the three countries that may be able to contribute additional in-kind co-financing to project activities, depending on the fisheries/gears addressed. Initial discussions on participation in the EAF4SG project have been held with some of these, but detailed agreements on their level of involvement and level of co-financing will only be confirmed at the PPG stage once project activities have been fully developed. Consequently, it is not possible to provide an indicative co-financing amount for each private sector and fisher association entities identified at this stage. However, based on initial discussions and experiences from similar projects, overall

co-financing of USD 50,000 or more is expected for the fisher associations. This will be largely, if not entirely, in-kind co-financing. For the private sector, a number of companies have been approached and initial discussions held, but their involvement and co-financing will not be confirmed until the PPG stage. However, FAO's expertise on private sector engagement at the international and regional levels, the involvement of private sector companies in previous FAO-GEF and FAO fisheries-focused projects will ensure strong engagement and clear identification of the private actors in the fisheries sector. Together the investments mobilized will contribute to more ecosystem-based fisheries management, as almost all the fishing vessels operating in the participating countries waters are privately owned. In terms of co-financing from international donors, initial discussions have been held with them on potential co-financing, which will be confirmed during the PPG. Similarly for the Regional Fisheries Bodies, the SGF Working Group is expected to receive a specific WECAFC project from EU next year. The FDS is also likely to have a follow up project to the current GCP/SLC/020/EC, which will end in July. The figure shown represents the minimum grant expected from EU DG Mare. Any grant to one or two WECAFC WG can go up to 300K each year. The initially identified co-financing contribution from WECAFC is based on scientific and technical support within the following WECAFC working groups - SGF, Fisheries Data and Statistics/FIRMS partnership, and IUU ? and 5% of the Secretariat coordination time, and also includes assistance in the value chains upgrading interventions.

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

<b>Agency</b>	<b>Trust Fund</b>	<b>Country</b>	<b>Focal Area</b>	<b>Programming of Funds</b>	<b>Amount(\$)</b>	<b>Fee(\$)</b>	<b>Total(\$)</b>
FAO	GET	Regional	International Waters	International Waters	1,776,484	168,766	1,945,250.00
<b>Total GEF Resources(\$)</b>					<b>1,776,484.00</b>	<b>168,766.00</b>	<b>1,945,250.00</b>

**E. Project Preparation Grant (PPG)**

PPG Required **true**

**PPG Amount (\$)**

50,000

**PPG Agency Fee (\$)**

4,750

<b>Agency</b>	<b>Trust Fund</b>	<b>Country</b>	<b>Focal Area</b>	<b>Programmin g of Funds</b>	<b>Amount(\$)</b>	<b>Fee(\$)</b>	<b>Total(\$)</b>
FAO	GET	Regional	International Waters	International Waters	50,000	4,750	<b>54,750.00</b>
<b>Total Project Costs(\$)</b>					<b>50,000.00</b>	<b>4,750.00</b>	<b>54,750.00</b>

**Core Indicators**

**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)
5,982,900.00			

**Indicator 5.1 Number of fisheries that meet national or international third party certification that incorporates biodiversity considerations**

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

Type/name of the third-party certification

**Indicator 5.2 Number of Large Marine Ecosystems (LMEs) with reduced pollutions and hypoxia**

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (achieved at MTR)	Number (achieved at TE)
0	0	0	0

LME at PIF	LME at CEO Endorsement	LME at MTR	LME at TE

**Indicator 5.3 Amount of Marine Litter Avoided**

Metric Tons (expected at PIF)	Metric Tons (expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

**Indicator 7 Number of shared water ecosystems (fresh or marine) under new or improved cooperative management**

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
<b>Shared water Ecosystem</b>	North Brazil Shelf			

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
<b>Count</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>

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

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
North Brazil Shelf	4			<input type="checkbox"/>
<b>Select SWE</b>				

**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 Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
North Brazil Shelf	4			<input type="checkbox"/>
<b>Select SWE</b>				

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

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
North Brazil Shelf	3			<input type="checkbox"/>
<b>Select SWE</b>				

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

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
North Brazil Shelf	3			
<b>Select SWE</b>				

**Indicator 8 Globally over-exploited fisheries moved to more sustainable levels**

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
22,000.00			

**Fishery Details**

Industrial and small-scale fisheries targeting shrimp and groundfish resources in the NBSLME.

**Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment**

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
<b>Female</b>	4,000			
<b>Male</b>	8,000			
<b>Total</b>	12000	0	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

**CI 5: Sum of extent of Inshore fishing areas for the three participating countries: Guyana 22,690 km<sup>2</sup>; Suriname 18,422 km<sup>2</sup>; Trinidad and Tobago 18,717 km<sup>2</sup>. Source: <http://www.seararoundus.org/> CI 8: The 'over-exploited marine fisheries moved to more sustainable levels' core-indicator was calculated as the 25% of the overall catch in the target fisheries for the three countries (landings: 88,000 tons). Source: FAO 2021. FishStatJ - software for fishery statistical time series. Version 4.01.8. FAO. Rome. CI 11: Based on available CRFM statistical data on beneficiary countries, figures refer to aggregated harvesting and post-processing sectors (Guyana: 8200 harvest, 5000 process; Suriname: 4500 harvest, 3000 process; Trinidad and Tobago: 5500 harvest, 1225 process). To estimate disaggregated values for M/F, we used 90% are males for harvesting, 35% are males for post-processing. The core indicator target is based on approximately 50% of the total number of men and women involved in the relevant fisheries.**

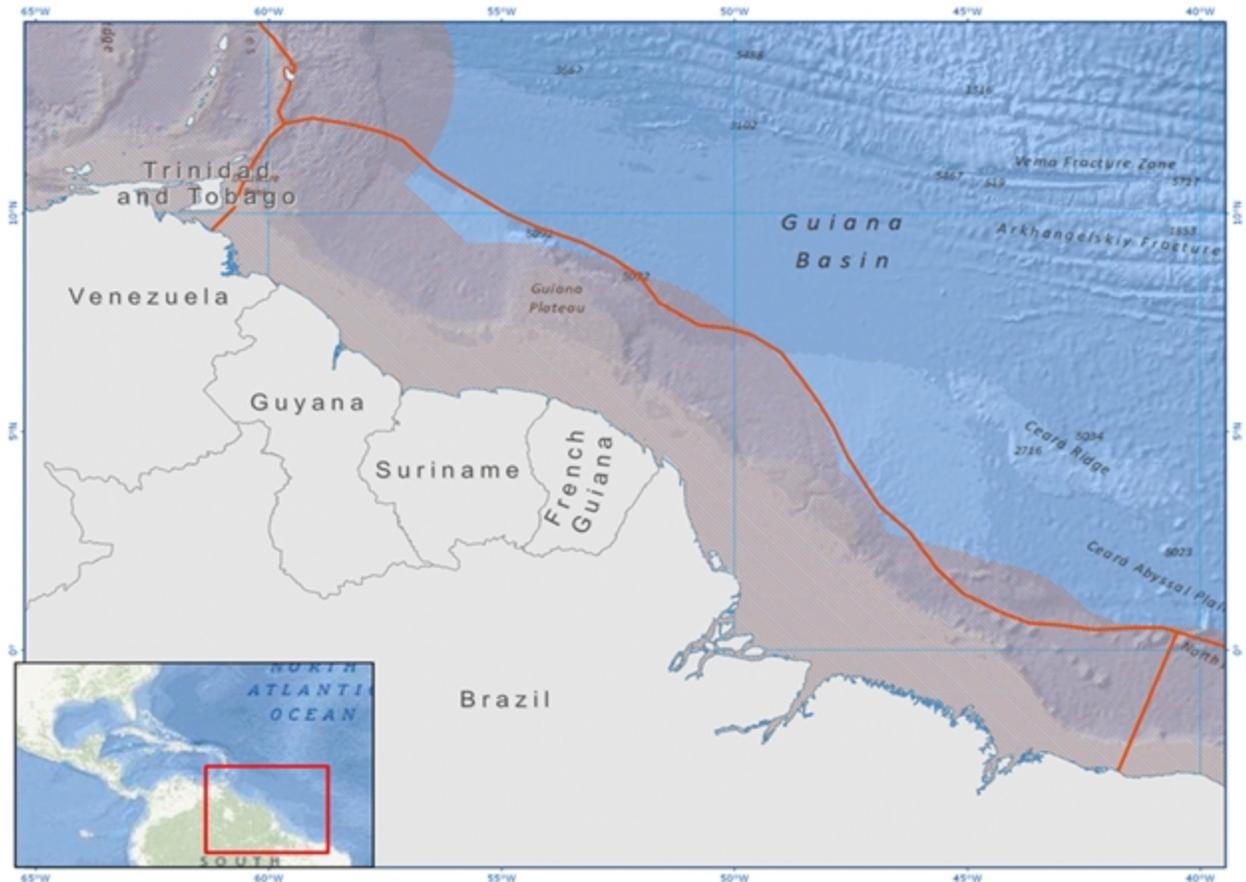
## **Part II. Project Justification**

### **1a. Project Description**

#### **a. The global environment root causes and barriers that need to be addressed.**

##### Project context

The three countries participating in the project – Guyana, Suriname and Trinidad and Tobago, are three of the principal countries in the North Brazil Shelf Large Marine ecosystem (NBSLME – Figure 1). Together they possess a combined continental shelf area of 115,073 km<sup>2</sup> and Exclusive Economic Zone area of 341,720 km<sup>2</sup>. In 2019, the combined total fisheries landings of these three countries were around 88,000 metric tonnes (mt) of which approximately 61,000 mt representing an estimated value of USD 200 million were exported mainly to the European Union, the United States of America and other countries in the Caribbean. All three countries have a high dependence on shrimp and groundfish resources which in 2019 represented 75% of total fisheries production for Trinidad and Tobago, 83% for Suriname and 96% for Guyana. Indeed, the shrimp and groundfish fishery located along the Guianas-Brazil continental shelf of the North Brazil Shelf Large Marine Ecosystem (NBSLME) is one of the most economically important fisheries in the Western Central Atlantic area, with a value of approximately USD 400 million for reported landings (Pauly et al., 2021). These fisheries are also of critical importance for the economic and cultural services they provide to the region through supporting livelihoods, generating income, providing food security and nutrition, helping to address poverty reduction, and through generating export earnings. They are also important in mitigating the effects of climate variability and climate change.



**Figure 1: The NBSLME region**

## Problems and threats

Although the overall reported landings and value (in constant 2010 dollars) of the NBSLME fisheries varies between countries (see Box 1), they peaked in the mid to late 1980s and have since declined despite increases in fishing effort. Indeed, based on the landings history in the region it is estimated that approximately 51% of the stocks are over-exploited or have collapsed due to overfishing (Pauly et al. 2021). For example, recent national assessments for the shrimp species exploited by industrial trawl fisheries indicate that the Atlantic seabob (*Xiphopenaeus kroyeri*) is fully exploited in Guyana and Suriname, southern brown shrimp (*Farfantepenaeus subtilis*) is overexploited in French Guiana and fully exploited in Brazil, while southern pink shrimp (*F. notialis*) is overexploited in Trinidad and Tobago. In terms of finfish species, which are targeted mainly by Small-Scale Fisheries (SSF), recent assessments indicate that southern red snapper (*Lutjanus purpureus*) is overexploited in Guyana and French Guiana, and fully exploited in Suriname and Brazil. Also, data-limited assessments of finfish species such as acoupa weakfish (*Cynoscion acoupa*), king weakfish (*Macrodon ancylodon*) and green weakfish (*Cynoscion virescens*) indicated high exploitation levels for these species in Guyana, Suriname and French Guiana (CRFM, 2019, CRFM, 2020a; FAO 2021a). Based on this knowledge of the current status of many exploited populations of shrimp and groundfish species it is clear that management and conservation measures are required in order to regain fish stocks and sustainably exploit the fishery resources in the region. Many of the stocks of the species above are shared across

the NBSLME so an agreed management fisheries approach is required between the countries in the sub-region.

**Box 1 - Contribution of shrimp and groundfish fisheries to economy and employment in Guyana, Suriname and Trinidad and Tobago**

Shrimp and groundfish fisheries differ in their contributions to the economies and employment in the three countries. In Guyana, these fisheries are considered to be particularly economically and culturally important. In 2019, production in the shrimp and groundfish fisheries reached 38,387 mt, of which 27,619 mt were exported with a value of approximately 96 million USD (FAO 2021c). In terms of employment, the fisheries primary sector accounted for 8,175 jobs in 2019 and around 5,000 additional jobs in other fisheries-dependent activities. The contribution of fisheries sector to the Gross Domestic Product (GDP) of Guyana in 2019 was approximately 1.2 percent and the total supply of fisheries products for human consumption was estimated at 26 kg per capita (CRFM, 2021).

In Suriname, total landings reached a historical maximum of 47,734 mt in 2017. In 2019, the total landings from vessels operating in Surinamese waters decreased to 36,601 mt, of which 6,761 were shrimp species, mainly Atlantic seabob, and 29,840 mt of marine fishes (FAO, 2021c). In 2017, Suriname exported 28,654 mt of fisheries products with a total value of 107 million USD. The fisheries primary sector provided in 2019 an estimated 4,500 jobs, while approximately 3,000 jobs were generated in fisheries dependent activities. Over the last decade, the fisheries sector has become increasingly important and represented 2.7% of GDP in 2019 (CRFM, 2021).

In Trinidad and Tobago, total fisheries landings peaked in 2002 with a value of 18,768 mt and have since declined reaching 12,983 mt in 2019. Exports of fisheries products in 2017 amounted to 4,616 mt with a value of approximately 27 million USD. Compared to other countries in the NBSLME Trinidad and Tobago is a net importer of fisheries products reaching 24,273 mt of imports in 2017 with an estimated value of 49 million USD (FAO, 2021 c). The number of persons directly involved in fisheries primary production in 2019 was estimated at 3,347. The contribution of fisheries to national GDP was estimated at 0.07 percent in 2018 (CRFM, 2021).

In addition, both industrial and small-scale shrimp and groundfish fisheries produce indirect impacts of fisheries activities on species, size groups or life stages that are not directly targeted by the fishery. These include high levels of bycatch of non-target species, composed of bony fishes, elasmobranchs and invertebrates, and often have high levels of discards of juvenile commercial fishes (Bachew, 2021; Kalicharan & Oxenford, 2020) and cause incidental catch of vulnerable and endangered species (e.g. sea turtles). For example in Suriname, several ray and shark species that are globally endangered or threatened according to IUCN Red Lists occur in bycatch of both seabob and finfish trawl fisheries, including *Narcine bancroftii* (?critically endangered?), *Sphyrna lewini* (?endangered?), *Dasyatis geijskesi*, *Rhinoptera percellens* and *Rhinoptera bonasus* (?near threatened?) *Carcharhinus falciformis* (?vulnerable?), *Dasyatis guttata*, *Gymnura micrura*, *Narcine brasiliensis* and *Dasyatis americana* (?data deficient?) (Meeremans et al., 2017). Hence, in addition to the fact that fishing effort for several species targeted by the NBSLME shrimp and groundfish fisheries is too high to ensure maximum sustainable

yield, these fisheries are also having adverse impacts on endangered, threatened and protected (ETP) species. While most shrimp trawl fisheries in the region have introduced Turtle Excluder Devices (TEDs) to mitigate bycatch of turtles, trawl and gillnet fisheries for groundfish still generate significant bycatch of turtles, sharks and rays (Sys, 2019; Willems et al. 2016; Willems 2020).

Stakeholder consultations carried out in the beneficiary countries during the first phase of the CLME project (FAO, 2013 a,b and c) identified causes of impacts on the shrimp and groundfish fisheries, some of which are directly relevant to the current proposal such as overharvesting and discarding of juveniles of economically important species leading to the loss of marine biodiversity; uncertain overall stock status of many exploited species subject to high fishing pressure and likely overfished; conflicts among fishermen competing for the same species but using different gear; problems associated with excess fishing effort and the need to set limits for stocks that are thought to be reaching or exceeding the Maximum Sustainable Yield (MSY) level; catch of juveniles of commercial species that are already fully exploited or overexploited; and outdated fisheries legislation and regulations.

In light of the importance of the shrimp and groundfish fisheries to the economies of the countries adjoining the NBSLME and its impact on shrimp and fish populations and other marine biodiversity, there is a clear need for effective and sustainable management of these fisheries. This is recognised in the politically endorsed CLME+ Strategic Action Programme (SAP) which includes a specific strategy (Strategy 6) that, inter alia, proposes the development and implementation of Ecosystem Approach to Fisheries (EAF) with national and sub-regional fisheries management plans for shared shrimp and groundfish fisheries resources in the NBSLME sub-region.

## Drivers and causes (of the problem)

The problem of overexploitation of the shrimp and groundfish resources in the NBSLME region is the result of a number of factors and drivers, including lack of employment opportunities in rural coastal areas, gaps in fisheries governance and management, overcapacity and poor gear selectivity across most of fishing fleets (trawl and non-trawl target fisheries). These problems have been well documented for decades (Singh-Renton and McIvor, 2015), and indeed, the CLME+ SAP states that 'unsustainable fisheries, habitat degradation and pollution have been identified as the three most important problems impacting the societal benefits obtained from marine ecosystems'.

The economic reality of the fisheries sector is one of both global and local drivers. The demand for fish and fish products (for human consumption and for animal feed and aquaculture sectors, as well as for non-food uses such as pharmaceuticals) continues to grow locally, regionally and globally and essentially, it comes down to excessive demand for a limited resource which threatens long-term sustainability of the fisheries. A reduction of stocks as a result of increasing fishing effort often leads to decreasing catches, compounded by increasing costs of fishing operations. These threaten the long-term viability of these fisheries and the social and economic conditions of coastal fishery dependent communities. The demand for fishery products is also fueled by government policies and incentives (financial, fiscal, social) that encourage investment in fisheries leading to overcapacity of the fishing fleets (too many boats chasing too few fish) across the region. Related to the latter are government policies that stress fish and marine resources as essential for food security in some countries, particularly as a source of protein and as key parts of the economy (providing revenue and jobs). Technological developments, such as improved engines, haulers, more efficient fishing gears, fish

location equipment, combined with increasing costs of fishing operations, also influence fishing intensity encouraging short-term gains and long-term losses.

## Barriers that need to be overcome to address the problems/threats

Despite efforts made by countries in the NBSLME to address management for sustainable fisheries, some barriers continue to hinder wider adoption and implementation of fisheries management based on EAF. These are outlined below.

1. Lack of adequate and sufficient fisheries information and analysis at national and sub-regional levels. Consistent and reliable fisheries data and statistics to inform effective decision making, especially in shrimp and groundfish small-scale fisheries, is generally lacking across the NBSLME sub-region. For instance, data and information on fishers, vessels, catch and fishing effort as well as biological data of exploited organisms such as length frequency distributions are often limited and/or outdated. This situation is further compounded by limited capacity to analyze and assess data collected for fisheries management purposes, and is considered inadequate for implementation of EAF management regimes. This is of special concern considering the shared nature of exploited fish stocks among the different countries in the NBSLME. While reliable fish stock assessment methods that can be applied where data is limited (e.g. Carruthers and Hordyk, 2018, Hordyk et al. 2015, Froese et al. 2017), these models require regularly sampled representative datasets. Fisheries data collection methods in the NBSLME countries are often insufficient to meet this goal. There is a clear need for review of national data collection strategies and frameworks and the application of robust and efficient data gathering and analysis approaches and methods, in combination with the introduction of platforms for easy management and reporting of fisheries data (such as FAO's Calipso platform).
2. Weak governance and management for sustainable fisheries nationally and sub-regionally. National Inter-sectoral Coordination Mechanisms (NICs) to guide EAF adoption and implementation in the NBSLME exist in various forms in the three countries but are considered weak and ineffective with limited impact. One weakness highlighted by all three participating countries is that NICs are not sufficiently participatory with poor involvement of local stakeholder groups. More generally, co-management of fisheries resources needs to be improved across the whole of the NBSLME shrimp and groundfish fisheries, with a particular need to improve the representation of women and minority stakeholder groups. Allied to this is poor knowledge and experience of the integration of EAF into conventional fisheries management planning, and the economic benefits to be gained from the EAF approach as well as social and environmental benefits. More generally, the NBSLME sub-region suffers from limited capacity (tools, skills, experience, knowledge, institutional support) to apply EAF thinking and practices from national (government

agencies) to the local community (fisherfolk, SSF) level, which has been a persistent barrier for achieving sustainable fisheries in the NBSLME sub-region.

3. Weak incentives to support behavioural change towards adoption of EAF fisheries management among SSF. Incentives and opportunities, such as supportive policies and legal frameworks, access to financial support, and developed value chains, which would not encourage small scale fishers to adopt practices that lead to more sustainable fisheries while at the same time improve their livelihoods, have been generally lacking for the NBSLME fisheries. As demonstrated across a variety of regions (e.g. Defeo & Vasconcellos, 2020; Vasconcellos & ?nal 2022), the successful transition to an EAF often involves collective changes in the processing and marketing of their fish products, shifting from high volume/low price products to low volume/high price products for human consumption. With the right incentives and enabling governance conditions and sufficient capacity, these changes can improve livelihoods, maximize economic benefits and support the recovery of stocks from overfishing. If adequately capacitated and with a supportive enabling environment SSF leaders, organizations and communities can be encouraged to proactively adopt fishing, processing and marketing practices that support sustainable fisheries and deliver enhanced livelihoods.
4. Lack of knowledge and poor availability of information on EAF and management for sustainable fisheries. Generally, there is poor knowledge of EAF for fisheries management in the NBSLME sub-region, especially among SSF. This is in part due to poor availability and access to EAF-related information or the information is not in an appropriate form (e.g. is difficult to follow technical documents) which limits the effectiveness of awareness-raising efforts, knowledge dissemination and promotion of good practices for EAF-based fisheries management. There is a need to develop and test a set of approaches for disseminating information on EAF using diverse methods, particularly in fishing communities. This is particularly timely in the case of Trinidad and Tobago where a new Fisheries Management Bill is replacing the former 100-year old fisheries legislation but there is very little awareness of the new legal and regulatory framework fishers will need to operate under which is very different from the former Fisheries Act.

The project aims to address and develop measures to overcome these four barriers, through four components, each component addressing a specific barrier. Although the overall scope of the project encompasses the shrimp and groundfish fisheries of the NBSLME sub-region, due to the limited size of the project most of the actions will be focused on specific fisheries and target communities within the sub-area, to be selected during the PPG phase. The lessons learned from these selected fisheries/communities will inform actions for scaling-up the approach in the future.

## **b. The baseline scenario and any associated baseline projects**

### i. Relevant regional and sub-regional programmes and interventions

Countries in the NBSLME recognize that urgent action is needed to halt the degradation of the marine environment. This is reflected in the CLME+ Strategic Action Programme-CLME+ SAP (2015-2025) which has been endorsed by 25 countries from the CLME+ region, including Guyana, Suriname and Trinidad and Tobago. The CLME+ SAP identifies three principal cross-cutting and inter-linked priority transboundary threats that negatively impact the region's societal benefits and its living resources: (a) unsustainable use of fisheries resources, (b) habitat degradation and modification of the community structure of ecosystems, and (c) pollution. The proposed EAF4SG responds directly to the first two of these threats and is aligned with the CLME+ SAP (Box2).

**Box 2: Relevance of EAF4SG project the implementation of the CLME+ SAP**

The proposed project particularly seeks to support the implementation of the regional governance arrangements for sustainable fisheries (Strategy 2) and efforts to enhance the governance arrangements for implementing an ecosystem approach for the shrimp and groundfish fishery of the Guianas-Brazil shelf (Strategy 6). More specifically, the proposed project will strengthen the FAO-WECAFC-CRFM sub-regional arrangement for the management of the shrimp and groundfish fisheries, enhance the capacity of sub-regional and national arrangements for implementing management and conservation measures, strengthen the capacity for data/information management and analysis and operationalization of national intersectoral coordination and consultation mechanisms, development and implementation of initiatives for sustainably enhancing livelihoods and creating value added for current catches, and implementing sub-regional EAF management plans for shared fisheries resources along the Guianas-Brazil Shelf. Together these will help meet the Ecosystem Quality Objective of the SAP of 'restoration and maintenance of fish stocks at a sustainable level and adoption of responsible fishing operations and fisheries management practices'. In addition, the project helps address the wider vision statement of the CLME+ SAP - 'a healthy marine environment in the CLME+ provides benefits and livelihoods for the well-being of the people of the region', and the SAP's stated Societal Benefits Objective 'Contribution to human well-being, socio-economic development, food security and enhanced livelihoods from goods and services provided by the ecosystems are optimized'.

Current progress on the implementation of the CLME+ SAP is reported on the [clmeplus.org](http://clmeplus.org) website 'SAP Actions Progress Tracking Portal'. The most recent progress reported (website accessed on 10 January 2022) indicates that for those actions under Strategy 2 of most relevance to the EAF4SG project and which it seeks to contribute to, namely actions 2.4, 2.5, 2.7, 2.8, 2.10, 2.13 and 2.14 there has been no or only a partial assessment or poor delivery to date. For SAP Strategy 6, current progress is better reported but those actions which the EAF4SG project seeks to contribute to: 6.1, 6.7., 6.8, 6.10 and 6.11; shows moderate progress for 6.1 and 6.7, limited progress for 6.8 and 6.10 and good progress for 6.11. Hence on the basis of the most recent reporting of implementation of the CLME+ SAP, measures proposed through the EAF4SG project to support achievement of SAP actions remain highly relevant.

From a fisheries perspective, all three countries participating in the EAF4SG project have been involved in the implementation of the CLME+ SAP. For instance, all three countries were involved with the WECAFC reorientation process and the RPOA-IUU development and have

actively participated in capacity building of their fisheries administrations and other government agencies in Monitoring Control and Surveillance (MCS) training, among others (under Strategy 2); Trinidad and Tobago has been particularly active in contributing to the development of the regional policy coordination mechanism for ocean governance (Strategy 3); and was also part of the CLME+ subproject on flyingfish fisheries coordinated by CRFM and contributed, among other activities, to the development of the sub-regional flyingfish fisheries of the Eastern Caribbean management plan (covered under SAP Strategy 5A). In addition, Guyana, Suriname and Trinidad and Tobago participated in the FAO CLME+ sub-project on shrimp and groundfish of the NBSLME (covered under Strategy 6). Among other activities, the countries contributed to development of a subregional fisheries strategy and management plan for shrimp and groundfish resources, advanced the development of their national fisheries management plans with Suriname completing the process in early 2021, and all three countries, especially Suriname and Trinidad and Tobago, have taken steps to improve their national fisheries statistical systems.

Several projects have sought to address the SAP priority areas through promoting adoption of some form of the ecosystem approach (e.g. Ecosystem-Based Management (EBM) and the Ecosystem Approach to Fisheries (EAF)) for the sustainable management of shared living marine resources in the CLME+ region. This includes the recent UNDP-GEF CLME+ Project (2015-2021), which incorporated an FAO executed sub-project on the shrimp and groundfish of the NBSLME (2017-2021), the FAO-GEF REBYC II LAC project (2015-2021), which focused on reducing environmental impacts of bottom trawl fisheries, and the GEF funded STEWARDFISH (2018-2021) project, which aimed at empowering fisherfolk to more actively contribute to fisheries co-management.

The Caribbean Regional Fisheries Mechanism (CRFM) <sup>1</sup> promotes and facilitates the responsible utilization of the region's fisheries and other aquatic marine resources for the economic and social benefits of the people of the region. The CRFM consists of three bodies: the Ministerial Council, the Caribbean Fisheries Forum, and the CRFM Secretariat. Its mandate for Ecosystem Approach to Fisheries (EAF) is enshrined in the Caribbean Community Common Fisheries Policy (CCCFP) and the governance entities of the CRFM have called upon all CRFM Member States to strengthen their commitment to and implementation of the ecosystem approach to fisheries and aquaculture and reaffirmed and declared the ecosystem approach to fisheries and aquaculture as a key guiding principle for the CRFM and partner organisations. Consequently, EAF management is applied to CRFM policies, management plans and projects. Relevant projects have included the recent UNDP-GEF CLME+ Project (2015-2021) in which the CRFM executed sub-project on Flyingfish, with the development of the Eastern Caribbean Flyingfish Management Plan 2020-2025, and the CRFM Continental Shelf Fisheries Working Group on Atlantic Seabob, *Xiphopenaeus kroyeri* fisheries in Guyana and Suriname has been providing guidance on improving management on the MSC certified Seabob fisheries in the NBSLME by taking an ecosystem approach to its management. The CRFM also applies EAF and develop sustainable linkages between Disaster Risk Management (DRM) and Climate Change Adaptation (CCA). To this end, the CRFM has made recommendations to mainstream EAF,

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CCA, and DRM in the region's fisheries governance and management. This included the CIF-PPCR (Caribbean Pilot Program for Climate Resilience 2015-2021) in which the CRFM executed the EAF and climate change component. More generally, CRFM has been providing capacity building and training on EAF to fisherfolks, fisheries administrations, and other stakeholders in the region for several years.

There are also a number of relevant FAO initiatives, supporting, for example, streamlining of data and statistics in the WECAFC area with backing from EU project GCP/SLC/020/EC: ?Support to the activities of the transversal WECAFC, CRFM, OSPESCA, IFREMER and CFMC Fisheries Data and Statistics Working Group (FDS-WG)?. Among main outcomes is the endorsement of an interim Data Collection Reference Framework (DCRF<sup>[2]</sup>) by WECAFC (FAO, 2020). The DCRF is an instrument to support fisheries management in the context of EAF and for capacity building in the WECAFC region (which includes the three target countries). In addition, other EU financed projects targeting EAF management in the WECAFC region include GCP/SLC/016/EC: ?Support to the implementation of the Regional Plan of Action to deter and eliminate Illegal, Unreported and Unregulated Fishing in the Western Central Atlantic?; GCP/SLC/217/EC: ?Support to the Secretariat of WECAFC in implementing targeted actions of the 2019-2020 Workplan on improved regional fisheries governance?; and GCP/SLC/219/EC: ? Support to the secretariat of WECAFC for an effective implementation of priority actions of the Programme of Work agreed at the 17th Session of the Commission?. Furthermore, implementation of innovative approaches to fisheries data collection, and processing and analysis of fisheries statistics have been initiated in the WECAFC region with co-funding from the aforementioned FAO CLME+ sub-project on shrimp and groundfish resources of the NBSLME (2017-2021), the FAO-GEF REBYC II LAC project (2015-2021), and the FAO-GEF CC4FISH (2018-2021). The WECAFC/CRFM/OSPESCA Fisheries Data and Statistics Working Group and the WECAFC/CRFM/IFREMER Working Group on shrimp and groundfish of the Guianas-Brazil shelf are key mechanisms for continuing information sharing and technical support for NBSLME countries and will be directly involved in the project as partners.

The FAO-GEF REBYC II LAC project developed (among other things) Fisheries Management Plan for the trawl fisheries of Brazil (covering four different regions). Because of the country's size and the vast array of fishing gear and methods used, the project focused exclusively on shrimp trawling in the North, Northeast, Central and South/Southeast subregions of the country. Only the North region is an integral part of the NBSLME, covering the waters of the states of Par?, Amap?, Piau? and Maranhao. In this region, the industrial fishery targets southern brown shrimp (*F. subtilis*) and red spotted shrimp (*F. brasiliensis*) with a fleet of around 100 boats (17-23 m in length) with estimated 500 involved. As for the other regions in the country, the EAF management plan was tailored to the capacity and needs, while encompassing the three pillars of sustainability (human wellbeing, ecological wellbeing and governance). The draft management plan, including the establishment of a Standing Consultative Committee for the Management of Shrimp Fisheries, was submitted to the Fisheries and Aquaculture Secretariat but is awaiting governmental approval and has not yet been implemented. While Brazil is not directly involved in the EAF4SG project, representatives from the Brazilian fisheries authorities will be invited to participate in relevant project events (paid for them their own funds, so co-financing), which will help support implementation of their fisheries management plans.

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FAO has also invested in supporting fisheries information system development in the region, most notably the Calipseo system which has been recently developed by FAO for fisheries data recording and analysis that allows for easy and simple deployment and rolling out of national fisheries statistics and management information system. One of the benefits of the Calipseo platform is that it can also be easily integrated with 'Smartforms' mobile apps used for supporting fisheries statistical data collection and review. In the NBSLME sub-region, FAO has been supporting Suriname and Trinidad and Tobago in implementing the Calipseo statistical system for fisheries data from industrial and small-scale fisheries. In Suriname, sampling with a revised procedure will start in early 2022 and it is expected that the first preliminary results will be obtained by mid-year. In Trinidad and Tobago, the deployment of the system has advanced significantly recently but improvements are still required in order to, among others, train data collectors in species identification and implementation of the recommended adjustments for improvement of the artisanal catch and effort sampling and data collection system. The proposed EAF4SG project will build in these activities.

b. GEF-supported projects

ii. GEF -supported projects

The recently approved GEF-funded 'Protecting and Restoring the Ocean's Natural Capital, building Resilience and supporting region-wide Investments for sustainable Blue Socio-Economic Development (PROCARIBE+)' project has been specifically designed to continue supporting and upscaling the coordinated and synergistic implementation of both the CLME+ SAP and the 'People Managing Oceans' civil society SAP, as well as of the associated regional and sub-regional strategies and action plans. The PROCARIBE+ project will produce the next iteration of the regional SAP(s) by 2025. In doing so, it aims to support effective planning and the management of the marine space and its uses in order to protect, restore and sustain coastal and marine ecosystem goods and services, and to achieve ocean-based, climate-resilient, inclusive socio-economic recovery and development, through inter alia the development of 'blue economies'. The proposed EAF4SG project compliments the delivery of this project for the NBSLME sub-region through supporting its sustainable management of marine resources aims, including improved governance and enhancement of stakeholder involvement through National Intersectoral Mechanisms (NICs) and co-management of fisheries.

Also relevant is the recently approved CAF-FAO-GEF 'Promoting National Blue Economy Priorities Through Marine Spatial Planning in the Caribbean Large Marine Ecosystem Plus' (BE-CLME+) project which supports national and regional development priorities and will contribute Blue Economic development plans for the Caribbean/CARICOM region, with tailored national blue economy and financing strategies to support sustainable development. The project also has a focus on the use of Marine Spatial Planning to inform establishment of MPAs, the assessment of selected fisheries value chains and the promotion of ecosystem-based fisheries management. The proposed EAF4SG project compliments and links with the BE-CLME+ project through supporting greater blue economy opportunities through value chain assessments and support for policy and investment environment of new business opportunities that encourage EAF management in SSF.

The GEF funded FAO CLME+ sub-project on shrimp and groundfish resources of the NBSLME (2017-2021) led to, among others, the endorsement in June 2021 of a sub-regional Fisheries Strategy and Management Plan for shrimp and groundfish resources by the fisheries authorities of Brazil,

Guyana, Suriname and Trinidad and Tobago, and provided support for trainings in EAF, introduction to data-limited stock assessments, and the development of national fisheries management plans. The current proposed EAF4SG particularly builds on this project.

The project also complements the recently completed FAO-GEF CC4Fish project. The objective of CC4Fish was to increase resilience and reduce vulnerability to climate change impacts in the Eastern Caribbean fisheries sector, including Trinidad and Tobago among the seven beneficiary countries, through introduction of adaptation measures such as capacity building of fisherfolk and aquaculturists and mainstreaming of climate change into fisheries governance. The project components addressed 1) understanding and awareness of climate change impacts and vulnerability; 2) increasing fisherfolk, aquaculturists and coastal community resilience to climate change and variability; and 3) mainstreaming of climate change adaptation in multi-level fisheries governance. Among the activities developed particular emphasis was placed on safety at sea with training of 1,200 fisherfolk in safety at sea, engine repair, value adding activities, fish handling and processing and other kinds of capacity building activities to enhance safety of fisherfolk; increase income through value adding and decrease fish waste, and fisheries and aquaculture response to emergency including climate change adaptation and disaster risk management sensitive fisheries policies, plans and legislation and fisheries-sensitive climate change policies at the national and regional level.

The GEF-funded 'Developing Organizational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-Scale Fisheries (StewardFish)' project supported seven countries, including Guyana, to empower fisherfolk throughout fisheries value chains to engage in resource management, decision-making processes and sustainable livelihoods, with strengthened institutional support at all levels. One of the key deliverables documented in terms of capacity development of fishers is the proposal for development of a Caribbean Network of Fisherfolk Organization (CNFO) leadership institute (CERMES 2020). The CNFO, which has chapters in Guyana, Suriname and Trinidad and Tobago, has taken full ownership and is leading this peer-to-peer learning and mentoring mechanism. This tool could be a reference to engage in support of fishers training and other stewardship building activities for the EAF4SG project.

The proposed project is also complementary to the recently approved FAO-GEF REBYC III CLME+ project which is due to start full development (PPG stage) in early 2022. This project will focus on addressing the issue of bycatch and discards in non-trawl fisheries in Barbados, Guyana, Suriname, and Trinidad and Tobago including the issue of Abandoned, Lost, or otherwise Discarded Fishing Gear (ALDFG). Consequently, it is seen as the 'sister project' to the proposed EAF4SG given three of the target countries are in common and several of its elements overlap in terms of focus, e.g. supporting value chain development for fisheries products that adopt more responsible fisheries practices (in this case reducing or eliminating bycatch through adoption of bycatch mitigation measures). The two projects will collaborate closely (including during the PPG stage), facilitated by having several key staff operating from the same offices.

Finally, the proposed project is consistent with, and supports, the GEF-6 Coastal Fisheries Initiative (CFI) which is built on the rationale that overfishing is a threat to ocean health and that the biological diversity in the world's oceans is concentrated in near-shore waters. The CFI is based on the need for more integrated approaches to sustainable development and ocean management. A parallel is seen in

the proposed project especially regarding adoption and implementation of EAF, critical capacity development, improved institutional integration and stewardship for sustainable development.

### iii. National fishery efforts to address EAF management

#### **Guyana**

The marine fishery subsector in Guyana is managed by the Department of Fisheries (DOF) and guided by the Fisheries Management Plan (FMP), which enables the Fisheries Department to manage and regulate the utilization of the fisheries resources in a sustainable manner that could benefit all stakeholders. The current FMP (2013-2021) was updated in 2018 and adopted in 2019 and is currently, as of 2021, under revision and includes elements of the EAF. Elements within the FMP relevant to the EAF4SG include data collection; monitoring, control and surveillance (MCS); and capacity building across all stakeholder groups. The various components of the FMP are implemented by the Fisheries Department in collaboration with several other agencies including the Guyana Defense Force, Coast Guard, Marine Police, Customs, and the Guyana Wildlife Conservation and Management Commission. Fisheries specific management plans have been developed under the scope of the national FMP. Of particular relevance to the EAF4SG project are the Seabob Management Plan (2015 to 2021), Penaeid Shrimp Management Plan, the Red Snapper Management Plan, the Shark Management Plan, and an Artisanal Fisheries Framework and Management Plan (2019-2024). The latter was developed separately with assistance from World Wildlife Fund (WWF) and aims to address issues within the small-scale fisheries sector.

Previous management measures in support of moving to more sustainable shrimp and groundfish fisheries in Guyana have included: attempts to reduce the impact of industrial harvesting by legislating the use of Turtle Exclusion Devices (TEDs) and the introduction of Bycatch Reduction Devices (BRDs), which has resulted in a reported a 50 percent decrease in bycatch and mandatory adoption of vessel monitoring systems (VMS) and closed-circuit television (CCTV) for industrial fishing vessels. Particular attention has focused on the Atlantic seabob fishery with measures to improve data collection, management, reporting and monitoring (e.g. of Endangered, Threatened and Protected (ETP) species and other vulnerable species), establishment of an at-sea observer programme, and monitoring and enforcement programmes. Guyana was awarded funding as part of the Fish4ACP Value Chain programme implemented for a 5-year period (2020-2025) to help strengthen the Atlantic seabob value chain.

Fisheries management in Guyana (as well as Suriname and Trinidad and Tobago) is generally constrained by weak enforcement. However, Illegal, Unreported and Unregulated (IUU) fishing is a high priority for the Government of Guyana. Activities and strategies to address IUU fishing include, putting instruments and tools to ensure all forms of fisheries harvesting and production are done sustainably and legally (Port State Measures Agreement, IPOA on IUU, Global record of fishing vessels, MCS). The improvement to the fisheries information systems provided by the EAF4SG will allow to address the unreported and unregulated components of IUU fishing.

In terms of private sector involvement, in Guyana the Atlantic seabob fishery received Marine Stewardship Council (MSC) certification in August 2019 and the fishery is due for reassessment in

February 2024. The certification process in Guyana was initiated by the Guyana Association of Trawler Owners and Seafood Processors (GATOSP). The Association is made up of Noble House Seafoods (which own vessels and a processing plant), Pritipaul Singh Investments (which also owns vessels and a processing plant) and Gopie Investments, who between them own nearly 90% of the active fishing vessels (the remaining vessels are owned by smaller companies and individuals). The fishery is monitored by the seabob working group which includes a number of stakeholders from government agencies (Fisheries Department, Coast Guard, Marine Police, Environmental Protection Agency, among others), academia, small-scale fisheries cooperatives, environmental NGOs and GATOSP. Consequently, there is already significant private sector interest in sustainable management of fisheries in Guyana and it is expected that some of these companies will be engaged with the EAF4SG project (roles and co-financing to be agreed during the PPG stage).

### **Suriname**

In Suriname, the fishing sector is managed by the Ministry of Agriculture, Animal Husbandry and Fisheries, which is responsible for the effective management of national fishing capacities and the rational exploitation of fish resources, as well as for monitoring compliance with legal regulations for the protection of fish resources. The Fisheries Directorate within the Ministry is responsible for fisheries management, while the Fish Inspection Institute is responsible for the safety of fishery products.

The country's Management Plan (FMP) was recently updated to cover the period 2021-2025 with support from the FAO/GEF REBYC II LAC and FAO CLME+ projects. The updated FMP for Suriname includes, inter alia, provisions for governance, decision making and participation; registration and licensing of fishing vessels; monitoring, control and surveillance (MCS); reduction of ecosystem impacts; and regional cooperation, as well as addressing the country's different fisheries (e.g. line fishing for snapper and mackerel, shrimp fisheries, and industrial and small-scale groundfish fisheries). Recent management actions within the Suriname fisheries sector include: the adoption of mandatory TEDs, bycatch reduction devices (BRDs) and vessel monitoring systems (VMS) for industrial fishing vessels. In addition, with financing provided by the Inter-American Development Bank (IDB) Suriname has requested assistance from FAO to facilitate implementation of the Port States Measures Agreement (PSMA). Due to the COVID 19 pandemic training has only been provided online but there have been actions towards developing a National Plan of Action (NPOA) on IUU.

In terms of private sector involvement in Suriname the Atlantic seabob fishery was granted Marine Stewardship Council (MSC) certification in 2011 which represented the first tropical shrimp fishery to be certified. The MSC certification process in Suriname was initiated by Heiploeg Suriname, which is a member of Heiploeg International BV one of the most important shrimp suppliers in Europe. The certification was renewed in 2017 and is valid until July 2022. Efforts have been undertaken to improve Atlantic seabob data collection, management, reporting, and monitoring to maintain MSC certification. In order to support the implementation of the Seabob Fishery Management plan, a Seabob Working Group (SWG) was established. The SWG usually meets monthly or more frequently if the need arises. Review of the Harvest Control Rule (HCR), management measures and a Research and Development plan are fixed items on meeting agendas. All members of the SWG had approved the Seabob Management Plan and had agreed to work together in its execution. As well as the private sector, implementation involves the Coast Guard, Fisheries Directorate and NGOs such as WWF. As in

Guyana, there is already significant private sector interest in sustainable management of fisheries and it is expected that some of these companies will be engaged with the EAF4SG project (roles and co-financing to be agreed during the PPG stage).

### **Trinidad and Tobago**

A National Fisheries Management Information System (FisMIS) is being developed for Trinidad and Tobago in collaboration with the Ministry of Agriculture, Land and Fisheries IT Unit and with the support of the FAO through Project GCP/INT/228/JPN ? ?Fisheries Management and Marine Conservation within a Changing Ecosystem?, and the GEF-FAO ?Climate Change Adaptation in the Eastern Caribbean Fisheries Sector (CC4Fish)? project. The development of the FisMIS began in 2016/17 and included: a review of data collection, storage, processing, dissemination and reporting for all types of fisheries data in Trinidad and Tobago; identification of the needs and requirements for a centralized fisheries information system; training in open source statistical software R; development of R-scripts for generating reports from the existing Fish Catch and Effort SQL Server Database in order to estimate total fish landings and effort by landing site around Trinidad, as well as by trawler fleet, and for all Trinidad; review of the catch and effort data collection system for the artisanal fisheries of Trinidad with recommendations on adjustments to improve the system in light of limited resources; deployment of the FAO Calipso database which includes the Vessel Registry and Landings database.

An updated Fisheries Management Bill was submitted to parliament in October 2020 and is currently before a Joint Select Committee of Parliament. This includes provisions for the establishment of stakeholder consultative mechanisms to facilitate participatory/co-management arrangements. The National Working Group established to oversee follow up to the REBYC-II LAC Project activities (National Working Group established to provide guidance on the issues of co-management of bycatch and the promotion of improved livelihood strategies in the shrimp trawl fishery in Trinidad and Tobago) will be formally established once the new Bill is promulgated.

A Bycatch Value Chain Study was conducted in 2018 under the REBYC-II LAC Project which will help inform the development of EAF4SG project activities related to value chains for EAF. In addition, the Fisheries Division has been recently involved in a dialogue with the Community and Outreach Manager and then later with the Training Manager of the Caribbean Fisheries Training and Development Institute (CFTDI) to conduct an introductory training session in fish handling, processing, salt curing and drying which involved the trawl community of Otaheite to support opportunities for fishers and vendors to develop a wider range of value added products for sale, thereby improving their incomes as well as widening their household income streams. Experience in Trinidad and Tobago has found that promotion of alternative/enhanced livelihoods for fishers/fish vendors to be critical for the successful implementation of fisheries management measures that can result in negative impacts on earnings from fish harvesting.

**c. The proposed alternative scenario with a brief description of expected outcomes and components of the project.**

## Objective of the EAF4SG project

The proposed US\$ 2 million four-year project has been designed to deliver GEF Global Environmental Benefits and the overall project objective, as well as assisting countries to address key trans-boundary environmental threats highlighted by the CLME+ SAP, including unsustainable fisheries. The project objective is to advance adoption and implementation of the Ecosystem Approach to Fisheries (EAF) in the shrimp and groundfish fisheries in the North Brazil Shelf Large Marine Ecosystem, supporting country implementation of the CLME+ SAP, with successful solutions for potential scale up to other LMEs. The longer-term global environmental goal that the project seeks to contribute to is a 'healthy, resilient NBSLME with threats to marine environment minimized and biodiversity protected and utilised sustainably contributing to the region's sustainable 'blue economy' and SDGs'.

## Target communities and fisheries

A detailed assessment of fisheries management across all NBSLME fisheries in the three participating countries will be undertaken during the Project Preparation Grant (PPG) phase to identify and agree the most appropriate communities and fisheries to target for the full project.

### Project Components and Outcomes

The key elements of the project 'Components, outcomes and outputs' - are presented below, along with the project's causal logic and how its immediate project outcomes lead to longer-term changes. The latter is summarized in a preliminary Theory of Change (ToC). This sets out the project's causal logic and relationships between the project's outputs (goods and services delivered by the project) and immediate project outcomes (changes resulting from the use of project outputs by key stakeholders), medium and longer-term changes and states (changes not deliverable through efforts of the project alone), and the project's ultimate desired impact (fundamental, durable changes in environmental and social benefits). The ToC will be further reviewed and revised during the PPG phase as the project develops and key elements are further refined.

The project will be implemented through four closely related technical components each one addressing one of the four key barriers acting against the achievement of more responsible, sustainable fisheries identified above. Parts of Components 1, 2 and 3 will be focused on selected communities engaged in shrimp and groundfish fisheries in the three participating countries, identified during the PPG phase in close consultation with national and local stakeholders. The project will also contribute to wider development objectives and socio-economic and cultural co-benefits such as reduced vulnerability to economic and environmental shocks, improved food and income security for fisherfolk communities (again especially for women), and enhancing resilience to climate change as well as contributing to the achievement of several Sustainable Development Goal targets.

Component 1: Enhancing or developing national and sub-regional EAF-based fisheries management information systems, supporting countries implementation of CLME+ SAP priorities.

This Component will focus its activities on achieving one outcome that will address the significant

gaps in data and data management and analysis in the shrimp and groundfish fisheries of the NBSLME. This will be done by reviewing current data collection and analysis systems and building institutional and stakeholder capacity for application of EAF management information systems at the national and sub-regional level and taking into consideration the shared nature of many of the stocks under exploitation.

**Outcome 1.1: Improved national and sub-regional data and data management systems supporting EAF fisheries management.** This will focus on improving existing fisheries management information systems (FMIS) and the comprehensiveness and quality of data in the three beneficiary countries and at the sub-regional level, including through addressing data collection, fisheries statistics, and analyses of fisheries data and interpretation. It will include activities to build the technical capacity of key fisheries stakeholders for the application of the improved EAF-based fisheries management information systems and support improved national and sub-regional fish stock identification and stock assessments, including the use of approaches which can be applied in the case of data-deficient stocks. It will also include a focus on improving the collection and analysis of socio-economic data for EAF management. This Outcome has four outputs:

- Output 1.1.1. Analysis of existing fisheries management information systems (FMIS) and data in the three target countries and sub-regional level undertaken and recommendations for improvement developed.
- Output 1.1.2. Technical capacity building for the application of EAF-based fisheries management information systems among key fisheries stakeholders delivered, including data collection, fisheries statistics, analyses of fisheries data and interpretation.
- Output 1.1.3. Improved national and sub-regional fish stock identification and stock assessments of selected priority species developed with relevant management recommendations
- Output 1.1.4. Improved fisheries-related socio-economic data for selected fisheries within national EAF-based fisheries management information systems, including value chain data.

**Component 2: Strengthening national and sub-regional governance arrangements for EAF fisheries management, supporting countries implementation of CLME+ SAP priorities.**

This Component will focus its activities on strengthening national and sub-regional governance of fisheries with emphasis on improving the participation of small-scale fisheries (SSF) stakeholders and minority groups and particularly on building capacity for co-management. This will be addressed by achieving three outcomes.

**Outcome 2.1: Strengthened stakeholder engagement in national decision-making for EAF fisheries management.** This will emphasize improving representation on, and operationalization of, the National Intersectoral Committees (NICS) for fisheries management in each of the three participating countries and particularly improving the ability of stakeholders to engage in co-management of fisheries resources, including in Information, Communication and Technology (ICT) skills and resources. The capacity building will particularly look to benefit women and youth in fishing communities. This Outcome has four outputs:

- Output 2.1.1. National inter-sectoral coordination mechanisms for EAF in three participating countries improved and fully operational.
- Output 2.1.2. Capacity of SSF stakeholders from target communities/fisheries for co-management in EAF fisheries management improved, including though enhanced Information, Communication and Technology (ICT) skills and resources and enabling legislation.

Outcome 2.2: Improved EAF management planning and implementation for shared resource management of shrimp and groundfish at national and sub-regional levels. This outcome includes updating of sub-regional and national Fisheries Management Plans (FMPs) and capacity building to improve monitoring of implementation of the FMPs for national shrimp and groundfish fisheries, and enhances the sub-regional collaboration in management of shared fisheries resources. In addition, attention will be given to efforts to support national engagement in EAF management planning and its implementation for shared shrimp and groundfish fisheries resources at the sub-regional level. This Outcome has four outputs:

- Output 2.2.1. Updating of national and sub-regional Fisheries Management Plans (FMPs) as part of EAF management cycle
- Output 2.2.2. Capacity for monitoring of implementation of Fisheries Management Plans for national Shrimp and Groundfish fisheries improved
- Output 2.2.3. National engagement in development of harmonized management measures and plans for shared fisheries resources at sub-regional level supported
- Output 2.2.4. Sub-regional collaboration on management of shared fisheries resources enhanced

Outcome 2.3: Strengthened legal and regulatory frameworks for EAF-focused fisheries management. Project efforts to deliver this outcome include a review of current national legal and regulatory frameworks for EAF management, in particular in relation to SSF. Measures to improve legal and regulatory frameworks for EAF will be identified, e.g. technical measures, conservation and management measures (CMMs) and harvest control rules (HCRs), in particular in relation to SSF, followed by promotion and advocacy work to support their adoption. This Outcome has four outputs:

- Output 2.3.1. Review of current national legal and regulatory frameworks for EAF, in particular in relation to SSF, including for co-management
- Output 2.3.2. Recommendations for improving legal and regulatory frameworks for EAF, e.g. technical measures, CMMs and HCRs, and co-management in particular in relation to SSF, identified, advocated and adopted

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- Component 3: Encouraging SSFs to adopt more sustainable fishing practices through new business opportunities, supporting the implementation of the CLME+ SAP priorities.
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This Component aims to support small-scale fishers to increase the value of their catch and their incomes through value chain innovation and development. The project will provide capacity building, technical support and improved access to financing to support small-scale fishing communities in

diversifying their activities and increasing their incomes. Particular attention will be targeted at women and young people under this component. At the broader level, the project will identify and promote incentives including national economic policy, financial/fiscal, social and market access measures and mechanisms, to encourage more business opportunities and greater investment and behavioural change towards sustainable fisheries practices. This component consists of two outcomes.

Outcome 3.1: New businesses ventures to promote EAF management in target SSF communities developed and widely available in target NBLME fisheries. This outcome will focus on undertaking socio-economic (including cost-benefit) analyses associated with adoption of EAF management. Building on these Value Chain Assessments (VCAs) will be developed for target species, and business opportunities identified with capacity building activities for fisher communities to take advantage of new EAF management related business opportunities identified through the VCAs. This Outcome has four outputs:

- Output 3.1.1. Socio-economic (including cost-benefit) analyses associated with adoption of EAF management undertaken and promoted in target communities, with results communicated to key fishery industry stakeholders in target NBSLME fisheries.
- Output 3.1.2. Value chain assessments (VCAs) for SSF value chains developed for target species and communities, and business opportunities identified
- Output 3.1.3. Capacity building for target fishers communities to take advantage of new EAF management related business opportunities identified through VCAs delivered

Outcome 3.2: Policy and investment environment supportive of new business opportunities that encourage EAF management in SSF. Activities to deliver this outcome will focus on reviewing and updating policies and financial frameworks that can support investments in sustainable fisheries and SSF, with identification and promotion of policies, strategies and measures to encourage fishers and markets to adopt and promote EAF management in SSF. For instance, the project will work to enhance potential access to micro-credit and insurance for new SSF ventures supportive of sustainable fisheries. This Outcome has four outputs:

- Output 3.2.1. Review of policies and financial frameworks that can support investments in SSF
- Output 3.2.2. Strategies and measures to encourage fishers and markets to adopt and promote EAF management in SSF identified, developed and advocated
- Output 3.2.3. Potential access to micro-credit and insurance for new SSF ventures (including vessels, gears and fishers) supportive of sustainable fisheries established or enhanced

Component 4: Supporting Knowledge Management and lesson learning, and implementation of associated CLME+SAP priorities.

This component seeks to improve adoption and implementation of the EAF by building a knowledge base among relevant stakeholders, in particular related to SSFs, on lessons and best practices on EAF management. As part of this, the project will identify and disseminate its experiences, achievements and lessons learnt to a range of stakeholders in the NBSLME region and beyond to promote greater

awareness, understanding and acceptance of solutions for addressing EAF management at the national and sub-regional level in tropical fisheries, and make knowledge of these more widely and easily available. Delivery of this component will be guided by a Knowledge Management, Awareness-raising and Communication Strategy and Action Plan (including digital media strategy). This component will also include a project M&E and lesson learning framework which will feed results into the project's Knowledge Management and communications activities. This Component will focus its activities on achieving two outcomes.

Outcome 4.1: Knowledge of processes, measures, options and incentives for effective EAF management to improve sustainability of fisheries increased among key stakeholder groups (individual fishers, fishing industry and fish-buying public). This outcome will be based on development and implementation of a Knowledge Management, awareness-raising and communication strategy and action plan to promote greater understanding of EAF management, with project lessons learned and recommendations for successful implementation of EAF management measures identified and disseminated. In addition, a roadmap for scaling up successful solutions for implementation of EAF management to other NBSLME fisheries and countries and beyond to the wider Caribbean region will be developed and promoted by relevant stakeholders. This Outcome has four outputs:

- Output 4.1.1. Knowledge Management, awareness-raising and communication strategy and action plan to promote greater understanding of EAF management developed and implemented
- Output 4.1.2. Project lessons learned and recommendations for successful implementation of EAF management measures identified and disseminated
- Output 4.1.3. Roadmap for scaling successful solutions for implementation of EAF management in NBSLME fisheries and beyond to wider CLME region developed and promoted by relevant stakeholders

Outcome 4.2: Effective project implementation based on adaptive management. This will be achieved through a comprehensive, gender-sensitive project Monitoring and Evaluation (M&E) system with an independent Mid-term Review and Final Evaluation. This Outcome has four outputs:

- Output 4.2.1. A gender-sensitive project Monitoring and Evaluation (M&E) system designed and operational
- Output 4.2.2. Mid-term Review and Final Evaluation carried out

It should be noted that gender concerns are mainstreamed across all four components, outcomes and outputs and will be integrated into the M&E framework to ensure that women (and youth and disadvantaged groups) are direct beneficiaries from the project.

## **Project Theory of Change, including linkages, assumptions, drivers and longer-term outcomes and impacts**

Several of the above Outcomes, both within and between components, interlink and work together or are dependent on the progress and results of others (as depicted by the network of arrows in Figure 2, the graphical representation of the Theory of Change). For instance, improved EAF management

planning and implementation under Outcome 2.1 depends in part on improved data gathering, analysis and management under Outcome 1.1 as well as strengthened stakeholder engagement in EAF decision-making under Outcome 2.1. Such linkage represents project risk (failure to deliver one set of activities may impede delivery of another).

In addition, the achievement of the project outcomes and progress towards the project objective and longer-term impacts depends on a number of wider assumptions [3] being met. Assumptions that directly relate to achievement of the project's immediate outcomes are that:

- A1. Government fisheries agencies, fishing communities and private sector fishery groups are willing to engage in co-management of fisheries and marine resources;
- A2. Social and cultural barriers do not prevent women from effectively participating in the sustainable management of fisheries;
- A3. The private sector is willing (or can be encouraged) to invest in activities to address new EAF-related business opportunities and to provide a supportive environment for EAF management.

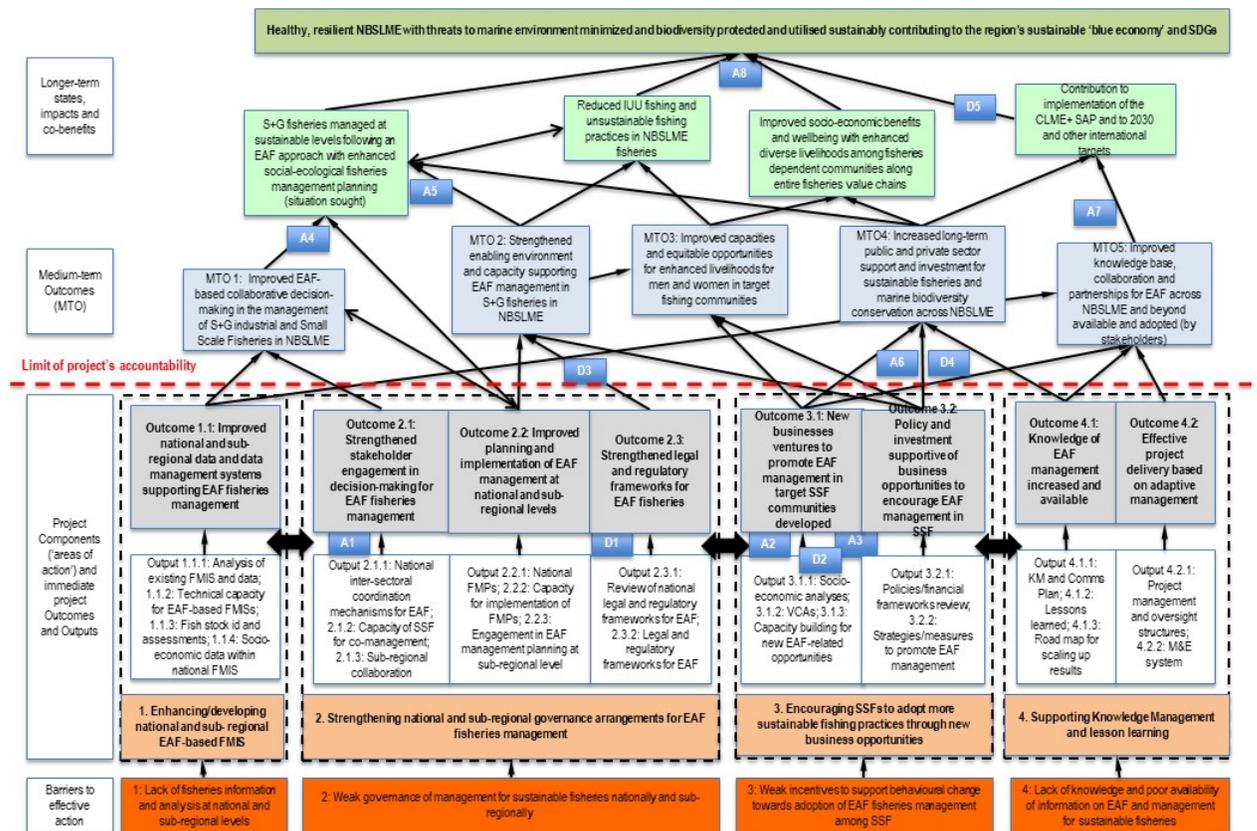


Figure 2. Theory of Change for the EAF4SG project

(A = Assumption; D = Driver. Arrows depict major linkages, lesser ones are not shown)

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- In addition, operation of the project itself rests on several preconditions, including that: (i) the project can secure the external expertise and technical assistance required for a full and timely implementation of project activities (needed for delivery of all Components, but especially Components 1-3); (ii) there is continued commitment of the participating institutions and actors from national to community level during the project lifetime, manifest through their continued staff involvement and co-financing contributions; (iii) there are no major political changes in participating countries that would prevent the project's institutional framework from continuing to operate and deliver project results; and (iv) the Covid-19 pandemic does not continue to have significant negative impacts on the ability of key stakeholders to engage with the project and deliver results or that adaptive management measures are not able to mitigate these impacts. In addition, it is assumed that fishing communities will grasp the opportunities offered by sustainable co-management, and are willing to invest the required time and energy (exact opportunities to be defined during the PPG phase) to change to more responsible fishing practices measures (particularly encouraged through activities under Component 3). In other words, that the project can interest sufficient numbers of fisher folk to abandon their old practices and engage in new ventures which may have a financial risk. Fishers' attitude to change and risk will be examined during the PPG and the results fed into the design of project activities (particularly relevant to activities under Component 3).

Conversely, there are a number of impact drivers<sup>[4]</sup> that may make progress towards achievement of project outcomes more likely, notably:

- D1. Increased awareness among government decision and policy makers about economic, social and environmental value of marine ecosystems and their role in climate change mitigation and sustainable development, the opportunities offered by the blue economy (particularly for supporting recovery from the COVID pandemic) and need to manage coastal and marine resources sustainably, together with increased promotion of the value of marine ecosystems by number of global level initiatives such as the High-Level Panel on Sustainable Ocean Economy;
- D2. The fishing industry (particularly the SSF subsector) is keen to engage in new business ventures for sustainable fisheries.

If the project outcome-level assumptions and impact drivers (A1-3 and D1-2) are met, then delivery of the four project Components will result in further gains along the causal pathway. Together the four Components and their eight Outcomes combine to affect a number of medium-term outcomes (MTO). For instance, the outcomes associated with Components 1 to improve data and data management systems and through Component 2 to strengthen stakeholder engagement in decision-making will combine to improve EAF-based collaborative decision-making in the management of shrimp and ground fisheries (both industrial and SSF) in the NBSLME (MTO1). Similarly, achievement of outcomes under Component 2 to strengthen legal and regulatory frameworks for EAF fisheries and support targeted capacity in EAF management together with those under Component 3 to encourage new EAF-related business ventures and related policy incentives work together to strengthen the enabling environment to support EAF management in shrimp and groundfish fisheries in NBSLME (MTO2). The project's focus on capacity building for EAF and promotion of co-management (outcomes under Component 2) and supporting new

ventures based on more sustainable fisheries e.g. adding value along fisheries value chain or providing alternative livelihood options, (outcomes under Component 3) will offer more equitable opportunities for enhanced and sustainable livelihoods for men and women in target fishing communities particularly for SSF communities (MTO3) and lead to increased long-term public and private sector investment for sustainable fisheries and marine biodiversity conservation across the NBSLME (MTO4). Together these four medium-term outcomes supported by other non EAF4SG project interventions and resources will lead to the NBSLME shrimp and groundfish fisheries managed at sustainable levels following an EAF approach with enhanced social-ecological fisheries management planning (situation sought), whilst also contributing to reducing IUU fishing in the NBSLME region (especially through Component 2 related activities), with improved socio-economic benefits and wellbeing with enhanced diverse livelihoods among fisheries dependent communities along entire fisheries value chains. Apart from gains in specific countries and the shrimp and groundfish fishery, the delivery of project outcomes would also improve the knowledge base for more effective decision-making, collaboration and partnerships for addressing EAF across the NBSLME region and beyond (MTO5), contributing, for instance, to implementation of the CLME+ SAP and to the 2030 and other international targets.

Achievement of these longer-term outcomes, which is beyond the immediate accountability of the project is subject to further assumptions (A4-A8) and three additional drivers (D3-D5), namely that:

- A4. There is sufficient and continued commitment (political support, staff, resources, etc) by national government institutions responsible for fisheries policy, legislation and management for actions to adopt and continue to implement EAF management;
- A5. Perverse subsidies can be eliminated and do not continue to reward unsustainable fishing and encourage overcapacity of fishing fleets;
- A6. Domestic and international markets for sustainable fisheries value chain products can be sufficiently developed and maintained to provide secure, long-term sources of income for fishing communities, particularly for SSF and the benefit of women;
- A7. Countries continue to see the value of, and commit resources for, national and sub-regional cooperation and collaboration to address EAF management;
- A8. Future climate change impacts do not irreversibly affect the structure and function of the CLME+ marine and coastal ecosystems and habitats;
- D3. Obligations under international/regional policy and legal frameworks, such as the Landing Obligations under the EU Common Fisheries Policy (CFP) and the US Seafood Import Monitoring Program (SIMP), which are encouraging more responsible fishing practices in order to maintain fish exports;
- D4. Increasing global demand for premium certified sustainable fish products and/or those which meet national legislation of import countries that require no/mitigated bycatch especially ETP species such as marine mammals;
- D5. Regional initiatives and forums, notably the CLME+ SAP, promoting regional visions, building capacity and facilitating increased inward investment for sustainable management of marine resources, along with international legal obligations, such as national commitments to the CLME+ SAP, SDGs, UNFCCC and CBD.

Together these would be expected to lead to the long-term 'situation sought' of the NBSLME Shrimp and groundfish fisheries managed at sustainable levels following an EAF approach with enhanced social-ecological fisheries management planning and longer term and with additional external inputs (e.g. other national and donor-funded initiatives) to the long-term state of a healthy, resilient NBSLME with threats to marine environment minimized and biodiversity protected and utilised sustainably contributing to the region's sustainable 'blue economy' and SDGs.

#### **d. Alignment with GEF focal area and/or Impact Program Strategies**

The proposed project is aligned with GEF-7 International Waters objectives, principally through catalysing greater adoption and implementation of EAF measures, thereby reducing threats to marine and coastal waters and helping to sustain healthy coastal and marine ecosystems that continue to deliver vital ecosystem services. The project's proposed policy reforms (under Component 2) and capacity building efforts to support technical aspects of the implementation of EAF (mostly Components 1 and 2) will also contribute to addressing IUU fishing and overfishing and incentivize the management for more sustainable marine capture fisheries. At the same time, the project will strengthen sustainable blue economy opportunities through supporting new initiatives and incentives to adopt EAF particularly among SSF (under Component 3), including market mechanisms to support sustainable fisheries value chains with new business opportunities and improving stewardship through co-management (under Component 2). Specifically, the project aligns with two areas of strategic action under *IW Strategic Objective 1 (Strengthening Blue Economy Opportunities)*, namely *IW-1 Sustaining healthy coastal and marine ecosystems* and *IW-2 Catalyzing sustainable fisheries management*.

Although not funded from national GEF Biodiversity Focal Area contributions, the project will also contribute to GEF-7 *BD 1-1 Mainstream biodiversity across sectors as well as landscapes and seascapes*, and *BD 2 Address direct drivers to protect habitats and species*. It will largely achieve this through strengthening national fisheries policies and regulatory frameworks to address the threat of unsustainable capture of target and non-target species (most important for threatened and protected species), and the negative impacts of fisheries on marine and coastal ecosystems. In addition, the project will indirectly support sustainable fisheries management measures relevant to shrimp and groundfish fisheries within marine protected areas (MPAs) in the target countries. Specific MPAs to be targeted by the project will be determined during the project development (PPG) phase.

A key GEF priority within the IW Focal Area is to invest in projects that support SAP implementation. The EAF4SG project directly supports many Strategies and associated Actions of the CLME+ SAP. These are listed in Box 1 above. The project also contributes to IW:LEARN (detailed in the Knowledge Management section of the PIF) which is a major resource platform for supporting the GEF IW focal area and delivery of LME SAPs.

#### **e. Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing**

To successfully advance the adoption and implementation of EAF in the shrimp and groundfish fishery of the NBSLME an incremental GEF investment is essential. The central problem the project seeks to address is the high levels of unsustainable catch among the shrimp and groundfish fisheries of Guyana, Suriname and Trinidad and Tobago and the wider NBSLME region. Apart from affecting target species, current fishing practices in these countries also have a significant negative impact on non-target species (ETP species are of particular concern) and, depending on the gear type, adverse knock-on wider impacts on regional marine habitats and ecosystem. Current fishing management is also wasteful in terms of fishing efficiency and operations.

The proposed GEF investment builds on a series of previous GEF investments supporting NBSLME countries and Caribbean SIDS in the achievement of mutual sustainable fisheries management and national development goals (outlined in baseline section above). The proposed project particularly builds on the CLME+ SAP helping to support delivery of its strategic areas, particularly Strategy 6 that, inter alia, proposes the development and implementation of Ecosystem Approach to Fisheries (EAF) with national and sub-regional fisheries management plans for shared shrimp and groundfish fisheries resources in the NBSLME sub-region. It also builds on a series of previous GEF-funded projects, including the REBYC II LAC, CC4Fish, Stewardfish, and the CLME+ project and its recently approved follow-up PROCARIBE+ project, undertaken over the last decade. However, whilst these previous efforts have shown some successes they have been limited and/or successes remain to be scaled up, and some issues have not been sufficiently addressed (or at all). For instance, although a NBSLME sub-regional Fisheries Strategy and Management Plan for shrimp and groundfish resources developed through the GEF funded FAO CLME+ sub-project on shrimp and groundfish of the NBSLME has been endorsed it has yet to be implemented, along with the two national-level Fisheries Management Plans (FMP) for Suriname and Guyana (Trinidad and Tobago has yet to develop a FMP).

Despite baseline efforts described above, four main barriers act against the achievement of greater adoption and implementation of the EAF fisheries management: (i) lack of adequate and sufficient fisheries information and analysis at national and sub-regional levels; (ii) weak governance and management for sustainable fisheries nationally and sub-regionally; (iii) weak incentives to support behavioural change towards adoption of EAF fisheries management among SSF; and (iv) Lack of knowledge and poor availability of information on EAF and management for sustainable fisheries.

The GEF-funded alternative will address the above constraints and barriers through concerted action with national and sub-regional elements, focusing on selected fisheries and pilot cases in three countries as well as supporting sub-regional collaboration and coordination for sustainable management of shrimp and groundfish fisheries. Although the exact fishing communities that will be targeted by the project have yet to be confirmed the project is expected to focus its efforts on those for which initial awareness-raising, and capacity building has already been undertaken through previous projects (listed above).

Building on the baseline, the project will lead to more sustainable target fish populations in the CLME+ region, including lower impacts of target fisheries on other coastal marine biodiversity and vulnerable benthic habitats. These will be achieved through a wider uptake of EAF fisheries management measures. Fisheries data collection, analysis and statistics along with fisheries management information systems (FMIS) in the three beneficiary countries and at the sub-regional level will be improved through the project thereby supporting more effective data-driven decision-making in the target

fisheries (including better stock assessments on which to base catch limits and harvest control rules and improving the collection and analysis of socio-economic data for EAF management). Governance for sustainable fisheries will also be improved through the project, including GEF investment to strengthen stewardship through improving co-management and participation of local communities in fisheries management, particularly in relation to small-scale fisheries. Enabling policy, regulatory and fisheries management frameworks will be strengthened through the project with specific attention given to actions to support implementation of the sub-regional and national FMPs for the NBSLME shrimp and groundfish fisheries. Incentives to encourage greater public and private investments in, and uptake of, more responsible fishing technologies will be identified, developed and promoted, aimed at both small-scale fisheries and industrial fisheries. The GEF financing will target fisheries value chains, especially for SSF, to demonstrate to local communities the livelihood advantages in adopting more responsible fisheries practices. To support these the project has a focus on identifying, developing and promoting incentives (government policies, measures to improve access to finance services such as credit and insurance, linkage between fisherfolk organizations and markets for responsibly caught fish, etc) to adopt behaviours that support more responsible fisheries. Taken together these actions will help participating countries to strengthen the ecosystem-based approach to fisheries management, and at the same time improve the conservation of marine living resources. As a result, the GEF incremental investment will strengthen sustainable blue economy opportunities and contribute to addressing climate change resilience. The project will also deliver important development, social and economic co-benefits through diversified livelihood opportunities, reduced vulnerability to economic and environmental shocks (such as climate change impacts), improved food and income security for fisherfolk communities, greater involvement of communities in fisheries management decision-making (particularly for women), supporting decent work opportunities and encouraging technical and financial innovation, which are not commonly featured in LME projects. The project will also support national post-Covid recovery efforts in the participating countries, support which under the baseline would not have been available. The project will also improve the knowledge base and exchange of lessons on EAF implementation, and raising awareness and strengthening knowledge networks such as e-learning hubs, and building the capacity for the use of innovative ICT tools, will also support more effective decision-making on sustainable fisheries management at government, private sector and fisher communities? levels.

Overall then, the GEF investment will create significant incremental benefit above the 'non-project' option with respect to environmental goods and services, their linkage with sustainable livelihoods, and with the broader well-being of the communities in the countries involved. Indeed, for a relatively small investment, the project will result in significant positive impacts, including over 5,982,900 hectares of globally significant marine habitat under improved management and an estimated 22,000 tons of globally over-exploited marine fisheries moved to more sustainable levels, as well as contributing to addressing Illegal, Unreported and Unregulated (IUU) fishing concerns.

The GEF funds will leverage a range of commitments, inputs and investments from FAO, CRFM, WECAFC and the participating countries, as well as from the fisheries sector including private sector (e.g. commercial vessel operators and financiers), fisherfolk communities and national and regional fisheries associations, and civil societies, and will connect with other areas of major policy implementation and development investment. The project's total co-financing at the PPG stage is US\$ 7,813,521, which comprises of both in-kind and cash contributions from project partners. The three

countries collectively through their liaison ministries for the project are providing a combined US\$ 2,707,401 of in-kind and cash co-financing in the form of staff time, use of equipment, office space, etc. The CFRM Secretariat is providing US\$ 200,000 (in-kind co-financing) and WECAFC Secretariat a co-financing contribution of US\$ 220,000 (cash and in-kind combined). The GEF Implementing Agency FAO is also providing cash and in-kind contributions totalling US\$ 1,186,120 through its various offices (country, sub-regional and headquarters). It is expected that the engagement of the private sector, Academic Institutions, and International Donors will provide additional co-financing contribution of US\$ 3,500,000 (cash and in-kind combined). The project's proposed multi-stakeholder coordinated approach will provide the necessary base for making coherent and viable investments, and consequently the cost-effectiveness of the project is expected to be high.

In the 'business as usual' scenario, unsustainable fishing of target species and marine habitat damage and loss within the NBSLME will continue to occur in those fisheries which have not fully adopted EAF management (or EAF will only be applied on an ad hoc basis), with continued loss and degradation of marine biodiversity and habitats. Given most fish stocks are shared between several countries in the NBSLME region and involve multiple stakeholders, coordination and support on advancing EAF is essential. Under the 'business as usual' scenario without GEF investment, participating countries would only integrate the use of EAF approaches during fisheries management planning and implementation on an ad hoc or opportunistic basis, without a national and sub-regional roadmap that represents the integrated interests and inclusion of multiple stakeholders and lacking robust fisheries management information systems and area-based management decision making tools.

Whilst under the baseline there is likely to be increasing awareness of the threats to fishery sustainability caused by the region's fisheries and unmanaged bycatch, without GEF involvement it will take longer to address these threats because of limited access to technical and financial assistance and capacity development. Under the baseline, the ability to fully implement EAF management will be limited by the weaker involvement of fisherfolk organizations and institutions to engage effectively in fisheries co-management, largely because of a lack of financing to support capacity building for their participation and encourage the uptake of more EAF management at the local level. Furthermore, financing opportunities are likely to be uncoordinated, failing to take advantage of economies of scale and experiences from other NBSLME nations (Brazil, French Guiana, Venezuela) and other countries in the wider Caribbean and IW community. Investments by national governments in fisheries would be directed to largely maintaining core functions with ad hoc non-strategic projects used to fill urgent gaps which would likely fail to address the overarching and long-term needs of the fisheries and the fisherfolk who depend on them for their livelihoods. At the same time, private sector investment will continue to view responsible fisheries approaches as costly and with limited benefits (the MSC certified seabob fishery in Guyana and Suriname is a rare example). Incoherent and piecemeal projects would be used to fill urgent gaps; projects that would likely fail to address the overarching and long-term needs of the fishery and the fisherfolk who depend on the fishery for their livelihoods (fisherfolk that have hardly any alternative livelihood options). Also, given the recent conclusion of several sustainable fisheries focused initiatives in the region (e.g. the FAO CLME+ Sub-project on shrimp and groundfish of the NBSLME and the REBYC II LAC project), there is a potential danger of a loss of critical institutional knowledge, expertise and opportunities to leverage information and project results, and importantly, stalling of political momentum for sub-regional cooperation towards and improving the implementation of EAF in the NBSLME countries. The net result will likely be varying degrees of

modest progress made towards implementing EAF approaches based on capacity and interests of individual governments at the expense of sustainable fisheries planning and marine resource management throughout the NBSLME.

In the absence of the GEF incremental investment, this baseline is particularly likely following the Covid-19 pandemic, which has had significant economic and societal impacts on NBSLME countries, and when governments are likely to focus their attention on other immediate human development challenges over the next few years, and private sector investors will remain cautious due to the uncertainties over recovery from the Covid-19 pandemic.

GEF added value will facilitate support of FAO, CRFM and WECAFC and other key partners to participating NBSLME countries. GEF funds will help link parallel baseline activities so that each organisation's comparative advantage is maximized to the benefit of participating countries. FAO's comparative advantage will be as a technical agency with competencies in EAF management across all project components. During project preparation phase, the distribution of tasks and responsibilities across components and between outcomes will be better defined, which may change the fee allocation among agencies.

#### **f. Global environmental benefits (GEFTF)**

The project will contribute to several GEF-7 Core indicators targets, principally those related to the GEF International Waters Focal Area. These include: GEF Core indicator 8 - Globally over-exploited marine fisheries moved to more sustainable levels through the increased adoption and implementation of EAF within fisheries management (both industrial and SSF) in the NBSLME region, with a conservative estimate of roughly 22,000 metric tonnes of over-exploited fisheries moving towards more sustainable levels; GEF Core indicator 5 - Area of marine habitat under improved practices (excluding protected areas) covering approximately 5,982,900 ha through supporting the implementation of fisheries management and marine biodiversity conservation plans within the EEZs of the target countries that aim to deliver more sustainable fisheries; and GEF Core indicator 7 - Number of shared water ecosystems (fresh or marine) under new or improved cooperative management, contributing to one LME - the NBSLME system - through implementation of some of the key aims of the CLME+ SAP relating to sustainable fisheries including strengthened EAF and fisheries co-management (particularly strategy 6), and establishment and/or enhancement of national and sub-regional co-management arrangements among the three participating countries, as well as strengthened EAF. In addition, depending on the final decision on the locations for the project activities (to be determined during the PPG phase), the project may also contribute to GEF Core indicator 2 - Marine protected areas created or under improved management for conservation and sustainable use, as there are a number of MPAs within the NBSLME area of the three target countries where fisheries occur (area to be determined during the PPG phase). Finally, it is expected that the project will target around 12,000 people (8,000 men, 4,000 women) which addresses GEF-7 Core Indicator 11 - Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment, across the three participating

countries. These figures include the important part-time and seasonal labour forces in the fisheries, and those involved in proposed value chain developments. More refined GEF Core Indicator targets values will be determined during the full project development phase.

The project will help protect habitat and reduce destructive practices by helping to protect habitat and reduce destructive practices through the focus on moving the shrimp and groundfish fisheries to more sustainable levels through greater adoption and implementation of the EAF approach to fisheries management. For instance, it will help to protect and restore populations of target and non-target fish and invertebrate populations through EAF based conservation and management measures (CMMs) (building on prior efforts through the FAO-CLME+ Subproject on shrimp and groundfish of the NBSLME for this fishery). Consequently, as noted above, the project will contribute to GEF Biodiversity Focal Area priorities. In addition, climate change issues will also be addressed through building the resilience of fisher communities through creating opportunities to enhance and diversify livelihoods.

The proposed project will address SDG Goal 14 ? Life below Water - which calls for specific actions in fisheries inter alia: address overfishing and illegal fishing; effectively regulate harvesting including destructive fishing practices; increase economic benefits from sustainable management of fisheries and aquaculture; provide access for small-scale fisherfolk to resources and markets and implement UN Convention on the Law of the Sea (UNCLOS) provisions. The project will particularly address targets 14.2 (Protect and restore ecosystems), 14.4 (Sustainable fishing), 14.7 (Increase economic benefits from sustainable use of marine resources), and 14.a (Increase scientific knowledge, research and technology for ocean health) and 14.b. (Support small-scale fishers).

The proposed project also is in support of the first draft of the Post-2020 Global Biodiversity Framework highlighting the importance of ecosystem-based approaches and the sustainable management of marine species. The following targets for urgent action over the decade to 2030 are relevant to this project:

- Target 2: ?Ensure that at least 20 per cent of degraded freshwater, marine and terrestrial ecosystems are under restoration, ensuring connectivity among them and focusing on priority ecosystems?
- Target 8. ?Minimize the impact of climate change on biodiversity, contribute to mitigation and adaptation through ecosystem-based approaches, contributing at least 10 GtCO<sub>2</sub>e per year to global mitigation efforts, and ensure that all mitigation and adaptation efforts avoid negative impacts on biodiversity?
- Target 9. ?Ensure benefits, including nutrition, food security, medicines, and livelihoods for people especially for the most vulnerable through sustainable management of wild terrestrial, freshwater and marine species and protecting customary sustainable use by indigenous peoples and local communities?

The project is also relevant to the UN?s Decade of Ocean Science (2021-2030), specifically the priority area of ?A sustainably harvested and productive ocean?. The proposed project will also support the relevant proposed post-2020 Biodiversity targets (notably successor to Aichi target 6), through promoting the EAF approach to fisheries management to ensure sustainable use of marine resources.

## **g. Innovation, sustainability and potential for scaling up**

**Innovation:** Central to the project's goal is advancing the adoption and implementation of the innovative concept of EAF. Innovation is evident in each of the components of the project. The project will assist the participating countries to take advantage of the wide-range of ecological, socio-economic and institutional benefits of EAF management with respect to their shrimp and groundfish fisheries. Innovative and adaptive fisheries management practices such as building stewardship through co-management activities that involve the use of ICT tools and e-learning hubs, encouraging public-private partnerships for SSFs, leveraging business opportunities that improve training in business skills and value chain analysis for SSF underscored by decent work, and introducing new policy directives that support investments in SSF are worthwhile initiatives under the project. Capacity development will introduce fisherfolk leaders (men and women) to new systems of organization management and other skills to better participate in EAF management some of which will involve new technology and ICT, minimizing conventional classroom formal training in preference to more hands-on approaches to the extent possible. On the other hand, fisheries officers from the three countries will be trained on theory and practice of recently developed data-limited stock assessment methods using packages developed for the freely available R language for statistical computing. The Calipseo system for fisheries data recording and analysis represents a new platform developed by FAO that allows for easy and simple deployment and rolling out of national fisheries statistics and management information system. The Calipseo platform can be easily integrated with the 'Smartforms' mobile app for supporting fisheries statistical data collection and review. Sharing of knowledge on successful development of real-world solutions to EAF management is a key feature of the project, and the transfer and scaling up of project-generated knowledge through the direct involvement of multiple end-users (fishers, managers, fishing agencies, environmental NGOs, etc) will be facilitated through project Component 4.

**Sustainability:** Sustainability of project results is built into the project design with actions to minimize the risks to sustainability. Experience from previous GEF-funded initiatives in the region, such as the FAO-GEF REBYC II project and the FAO-CLME+ sub-project on shrimp and groundfish of the NBSLME, shows that demonstration of the benefits of EAF including the stakeholder consultation process for development and review of fisheries management plans, will encourage their integration as standard operating practices within the fisheries industry. Similarly, the ability to demonstrate that fish is sourced from fisheries following EAF based management e.g. marine fisheries certification standards will make the fishing industry business more competitive on regional and world markets. Indeed, recent fish import requirements by some developed countries to prohibit the intentional mortality or serious injury of some bycatch species/groups in the course of commercial fishing operations in the fisheries or the requirement to have procedures in place to reliably certify that a country's exports of fish and fish products are not the product of an intentional killing or serious injury e.g. the US Marine Mammal Protection Act ' Fish and Fish Product Import Provisions, also support sustainability aims. Enshrining the requirement to implement EAF and providing the capacity to do so within national policy and legislation in the three target countries (through Component 2) will help create the enabling platform for wider and more permanent adoption of EAF across both SSF and industrial fisheries in the NBSLME.

The project's capacity building efforts (present in all four Components) to promote wider implementation of EAF, including strengthening national fisheries authorities and SSF to undertake co-management of shrimp and groundfish resources and with a focus on both the fisherfolk organizations and fisheries-related state agencies, are a key element of the project and central to the sustainability of project results and the long-term implementation of EAF. Fisheries agencies will be strengthened to support fisherfolk organizations and vice versa.

It is expected that by the end of the project (year 4), the key fisheries-related institutions, organizations and stakeholders will have sufficient capacity to ensure continuity of the project results. A 'training of the trainer' approach and learning-by-doing methodologies, combined with an effective Knowledge Management programme (Component 4) promoting wide sharing of project-generated information (with project data base/knowledge repository), lessons learned and good practice including linkage with well-established knowledge platforms and the websites of project partners, will ensure that capacity and knowledge generated by the project will be sustained over the longer-term.

The project is designed to reduce socio-economic risks to the sustainability of project results through empowering fisherfolk and fishing communities and promoting participatory co-management of fisheries (through Component 2) that takes into account the local dynamics of social-ecological systems which are critical to the successful application of the EAF approach. Integral to this are project efforts to promote gender equality and gender mainstreaming throughout its components, strengthening capacity from the ground up, as well as employment of learning-by-doing methodologies. Developing the potential of alternative livelihoods, building better connections to relevant markets, and enhancing capacity in fisheries value chain analysis (through Component 3), facilitating new policies that support investments in SSF with new business opportunities developed, will help ensure more sustainable livelihoods and improved local food security and nutrition as well as increasing the resilience of the target coastal communities against economic and social shocks and climate change impacts.

These actions and promotion of fisheries co-management will offer the potential for fair and decent work including improved working conditions in the fisheries industry and therefore promote a better quality of life quality for workers (particularly for women) and their families, further supporting sustainability of project results. In this context, the FAO Voluntary Guidelines for Securing Small-Scale Fisheries, and the Code of Conduct for Responsible Fisheries (CCRF) will provide guiding principles for the design and implementation of project activities targeted at SSF communities.

Further support for the sustainability of project results comes from the strong project partnerships with well-established regional and national entities, such as with WECAFC and CRFM, which share similar aims and mandates with regard to achieving responsible fisheries. For instance, the project has been designed in close alignment with already endorsed policies and mechanisms, such as the CLME+ SAP, the Caribbean Community Common Fisheries Policy (CCCFP), and the CRFM 2022-2030 Strategic Plan, and supports these organizations and their mandates. Consequently, the project does not rely heavily on establishing new policy and institutional frameworks or mechanisms that would be required to promote project goals after the project concludes. Institutional sustainability will be further promoted by the involvement of the CRFM Secretariat in the project, providing the opportunity to ensure that the project results are embedded in its strategy and programmes and also helping to facilitate scaling up through CRFM's wide membership (which includes Guyana, Suriname and Trinidad and Tobago).

Similarly, the involvement of the WECAFC/CRFM/IFREMER Shrimp and Groundfish of the Guianas-Brazil Shelf Working Group in the project promotes sustainability of project results.

The project promotes environmental sustainability through enhancing sustainable fisheries and marine biodiversity conservation as a result of an EAF based management approach (particularly through Component 2), addressing overfishing and marine habitat degradation (mostly seafloor), consistent with the CLME+ SAP objectives. The project is also compliant with the FAO Environmental and Social Standards (ESS) and rated as 'low risk' given its overall focus on EAF and promoting responsible fisheries, which supports environmental sustainability aims.

Scaling-up: Translating project successes to other non-participating countries (both coastal and island states) in the NBSLME and wider CLME+ region as well as other tropical and sub-tropical LMEs is a major element of Component 4. Project results are likely to be of particular value to non-project countries involved in fisheries in the NBSLME sub-region, notably Brazil, Venezuela and French Guiana, all of which will be invited to project knowledge sharing and lesson learning activities as non-GEF funded participants which will upscale project impacts and further promote sustainability of project results. Project results, successful lessons and good practices will be disseminated and scaled up through both national, regional and global level partners and initiatives, including through measures to implement the CLME+ SAP, project linkage through non-participating member countries of CRFM, WECAFC and OSPESCA, and other GEF-financed projects including the recently approved UNDP-GEF PROCARIBE+ project, the CAF-FAO-GEF Promoting National Blue Economy Priorities Through Marine Spatial Planning in the Caribbean Large Marine Ecosystem Plus project, and the FAO-GEF REBYC III CLME+ project. All of the above initiatives support measures for sustainable use of natural resources in the CLME+ region, and exchange and collaboration on approaches and methods will support mutual up-scaling of results.

The existence of several closely connected (in space and time) GEF-funded projects offers unprecedented opportunities for synergies and scaling up through linkages and networking and potential leverage to achieve greater economies of scale depending on the sequencing of activities. The REBYC III CLME+ project is of particular relevance given its focus on aspects of EAF, notably bycatch and discard reduction and mitigation, and the overlap in target countries – both the EAF4SG and REBYC-III CLME+ projects include Guyana, Suriname and Trinidad and Tobago, and the REBYC III CLME+ project is considered the 'sister project' to the proposed EAF4SG project.

The project will also maintain close ties with the regional fishery bodies (CRFM, WECAFC, OSPESCA and others in the RFB network linked to FAO), as well as Fishery Advisory Committees and the National Inter-sectoral Coordination Mechanisms in the target countries, research institutions (notably UWI) and NGOs (CANARI, CNFO, WWF and Conservation International) as well as global initiatives such as FAO-GEF Coastal Fisheries Initiative (CFI) project. Additionally, a proposed project e-learning hub will be freely available and easily accessible, providing increased opportunities for fisherfolk in non-participating Caribbean countries to engage in sustainable fisheries. At the global level, the project will achieve dissemination through sharing results with the IW:LEARN and LME:LEARN communities<sup>[5]</sup> and through FAO-supported fisheries networks.

The project also offers the potential to scale up impact through activities to attract private sector investments in responsible fisheries at the local, national, sub-regional and CLME+ wide levels,

including new or strengthened policies supporting private sector investments in SSF, the development of incentives for new business opportunities and strengthening capacity in value chains (through Component 3), the strengthening of co-management (through Component 2), and facilitating access to improved knowledge on effective, locally relevant solutions to achieving responsible fisheries through online content (through Component 4). Related to this, it is expected that follow-up bankable proposals will be developed to scale-up the key achievements of this project during the final year of the project as part of a project sustainability strategy.

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**Footnotes:**

[1] <https://crfm.net/>

[2] [https://www.fao.org/fileadmin/user\\_upload/faoweb/FI\\_Meetings/WECAFC/FDSWG/2021/2e.pdf](https://www.fao.org/fileadmin/user_upload/faoweb/FI_Meetings/WECAFC/FDSWG/2021/2e.pdf)

[3] Assumptions are defined here as external factors or conditions that need to be present for change to happen, but are beyond the power of the project to influence or directly address, e.g. turnover of government officials, global financial situation.

[4] Impact drivers defined here as significant external factors that can positively influence the direction of change along the project's causal pathways from outputs to outcomes to impacts, and over which the project, or its stakeholders/partners has some degree of control or influence, e.g. public pressure on decision-makers through KM and advocacy activities.

[5] See <https://www.iwlearn.net/> and <https://ioc.unesco.org> respectively

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#### **1b. Project Map and Coordinates**

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

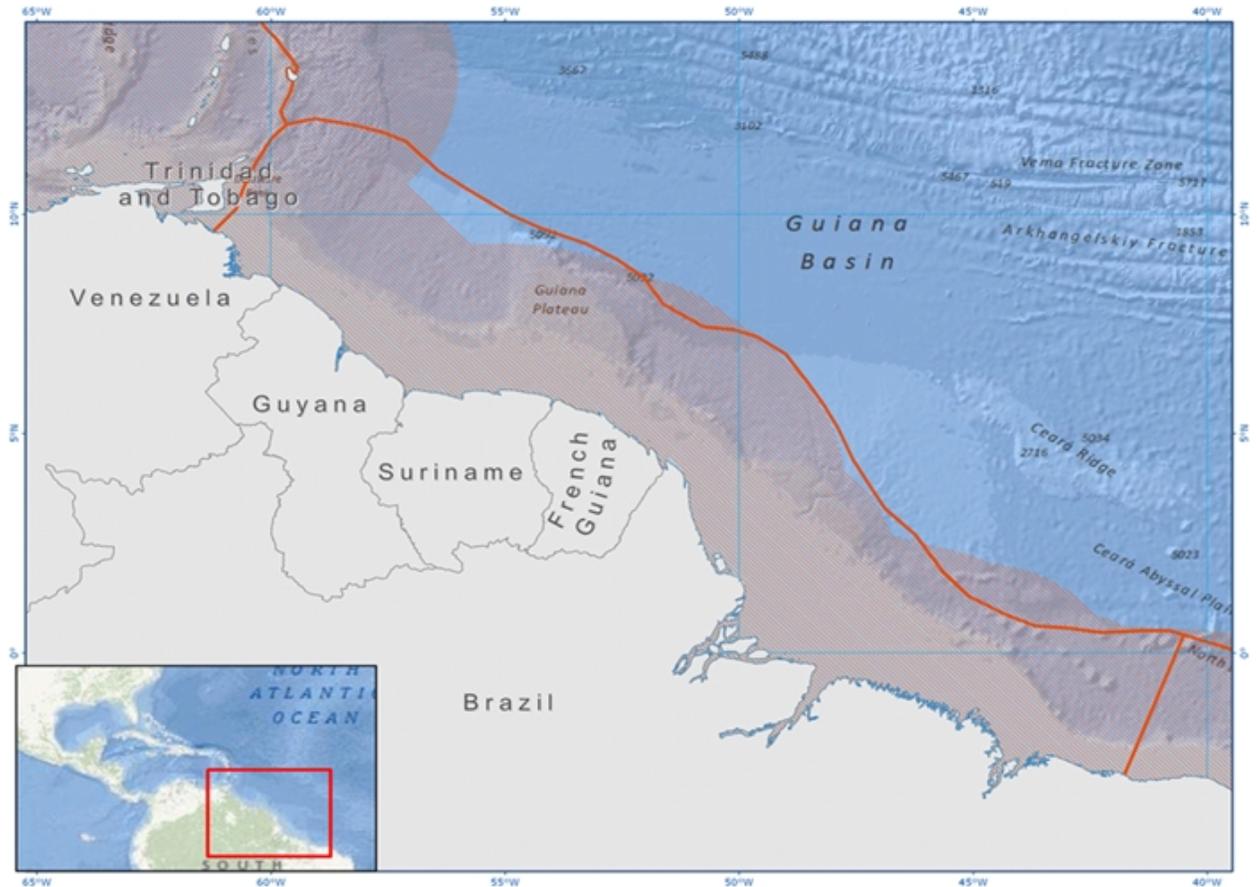
##### **Coordinates**

9°37' N, 61°14' W

02°46' S, 41°48' W

00°23' S, 40°35' W

12°05' N, 59°39' W



## 2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

**Indigenous Peoples and Local Communities** Yes

**Civil Society Organizations** Yes

**Private Sector Entities** Yes

**If none of the above, please explain why:**

Stakeholder consultations during the PIF phase were constrained by COVID-related lockdowns and restrictions over the last 20-24 months. Nevertheless, the project has engaged with a variety of key stakeholders at the national and regional levels during the initial project development phase. This included the national fisheries agencies of Guyana, Suriname and Trinidad and Tobago, notably officials at the decision-making level (Permanent Secretaries/Ministries and GEF OFP, and Chief Fisheries Officers), FAO (sub-regional office in Barbados as well as FAO Country Offices in Guyana, Suriname and Trinidad and Tobago), and the CRFM Secretariat, UWI-CERMES, and the CLME+ GEF project. In addition, the project has had exchanges with the design teams of the GEF-funded PROCARIBE+, BE-CLME+ and recently approved REBYC III CLME+ projects to explore early possible collaboration and synergies (beginning in the PPG phase and facilitated by FAO being the

implementing agency for two of these). Project development has also been informed by discussions with other regional GEF projects, particularly the FAO-GEF CC4Fish project and StewardFish project. Initial discussions included assessment of the current situation, identification of specific needs and prioritization of project activities based on an outline project concept document. The proposed project was presented at the Fourth (Virtual) Meeting of the WECAFC/CRFM/IFREMER Working Group on Shrimp and Groundfish in North Brazil-Guianas Shelf on 18-19 November 2020 and a virtual meeting to the national country partners on 20th July 2021, and a revised proposal was reviewed and feedback offered by the participating countries in December 2021. More in-depth consultations with the key stakeholders will be undertaken during PPG including those shown in the table below.

This project will draw together a large and diverse group of stakeholders who play important roles in fisheries in the NBSLME region. Key project partners include the national fisheries authorities of the three target countries (Fisheries Department, Ministry of Agriculture, Guyana; Fisheries Directorate, Ministry of Agriculture, Animal Husbandry and Fisheries, Suriname; and Fisheries Division, Ministry of Agriculture, Land and Fisheries, Trinidad and Tobago), as well as fisher folk organisations (both national and local). Other stakeholder groups to be involved include private sector fishing enterprises (small and large scale), processors, marketers and retailers, and others involved along target fisheries value chains including institutions financing the fisheries. Depending on how activities under Component 3 are developed during the PPG phase, linkages will be formed with financial and insurance sector companies and groups/NGOs addressing gender and alternative livelihood issues in fisher communities. An emphasis will be placed on effective participation of women in the project with specific activity sets to help empower and directly benefit women (meeting both GEF and FAO gender policy objectives).

At the regional level, linkage with several Regional Fisheries Bodies, principally the CRFM, the Central America Organization for Fisheries and Aquaculture (OSPESCA), and WECAFC, as well as NOAA, Institut Français de Recherche pour l'Exploitation de la Mer (IFREMER, the French Sea Research Institute), the Caribbean Network of Fisherfolk Organizations (CNFO), and the Cartagena Convention SPAW Protocol/RAC, as well as the Caribbean Community Climate Change Centre (CCCCC), will both support project delivery and facilitate scaling up and wider impact of project successes throughout the wider CLME+ area and global level. In addition, several regional academic institutes such as the Centre for Resource Management and Environmental Studies (CERMES) of the University of the West Indies in Barbados will be engaged and strong linkages are foreseen with civil society organisations including the Caribbean Natural Resources Institute (CANARI), along with various target area fisherfolk organizations. Environmental NGOs, such as Conservation International and WWF Guianas, will also be invited to participate as they both have active fisheries-related projects in the NBSLME region. The project will build on existing collaborations, particularly through those developed through the FAO-managed CLME+ Sub-Project on Shrimp and Groundfish of the NBSLME and the recently completed FAO-GEF REBYC-II LAC project.

An overview of main stakeholders is presented below with their roles and responsibilities during the full project design period and expected role during project implementation outlined. The latter will be elaborated further during the project development phase.

Stakeholder	Participation in project preparation	Participation in project implementation
<b>Government Institutions</b>		
<b>GUYANA</b>		
Fisheries Department	Project Focal Point, Liaison Office in country and lead national agency supporting development of project activities in Guyana	Direct responsibility for ecosystem-based fisheries management, research and licensing and enforcement of fisheries regulations. Also, facilitate and support legal, policy and institutional related outcomes proposed by the project  National executing partner for project, responsible for delivery of project activities relevant to country including project M&E at national level
Environmental Protection Agency	GEF Operational Focal Point  Validation and endorsement of PIF and CEO Endorsement Request	Facilitate and support all policy related outcomes proposed by the project  Project Monitoring and Evaluation at the national level  Liaison with the GEF Implementing Agencies and the project's Executing Agency  Contributes to project oversight (member of national PSC)
Ministry of the Presidency ? Department of Energy	Source of information on the developing petroleum/hydrocarbon resources sector	Important project partner for capacity building, blue economy advocacy, and knowledge management
Ministry of Agriculture	Parent ministry responsible for fisheries policy and management	Important project partner for policy and decision-making on EAF at the national level
Customs Department	Consultation on operational and structural opportunities to incorporate surveillance and monitoring of fishing into customs operations	Key capacity building and advocacy partner for EAF and promote legal fishing
Ministry of Business	Source of information on business ventures within the context of blue economy	Important project partner for supporting blue economy initiatives, including improving access to financing, development of value chains, as well as other incentives for adoption of responsible fisheries, Also input to associated capacity building, and Knowledge Management
Coast Guard	Consultation on operational opportunities to promote fisheries MCS	Key partner for capacity building and definition of strategies to promote legal fishing
<b>SURINAME</b>		

Stakeholder	Participation in project preparation	Participation in project implementation
Directorate Fisheries, Ministry of Agriculture, Animal Husbandry and Fisheries	Project Focal Point, Liaison Office in country and lead national agency supporting development of project activities in Suriname	Direct responsibility for ecosystem-based fisheries management, research and licensing and enforcement of fisheries regulations. Also, facilitate and support legal, policy and institutional related outcomes proposed by the project  National executing partner for project, responsible for delivery of project activities relevant to country including project M&E at national level
Ministry of Spatial Planning and Environment	GEF Operational Focal Point  Validation and endorsement of PIF and CEO Endorsement Request	Liaison with the GEF Implementing Agencies and the project's Executing Agency Responsible for policy with regard to environment and climate change  Facilitate and support legal, policy and institutional related outcomes proposed by the project  Contributes to project oversight (member of national PSC)
Ministry of Land and Forestry	Consultation on project aims and components	Responsible for management of coastal zone and enforcement within Multi Use Management Areas (lagoons)
Maritime Authority Suriname	Consultation opportunities to promote sustainable fisheries and improve MCS	Key partner responsible for maritime services including registration of vessels and safety of shipping.
Coast Guard, Ministry of Internal Affairs	Consultation opportunities to promote sustainable fisheries and improve MCS	Key partner for the enforcement of MCS at sea
Ministry of Justice and Police: maritime police and prosecution	Consultation opportunities to promote sustainable fisheries and improve MCS	Key partner for enforcement on land and the follow up with prosecution
Navy Suriname, Ministry of Defense	Consultation opportunities to promote sustainable fisheries and improve MCS	Key partner for enforcement, responsible for border patrol
<b>TRINIDAD AND TOBAGO</b>		

Stakeholder	Participation in project preparation	Participation in project implementation
Fisheries Division, Ministry of Agriculture, Land and Fisheries	Project Focal Point, Liaison Office in country and lead national agency supporting development of project activities in Trinidad and Tobago	<p>Direct responsibility for ecosystem-based fisheries management, research and licensing and enforcement of fisheries regulations. Also, facilitate and support legal, policy and institutional related outcomes proposed by the project</p> <p>National executing partner for project, responsible for delivery of project activities relevant to country including project M&amp;E at national level</p>
Environmental Management Authority	<p>GEF Operational Focal Point</p> <p>Validation and endorsement of PIF and CEO Endorsement Request</p>	<p>Regulatory agency with respect to the environment.</p> <p>Liaison with the GEF Implementing Agencies and the project's Executing Agency. Responsible for policy with regard to environment and climate change.</p> <p>Facilitate and support legal, policy and institutional related outcomes proposed by the project</p> <p>Contributes to project oversight (member of national PSC)</p>
Institute of Marine Affairs (IMA)	Source of information on fisheries resources and marine environment	Key partner in fisheries and marine research
Caribbean Fisheries Training and Development Institute	Consultation opportunities on capacity-building for fishers	Key partner for conduct of training of fishers in such areas as safety at sea, engine repair, fish handling and processing
Maritime Services Division, Ministry of Works and Transport	Consultation opportunities to promote fisheries MCS	Key partner responsible for maritime services including registration of vessels and safety of shipping.
Ministry of Energy and Energy Industries	Source of information on the petroleum/hydrocarbon resources sector	Important project partner for EAF in terms of shared use of marine space and resources and resultant impacts
Ministry of Planning and Development	<p>GEF Political Focal Point</p> <p>Source of information on activities being conducted in the coastal zone.</p>	<p>Parent ministry responsible for environmental policy and management</p> <p>Responsible for management of the coastal zone</p>

Stakeholder	Participation in project preparation	Participation in project implementation
Office of Disaster Preparedness and Management	Consultation opportunities to promote disaster risk management	Partner responsible for implementation of comprehensive disaster management, ie. management of all hazards (that threaten human life, economy and infrastructure) through the phases of prevention and mitigation, preparedness, response, recovery and rehabilitation
Ministry of Trade and Industry	Source of information on trade and industry within the context of blue economy	Key partner in regulating fisheries-related trade
Ministry of Agriculture, Land and Fisheries	Parent ministry responsible for fisheries policy and management	Important project partner for policy and decision-making on EAF at the national level. Facilitate and support all policy related outcomes proposed by the project.
Coast Guard, Ministry of National Security	Consultation on opportunities to promote fisheries MCS	Key partner for the enforcement of MCS at sea
Customs and Excise Division, Ministry of Finance	Consultation on operational and structural opportunities to incorporate surveillance and monitoring of fishing into customs operations	Key partner in promotion of legal fishing
Division of Community Development, Ministry of Sport and Community Development	Consultation on opportunities to promote alternative and enhanced livelihoods for fishers	Key partner in livelihood enhancement of fishers
Co-operative Development Division, Ministry of Labour and Small and Micro Enterprise Development	Consultation on opportunities to promote organization of fishers	Key partner in capacity building of fishers with respect to establishment and administration of co-operatives as viable business enterprises. Responsible for oversight of fisher co-operatives.
<b>Inter-governmental and External Governmental Institutions</b>		

Stakeholder	Participation in project preparation	Participation in project implementation
Food and Agriculture Organization of the United Nations (FAO)	GEF Agency for this project. Key partner on region-wide fisheries management approaches and lessons learned	Global coordinating entity, ensuring coherence in global-regional fisheries management and development, including EAF and blue growth, and FAO has worked extensively on fisheries management throughout the region  Responsible for project implementation, including providing substantial technical support
Caribbean Regional Fisheries Mechanism (CRFM)	They will be engaged throughout the project to make certain activities are well-aligned with the CFRM strategy. Potential project executing body.	CRFM is an inter-governmental organization concerned with the promotion of sustainable fisheries in the region.
Western Central Atlantic Fishery Commission (WECAFC)	Subunit of GEF Agency important for project technical support. Shrimp and Groundfish Working Group agreed to support PIF.	Key for coordinating project in regional and sub-regional fisheries management approaches, including blue economy and EAF. Convener of sub-regional meetings
Interim Coordination Mechanism for Sustainable Fisheries of CRFM, OSPESCA and WECAFC	Will be kept informed of project activities and several of its Working Groups, e.g. those for Fisheries Data and Statistics, are expected to be involved in project activities	The ICM aims to facilitate, support and strengthen the coordination of actions among the three RFBs to increase the sustainability of fisheries. It formalizes the joint working arrangements and processes, particularly for the joint working groups on various species and specific fisheries
National Oceanic and Atmospheric Administration (NOAA) of USA	NOAA already engages with RFBs in the region on a variety of science and monitoring activities. These programs and project collaboration will help to inform and strengthen the design of project outputs.	Provides fisheries information systems for conservation and management, as well as more responsible fishing technology
Institut Français de Recherche pour l'Exploitation de la Mer (IFREMER)	With a research facility in French Guiana IFREMER is a key research partner for the NBSLME	Collection and analysis of statistical and biological data on shrimp and groundfish resources exploited in waters of French Guiana. Collaborates with countries in the region in marine exploited populations research. Participates in the WECAFC/CRFM/IFREMER working group on shrimp and groundfish of the North Brazil-Guianas shelf
<b>Civil Society Organizations, Big and Small Non-Governmental Organizations</b>		

Stakeholder	Participation in project preparation	Participation in project implementation
World Wide Fund for Nature (WWF)	Involvement in providing support on sustainable fisheries certification and standards	Knowledge management and information exchange especially on marine spatial planning, ecosystem health, biodiversity. Involvement in involvement in the MSC marine resources certification schemes in Suriname and Guyana.
Caribbean Natural Resources Institute (CANARI)	Important partner to be consulted on ecosystem-based strategies and civil society participation within the context of blue economy. Potential project executing body.	Important partner on civil society and small business participation within the context of EAF  Key capacity building and advocacy partner for the ecosystems approach and Knowledge Management within a blue economy context
Conservation International (CI)		Knowledge management and information exchange especially on marine spatial planning, ecosystem health, biodiversity
<b>Academia</b>		
Centre for Resource Management and Environmental Studies (CERMES) of UWI	Source of data and information on the socio-economic benefits of responsible fisheries and blue growth in Caribbean. Provided input to drafting of the PIF document	Source of technical expertise and consultations in processes to develop and implement responsible fisheries, blue growth opportunities, engagement and awareness strategies. Support for capacity building activities and Fisheries Policy and Plan development.
Department of Agricultural Economics and Extension, Faculty of Food and Agriculture, University of the West Indies (UWI), St. Augustine	Source of data and information on fisheries socio-economics and value chains	Source of technical expertise in socio-economics and value chain analysis of fisheries
Department of Electrical and Computer Engineering, University of the West Indies (UWI), St. Augustine	Source of data and information on ICT in fisheries	Source of technical expertise in development and implementation of ICT for fishing industry, and key partner in capacity building of fishes in use of ICT, and carry out ICT training

Stakeholder	Participation in project preparation	Participation in project implementation
Department of Life Sciences, The UWI, St. Augustine	Source of data and information on fisheries	Staff can provide a source of technical expertise in fisheries science and research. There are 5 undergraduate courses being taught that are focused on coastal and marine ecosystems, one of these courses is specifically focused on Fisheries Management.
University of Trinidad and Tobago	Source of data and information on fisheries	Source of technical expertise in fisheries science and research
<b>Private Sector</b>		
Caribbean Network of Fisherfolk Organizations	Consultation on opportunities for promotion of information sharing on EAF measures, co-management and value chain analyses. They will be engage to provide insights regarding development of project activities and will be a beneficiary of project activities	Key NGO representing a variety of fishing interests including on fishers? socio-economic conditions and is a source of extensive traditional knowledge on fishing  Instrumental in ensuring participation of fishers in capacity building and in garnering support for sustainable fisheries, including uptake of bycatch mitigation measures, and blue economy policy
Trinidad and Tobago United Fisherfolk	Umbrella association representing fishers? socio-economic interests  Source of local knowledge on fishing  Consultation on opportunities for promotion of information sharing, co-management and value chain analyses	Instrumental in ensuring the participation of fishers in capacity building and in garnering support for EAF implementation  Key partner in development and implementation of fisheries policy
Trinidad and Tobago Industrial Fishing Association Limited	Association representing non-artisanal trawl fishers? socio-economic interests.  Consultation on opportunities for promotion of information sharing, co-management and value chain analyses.	Instrumental in ensuring the participation of fishers in capacity building and in supporting EAF implementation.  Key partner in development and implementation of fisheries policy.  Source of extensive traditional knowledge on fishing.

Stakeholder	Participation in project preparation	Participation in project implementation
Upper Corentyne, Guyana National Fisherfolk Organisation	Consultation on opportunities for promotion of information sharing on sustainable fisheries, co-management and value chain analyses and blue growth	Key institution representing fishers? socio-economic interest and source of extensive local knowledge on fishing.  Key partner for implementation of all components  Instrumental in ensuring the participation of fisherfolk in capacity building and in supporting sustainable fisheries implementation
Georgetown Fishermen's Cooperative Society Limited - Guyana	Consultation on opportunities for promotion of information sharing on sustainable fisheries, co-management and value chain analyses and blue growth	Key institution representing fishers? socio-economic interest and source of extensive local knowledge on fishing.  Key partner for implementation of all components  Instrumental in ensuring the participation of fisherfolk in capacity building and in supporting sustainable fisheries implementation
Seafood Association Suriname and Suriname Industrial Fisheries Cooperative	Consultation on opportunities for promotion of information sharing on sustainable fisheries, effective bycatch/discards measures, co-management and value chain analyses and blue growth.	Key institution representing fishers? socio-economic interest and source of extensive local knowledge on fishing.  Key partner for implementation of all components  Instrumental in ensuring the participation of fisherfolk in capacity building and in supporting sustainable fisheries implementation
Suriname National Fisherfolk Organisation (SUNFO)	Consultation on opportunities for promotion of information sharing on sustainable fisheries, effective bycatch/discards measures, co-management and value chain analyses and blue growth	Key institution representing fishers? socio-economic interest and source of extensive local knowledge on fishing.  Key partner for implementation of all components  Instrumental in ensuring the participation of fisherfolk in capacity building and in supporting sustainable fisheries implementation

Stakeholder	Participation in project preparation	Participation in project implementation
Commercial fisheries enterprises	Consultation on opportunities for promotion of information sharing on sustainable fisheries, effective bycatch/discards measures, co-management and value chain analyses and blue growth. Several companies engaged in the REBYC-II LAC project will be approached during the PPG stage, e.g. Marisa Fisheries N.V., Holsu N.V., Heiploeg Group, and Deep Sea Atlantic N.V.	There are several commercial entities engaged in commercial fisheries throughout the region. These will be primary stakeholders throughout project implementation as well as beneficiaries of project improvements. Heiploeg Suriname N.V, for instance, is a key company representing fish processing companies that export shrimp. Important for consultation, especially on seabob.

**In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement**

PPG phase resources will be utilized to engage all key stakeholders listed above during the project design phase, during which a more comprehensive stakeholder analysis will be conducted to determine specific stakeholder needs and priorities. Further in-depth consultations will be undertaken to establish/strengthen partnerships and practical modalities for linkage and collaboration, and a project partner and stakeholder engagement plan will be developed.

A series of stakeholder workshops and regular communications with key individuals and stakeholder groups will be held during the PPG phase. During the PPG phase specific efforts will be made to ensure full engagement of civil society organizations and NGOs active at national level in the participating countries in the project design which will help increase their collaboration, buy-in and commitment to the project in support of the implementation of the project.

Two regional workshops (inception and project document finalization) and national consultations will be held to identify and involve the relevant stakeholders. These workshops will be conducted online depending on the Covid restrictions, travel constraints and public health risks at the time. The national fisheries administrations are expected to take a coordinating role during the design phase in their project countries (this may change if necessary in the implementation phase), while FAOSLC (Barbados) in close cooperation with CRFM, will coordinate the regional workshops and activities in

the PPG phase. The mechanisms for full project partnerships, coordination, implementation, monitoring and evaluation, and oversight will be fully developed and agreed on during the design phase, with a Project Steering Committee established during the PPG to oversee project design and development and, once the project commences, project implementation.

### **3. Gender Equality and Women's Empowerment**

**Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).**

FAO is committed to gender equality and women's empowerment and has a specific gender policy and strategy that is integrated across all of its programmes, projects and operations. The FAO Policy on Gender Equality 2020-2030<sup>[1]</sup> is set on a foundation of four objectives<sup>[2]</sup> that seek to promote gender equality for development and natural resource management, and on which the gender-related objectives of the project are focused. The project will follow both FAO and GEF gender policies to ensure that the project maximizes participation, inclusion, opportunities and benefits to women in all project activities, whilst respecting the norms, values and customs of targeted communities. The project will also complement the implementation of CRFM's gender mainstreaming policy and priorities for the fisheries sector and a regional Protocol<sup>[3]</sup> on securing sustainable small-scale fisheries for Caribbean Community fisherfolk and societies, which has been in force since 2018. The project also draws on experience gained from relevant regional projects including the recently completed 'Mainstreaming Gender Equality in Fisheries in the Caribbean' project which had a focus on improving governance for gender-responsive fisheries planning and decision-making and enhancing national capacities for mainstreaming gender into fisheries management within the CLME+ sub-project 'EAF for the Eastern Caribbean Flyingfish'.

A gender-sensitive approach<sup>[4]</sup> will be adopted across the project and throughout its life cycle, with representation of, and consultations with, women emphasized. The goal of gender equality will guide the selection of participants in project activities as well as in project staffing (particularly leadership positions), and specific opportunities and activity sets at both national and fishing community levels to help empower and directly benefit women giving them an equal voice and participation in decision-making (which link to FAO gender objectives 1 and 2) and also benefit other minority or marginalised groups such as unemployed youth. Special attention will be given to complementing post-Covid-19 recovery measures to ensure women and men's diverse needs are met. The project will also consider how best to engage and include groups representing youth (as agents

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of change through awareness creation) and persons with disabilities within the project during the PPG phase.

During the PPG phase, the project will provide training on gender analysis, equality, awareness and responsiveness to project participants to ensure that gender mainstreaming is maximized in the project design. Shrimp and groundfish fishery gender analyses have been recently conducted for Guyana<sup>[5]</sup><sup>5</sup>, Suriname<sup>[6]</sup><sup>6</sup> and Trinidad and Tobago<sup>[7]</sup><sup>7</sup>, along with a sub-regional integrated report<sup>[8]</sup><sup>8</sup>, which have informed the development of the project. Additional gender data will be collected and analysed during the PPG stage to better understand the gender dimensions of the adoption and implementation of EAF in NBSLME fisheries and the impacts and sustainability of measures to support more responsible fisheries and along key fisheries value-chains and to ensure gender-specific views are fed into the design and implementation of project components. A project Gender Strategy and Plan will be developed during the PPG phase with actions to be taken under each component with specific gender targets and gender-specific indicators built into the project's M&E framework and necessary budgetary provision as appropriate. A gender specialist will also be included in the project management team.

Women are conspicuous in the postharvest stages of value chains, but often less visible as boat owners and contributors to several types of fisheries enterprises, organisations and livelihoods. So, although project activities targeted at women will be included in all four Components, Component 3 has a specific emphasis on opportunities for women, as women frequently play the major role in processing, packaging, marketing, distribution and sale of fish products in both industrial and SSF. This will include a focus on support for new value chain and market development for products from target EAF-managed shrimp and groundfish fisheries, promotion of alternative income-generating activities (e.g. use of discards and fish waste for silage for local farmers), improving access to micro-credit facilities and insurance for existing or new EAF-related ventures, or alternative livelihood marine conservation schemes, as well as associated capacity enhancement for small business enterprise development specifically targeted at women (supporting FAO gender objectives 3 and 4). A detailed assessment of the current situation of women in the sector and opportunities for more sustainable livelihoods based on adoption and implementation of EAF will be undertaken during the PPG phase.

The project policy, legislative and capacity building activities focusing on strengthening multi-level co-management (under Component 2) offer another important route to

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empower women in fisheries decision-making. Also, under Component 2, the project will work to ensure that fisheries, along with environment and climate change more broadly, are included in the national gender strategies in each of the countries to counter the tendency to ignore natural resources and their users in gender mainstreaming (also critical for addressing social protection and social standards more generally). Similarly, the project's strong partnerships with civil society organisations (across all Components) will help promote benefits for women in the fisheries sector. The project has set an initial Core Indicator 11 target of generating direct benefits to approximately 8,000 males (out of a total of 16,000) and 4,000 females (out of 8,000) across the three countries participating in the project.

In developing gender-responsive project activities and implementation measures, the project will draw on FAO's long-standing technical capacity in its Fisheries Division in assisting FAO Members in the development of gender-responsive fisheries programmes and projects and supporting women's empowerment in the fisheries sector. FAO will provide guidance on gender mainstreaming for the project's activities and events, gender-sensitive knowledge product development, and gender-targeted awareness raising and capacity development activities including supporting improved capacity for collecting and reporting gender statistics and fostering women's economic empowerment throughout the targeted fisheries value chains. In addition, gender will have a special focus in the Communication Strategy of the project, which will ensure appropriate mainstreaming of gender into all communication products, with effective targeted communication products developed for women and distributed through the most gender appropriate communication channels.

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**Footnotes:**

[1] FAO. 2020. FAO Policy on Gender Equality 2020-2030. Rome.  
<http://www.fao.org/3/cb1583en/cb1583en.pdf>.

[2] Objective 1: Women and men have equal voice and decision-making power in rural institutions and organizations to shape relevant legal frameworks, policies and programmes; Objective 2: Women and men have equal rights, access to and control over natural and productive resources, to contribute to and benefit from sustainable agriculture and rural development; Objective 3: Women and men have equal rights and access to services, markets and decent work and equal control over the resulting income and benefits; Objective 4: Women's work burden is reduced by enhancing their access to technologies, practices and infrastructure and by promoting an equitable distribution of responsibilities, including at household level.

[3] The protocol is being developed within the framework of the Caribbean Community Common Fisheries Policy (CCCFP), to fully incorporate the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (the SSF Guidelines). Further, the proposed project recognizes that the UN Entity for Gender Equality and the Empowerment of Women (UN Women) and CARICOM entered into an MOU in January 2017. The project will explore every opportunity to support CARICOM in implementation of the objectives of this MOU through the proposed project.

[4] Gender Sensitive: Identify and acknowledge the existing gender differences and inequalities between women and men. Gender is integrated as a means to achieve other objectives without seeking to change structural barriers.

[5] Maison, D. and L. Perch. 2020. Enhancing the role of women in the shrimp and groundfish fishery in Guyana: gender analysis along the fishery value chain. CERMES Project Report to FAO.

[6] Biharie, R. and L. Perch. 2020. Enhancing the role of women in the shrimp and groundfish fishery in Suriname: gender analysis along the fishery value chain. CERMES Project Report to FAO.

[7] Chin, C. and L. Perch. 2020. Enhancing the role of women in the shrimp and groundfish fishery in Suriname: gender analysis along the fishery value chain. CERMES Project Report to FAO.

[8] Perch, L., R. Biharie, C. Chin and D. Maison. 2020. Enhancing the role of women in the shrimp and groundfish fisheries in Guyana, Trinidad and Tobago, and Suriname: gender analysis along the fishery value chain sub-regional report. CERMES Project Report to FAO.

**Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?** Yes

**closing gender gaps in access to and control over natural resources;** Yes

**improving women's participation and decision-making; and/or** Yes

**generating socio-economic benefits or services for women.** Yes

**Will the project's results framework or logical framework include gender-sensitive indicators?**

Yes

#### **4. Private sector engagement**

##### **Will there be private sector engagement in the project?**

##### **Please briefly explain the rationale behind your answer.**

As almost all of the fishing vessels and processing facilities operating in the NBSLME and the participating countries are privately owned, private sector engagement is essential for achieving the project's outcomes, securing its longer-term impacts, and importantly for the scaling up and sustainability of project successes. The private sector is obviously a critical audience for project efforts to change fisher attitudes, behaviours and investments towards more ecosystem-based fisheries management (largely through Components 3 and 4). Fisherfolk organizations in the NBSLME sub-region representing SSF are often treated more as NGOs and CBOs than as private sector producers and marketing organisations, but they are increasingly attempting to promote themselves as business-oriented. Moreover, from the private sector's point of view, moves to more sustainable fisheries also helps to de-risk investment and financing, so there are clear commercial advantages from wider adoption and implementation of EAF to the private sector.

Consequently, the project will involve the private sector – both industrial and SSF fisheries – from the early design stage, working with both large-scale commercial fishing fleets as well as SSF and identifying new investment opportunities for responsible fisheries and marine conservation. For instance, the private sector will be co-partners in the design of strengthened fisheries policy, regulatory and management frameworks (under Component 2) and improving key fisheries data collection and analysis (under Component 1). Their involvement will also engage private sector companies in greater efforts to address IUU fishing and promote the wider adoption of EAF within the fisheries sector. The project particularly aims to facilitate increased private investment in SSF under Component 3, through improving value chains (and strengthening capacity to deliver these) and associated business skills, and identify viable business opportunities for alternative livelihoods and decent work in the NBSLME shrimp and groundfish fishery. The private sector will also be engaged in project Knowledge Management and lesson learning activities (under Component 4) and the private sector represents a key focus for dissemination and upscaling of project results, through individual fisheries companies, trade bodies and fisher associations. Enhancing the awareness, knowledge and skills of private enterprises in the fisheries sector will empower them to act as agents for market transformation and shift towards a more sustainable fishery capable of meeting the growing demand in the beneficiary countries. As part of ensuring effective engagement, the project will undertake a study to better understand fishers' socio-economic interests (for both industrial and SSF) during the PPG phase.

In addition, FAO will provide expertise and unique added value to private sector engagement at the international and regional levels, and both CRFM and WECAFC, key project partners, work closely with leading industry organizations in the fisheries sector which will facilitate their involvement. The recent EAF management plans [1] in the NBSLME sub-region envisage private sector involvement in implementation and in monitoring and evaluation [2]. The project also responds to the GEF's Private

Sector Engagement Strategy (PSES<sup>[3]</sup>). In line with PSES guidance private sector stakeholders will be engaged through a variety of approaches and mechanisms, including:

- Targeting communication activities and channels to inform private sector partners of the GEF process, objectives of the International Waters Focal Area and demonstrating potential entry points for the private sector;
- Providing guidance on potential private sector roles and support for the EAF4SG project based on identification of individual private sector company priorities and their alignment with (mapping to) the project objectives and GEF country and focal area priorities;
- Use of tailored private sector-specific workshops, consultations and working groups to explore possible matching of their interests with those of the project, as well as direct capacity building with project staff (costs met through co-financing);
- Ensuring communication of private sector interest and engagement among the project partners;
- Compiling lessons learned from the project's experience with private sector engagement with partners, and sharing them with partners and disseminate them through networks such as through IW:LEARN, LME:LEARN and CLME+HUB;
- Providing accurate and timely information for guidance documents, such as case studies;
- Exploring barriers to private sector involvement in the project and potential solutions to these (particularly during the PPG);
- Ensuring project representation and promotion of project results at key fishing industry fora held in the participating countries and the NBSLME sub-region and wider region, such as meetings of the regional fisheries bodies (CRFM, WECAFC, and OSPESCA), and
- Arranging co-hosted project events with senior fisheries industry leadership.

The project will develop a Partnership and Stakeholder Engagement Strategy along with a Knowledge Management and Communications Strategy during the PPG phase, both of which will have a specific focus on private sector engagement. Regular briefings to private sector partners by the Project Management Unit staff will help strengthen coordination along with their representation on the Project Steering Committee, as well as their direct interaction on key technical aspects of the project.

The fact that private fisheries industry actors operating in the NBSLME region increasingly recognize the need for adoption of sustainable and responsible fisheries practices is a solid basis for effective interaction. Many of the larger private sector companies who were involved with the recently completed REBYC II LAC project follow the FAO Code of Conduct for Responsible Fisheries and have some form of Social, Environmental and Governance (ESG) policies and strategies. Some of these are interested in engaging with the EAF4SG project.

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**Footnotes:**

[1] Anon. 2021. Guianas-Brazil Shrimp and Groundfish - Subregional Fisheries Management Plan with sub-plans for groundfish, penaeid shrimp, red snapper and seabob. CERMES Project Report to FAO.

[2] Mahon, R. and L. Fanning. 2020. CLME+ SAP monitoring report: North Brazil Shelf ecosystem (subregion) baseline 2011-2015. CLME+ Project, Cartagena Colombia, 80 pp.

[3] GEF/C.57/06 November 22, 2019.

## 5. Risks to Achieving Project Objectives

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

The table below shows the main risks to project results being delivered and achieving longer term impacts.

Risk	Impact/ probability rating (Low: 1 to High: 5)	Mitigation measures
<p>Low commitment and engagement in project (poor political support, staffing, co-financing, and/or changed priorities due to adverse economic conditions) from key partners and government institutions responsible for fisheries management</p>	<p>Impact: 3 Probability: 2</p>	<p>The project has been designed to respond to national and regional fisheries priorities addressing EAF, SSF and blue growth, and in particular a sub-regional fisheries strategy and management plan for shrimp and groundfish and national fisheries management plans for the shrimp and groundfish fisheries (for Guyana and Suriname but not Trinidad and Tobago as their legislation has not yet updated, in addition Guyana and Suriname have specific plans for Seabob as part of the MSC process). These include actions to help strengthen capacity of the national fisheries authorities as well as the needs of local fishing communities and associations. It also responds to, and directly supports, priorities of CRFM and WECAFC and their member states, and the project will leverage existing coordinating and cross-cutting intergovernmental and transboundary mechanisms that govern these institutions to ensure participation remains strong. The need to adopt EAF and move towards more sustainable fisheries is well recognized in the region having had awareness raised on this issue through previous EAF and biodiversity conservation initiatives, including the CLME, CLME+ and REBYC-II LAC projects. In addition, FAO has extensive experience in working with many of the main project partners and there are FAO representations in each of the participating countries which will facilitate continued political and institutional engagement in the project during implementation. Political buy-in will also be maintained through strategic and periodic awareness-raising and communication to key decision-makers including parliamentarians, and through carefully crafted messages to targeted audiences at the national level. The fact that the three participating countries participated in the previous FAO CLME+ Sub-project on shrimp and groundfish of the NBSLME and have been actively involved in the development of this follow up project demonstrates good political interest. The establishment of the Project Steering Committee (PSC) during the project inception phase will also ensure participation, ownership and engagement of key partners and maintain attention on the project.</p>

Risk	Impact/ probability rating (Low: 1 to High: 5)	Mitigation measures
Low participation of local fishing communities during the life of the project	Impact: 2 Probability: 2	<p>The project has a specific focus on SSF communities. Careful attention will be given to ensure involvement of relevant local stakeholders, including fisherfolk, at an early stage in the PPG phase and throughout the project implementation process. Specific activities and incentives are aimed at encouraging and supporting engagement, including promotion of fisheries co-management, a 'bottom-up' participatory approach and negotiated agreements, as well as demonstration of socio-economic benefits and use of trust-building and conflict resolutions mechanisms. Capacity building and training of local fishers will take place as much as possible to fit with their work calendar, e.g. during the low season to avoid participants missing fishing opportunities. Key project personnel in each country will be identified to act as fishing community liaisons/contacts and similarly specific individuals within the communities (project 'champions') will be identified as focal points for the SSFs targeted by project. The project will carry out a structured Knowledge Management programme and targeted awareness-raising campaign to increase public understanding and awareness of EAF benefits which will have a particularly high profile at local level. In addition, an analysis of the performance of CLME+ and GEF-funded projects in the region during the COVID 19 pandemic, including the FAO CLME+ sub-project on shrimp and groundfish of the NBSLME and the REBYC-II LAC project, will be undertaken to determine what lessons can be learned from delivering training/capacity building virtually or blended in the evenings.</p>

Risk	Impact/ probability rating (Low: 1 to High: 5)	Mitigation measures
Private sector is hesitant to engage or invest in sustainable fisheries management improvements because of short-term financial interests and/or fear of legal action	Impact: 3 Probability: 2	Engagement and support by the private sector is important and will require dedicated attention by the project. Consequently, the project will engage private sector groups directly from early in project design. There is growing pressure (drivers) for the fishing sector regionally and globally to demonstrate sustainable fishing practices, which can command a premium on fish prices. The benefits of adopting and implementation EAF will be demonstrated to both large- and small-scale fisheries. Financial institutions providing funding for the fisheries sector will be engaged by the project to encourage their financing of sustainable fisheries and the risks from not doing so highlighted. For example, the recently completed GEF-financed Caribbean Billfish Project has successfully shown that if interventions are designed to specifically address and respond to the needs of the private sector, uptake and sustainable management improvements can be made in a very short period of time. This is particularly the case if those improvements lead to both fisheries conservation advances and increased efficiency and profitability. In addition, a small number of companies will be approached and encouraged to act as 'champions' in the private sector to promote the financial, social and environmental advantages to be gained from supporting moves towards EAF. The project will identify financial and risk barriers to encourage market interventions, while also empowering fisherfolk (especially women and youths) with skills and financing to engage in entrepreneurial programmes. This combined bottom-up and top-down approach aims to make for a strong enabling environment for investors and the private sector generally.
Insufficient capacity to support the proposed transformational changes, particularly with regard to institutional and administrative support	Impact: 2 Probability: 2	The scope of the project has been agreed with the relevant stakeholders and, by focusing on a selected number of issues in a limited number of countries and locations, it will be possible to achieve results without putting undue pressure on the existing government institutions (particularly important due to the COVID pandemic). Capacity building at both the individual and institutional levels is a central element of the project within each component and capacity needs will be identified and a capacity building strategy and plan will be developed during the PPG phase. In addition, project partnerships with non-governmental and academic institutions will help cushion the impacts of any changes to relevant national policies and political administrations.

Risk	Impact/ probability rating (Low: 1 to High: 5)	Mitigation measures
Large number and diversity of stakeholders constrain efficient coordination and implementation of the project's activities	Impact: 2 Probability: 2	Key stakeholders will actively support the project activities through the establishment and maintenance of partnerships managed by the Project Management Unit. A project stakeholder engagement strategy and plan will be developed during the PPG to ensure effective, coherent stakeholder coordination. Addressing the issues of particular concern to stakeholders and demonstrating the socio-economic benefits will generate collective engagement among key stakeholders. The establishment of a Project Steering Committee during the PPG phase with appointment of National Project Committees and National Project Focal Points, and the strengthening of the national inter-sectoral coordination mechanisms, during implementation will also support coordination and continued participation of the key partners. An effective Knowledge Management and Communication Strategy will also support stakeholder engagement and coordination.
Women may be less able to participate and benefit from the project due to their generally greater child-care and family responsibilities compared with men.	Impact: 2 Probability: 3	Women tend to have responsibility for the bulk of household duties, consequently project activities targeted specifically at women will be programmed to ensure they are not excluded due to any family commitments. Special attention will be paid to ensuring that social and cultural barriers do not prevent women from effectively participating in the project. The representation of women (as well as youth and other vulnerable groups) will be emphasized when selecting participants in project activities, as well as in project staffing; a gender sensitive approach will be adopted by the project throughout its life cycle. The project will focus on promoting participation of women, empowering them to engage in planning and decision-making within the project sphere (and also encouraging them to do so outside of the project), and to improve their productivity, income and living conditions. Project activities targeted specifically at women will be programmed to ensure they are not excluded due to any family commitments. Participation of women, but also of youth, will be promoted through multi-stakeholder workshops, consultation and validation processes used in project activities, and the employment of a gender officer within the project who will particularly focus on supporting women's engagement and enterprise opportunities
Difficulty in defining sustainable fisheries value chains results in ineffective project interventions with poor engagement of local fisher groups	Impact: 2 Probability: 3	Providing increased opportunities that benefit from the adoption of EAF and more responsible fisheries practices in the target shrimp and groundfish fisheries at the fishing community level is seen as important and the project has several approaches to address this. Specific value chains and opportunities to strengthen these will be identified early in the PPG and comprehensive training workshops and information campaigns launched early in project implementation to ensure the buy-in necessary for a successful project intervention. These will build on recent studies of fisheries value chains in the three countries (conducted in Suriname and Trinidad and Tobago for REBYC II LAC. Work is still to be done in Guyana on the seabob value chain for ACP4FISH.).

Risk	Impact/ probability rating (Low: 1 to High: 5)	Mitigation measures
<p>The current Covid-19 pandemic continues to have significant negative impacts on the ability of key stakeholders to engage with the project and deliver results (including delays, shortage of technical staff, reallocation of Government resources for other post Covid recovery measures with risk to project co-financing, etc), or adaptive management measures are not able to mitigate these impacts</p>	<p>Impact: 3 Probability: 2</p>	<p>The project's mitigation strategies to address the Covid-19 pandemic will be guided by both GEF and FAO policies and guidelines on operating during the pandemic, and lessons learned through execution of other projects in the NBSLME and wider Caribbean region during 2020-2021 period. In addition, the project's strategy of not overly relying on individual staff, but on institutions and organizations, and spreading capacity development within individual countries so that as many individuals are involved and trained as possible, will help address some of the potential loss and reallocation of partner staff due to Covid. The FAO Sub-regional office (FAOSLC) and national FAO Country Offices will closely monitor the Covid situation and risks, with regular discussions held with project partners. The project will employ an adaptive management approach where work plans are frequently reviewed and revised to take into account changing circumstances as needed. Other co-financing sources for project activities not dependent on public sector funding will also be identified during the PPG and implementation. In addition, meetings and workshops will be conducted virtually whenever feasible (within internet limitations), and as much as possible local resource persons will be engaged for interactions with communities (which will also help maintain local community buy-in and support dissemination of result). Access to internet facilities can be a barrier at the community level, particularly in poorer communities in Suriname and Guyana. Consequently, Key fishing community liaisons, who can participate in virtual meetings with the fisheries authorities and other stakeholders, will be identified in the relevant fishing communities and capacity building support offered to these individuals as required. It should also be noted that the project results can support opportunities to 'build back better', for example, through the adoption of more sustainable fishing practices and livelihood enhancement.</p> <p>Further analysis of Covid-19 impacts on the fisheries in the region and the project's contribution to helping to support post-Covid measures in the three countries is included in Annex E.</p>

Risk	Impact/ probability rating (Low: 1 to High: 5)	Mitigation measures
<p>Adverse effects of climate variability and climate-driven changes driven natural disasters (e.g. damages to infrastructure, ocean warming and changes to species abundance and distribution in the NBSLME) compromise the project's achievements, and in longer term impact fish operations</p>	<p>Impact: 4 Probability: 5</p>	<p>Although noticeable climatic changes and impacts, such as major shifts in distribution or migratory routes of shrimp and groundfish species, are unlikely to occur over the four years of project implementation, climatic trends do need to be addressed and are a major concern of the project. The project will draw on the experience gained from several other on-going initiatives in the region that are addressing climate vulnerability and resilience in fisheries, including the FAO-GEF CC4Fish and ?Climate Change Adaptation in the Eastern Caribbean Fisheries Sector (CCA)? projects that are being undertaken in several Eastern Caribbean states. Furthermore, the FAO and CFRM have developed a Protocol on Climate Change Adaptation and Disaster Risk Management in Fisheries and Aquaculture in the Caribbean<sup>[1]</sup> that will inform the development and implementation of the project. Other climate impacts on the fishing communities and government agencies may also affect the project's delivery. For instance, government priorities may shift after a significant climate event, such as a hurricane, which can mean fewer resources for fisheries management (and hence project co-financing), as well as direct damage to government fisheries management structures, infrastructure and equipment (e.g. in Dominica, an entire building of fisheries division was destroyed, including computers, desks, printers etc). An assessment (utilizing FAO technical expertise) of the impact of climate change on the target fishing communities and key stakeholder groups in the participating countries will be undertaken at the PPG stage. Over the longer term, there are likely to be significant impacts on fish populations and therefore fisheries and their dependent fishing communities. For instance, increased temperature and reduced productivity are correlated with reduced recruitment of penaeid shrimp which could lead to reduced biomass and lower catch per unit of effort, resulting in declining fishery productivity and related incomes<sup>[2]</sup>. The project's efforts to improve fisheries management through improving data collection, analysis and monitoring for the target shrimp and groundfish species (through Component 1) will support more effective decision-making (e.g. on setting catch limits based on changes in recruitment, growth, survival and reproductive success) and more generally through the application of the precautionary principle within the EAF approach to prevent overfishing in the face of climate change. In addition, the project's promotion of trans-boundary agreements and cooperation between neighbouring countries and others in the region, including developing and/or modifying fishing agreements and collaborative management will also support adaptation to climate change over the long-term.</p>

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**Footnotes:**

[1] FAO and Caribbean Regional Fisheries Mechanism, 2021. Protocol on Climate Change Adaptation and Disaster Risk Management in Fisheries and Aquaculture in the Caribbean. Barbados, 18 April 2018. Rome, Belmopan, 22 pp.

[2] Magraoui, A. L. Baulier and F. Blanchard, 2014. Effet du changement climatique sur le stock guyanais de crevettes p?n??des. Rapport final du projet PENECLIM. IFREMER, Guyane. 25 pp.

## 6. Coordination

### **Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.**

FAO will be the GEF Implementing Agency. The project's lead Executing Agency will be determined during the PPG. It will be responsible for managing the sub-regional level project activities, particularly knowledge management and lesson learning, organising common capacity building activities, and overall project coordination and management, but with national entities subcontracted to run activities at the national and local levels. FAO will play an oversight role particularly with regard to project monitoring and reporting to GEF. FAO's Fisheries and Aquaculture Division (NFI) will particularly assist with aspects of project implementation, acting as the lead technical unit (with the FAO Lead Technical Officer embedded in the project team), to ensure the technical and economic feasibility of the measures introduced by the project, and to facilitate sharing of experiences with other regions through FAO's global network.

A Project Management Unit, will be responsible for the regional-level project activities (project coordination, day-to-day project management, as well as Knowledge Management and lessons exchange and common capacity building activities). Project monitoring will be led by dedicated M&E staff, leveraging existing M&E mechanisms in the region, including continued alignment with national monitoring frameworks and the CLME+ SAP, and use of common monitoring indicators where possible (with possible synergies and collaboration with the FAO-GEF REBYC III CLME+ project). A project Mid-Term Review will provide an independent assessment on project progress after two years of implementation and an opportunity to adjust and improve project execution if required, supporting adaptive management.

The government fisheries authorities in the three participating countries are expected to act as the national executing partners and focal point for national level activities, which will be carried out in close collaboration with the national fisherfolk organisations, as well as with other fisheries-related stakeholders.. However, different main executing agencies may have responsibility for individual project components in their country. The capacity of the executing partners to deliver the project effectively will be assessed at the PPG stage, and, where needed, targeted capacity building carried out during the first 3-6 months period of project inception, including training on project management and financial reporting. Each country's GEF Operational Focal Points will also be kept regularly informed of project results, activities and events.

A Project Steering Committee (PSC) will be established to provide project oversight and support close coordination with other national and regional initiatives including other donor-funded (e.g. EU-funded) fisheries projects, while also offering a channel for scaling up project successes and lessons. The PSC

will include representation from the national executing partners and key stakeholder groups listed above in the stakeholder section, as well as FAO and CFRM.

During the PPG phase, in-depth consultations will be undertaken to establish project management arrangements and partnerships and the practical modalities for linking, collaborating and communicating with on-going initiatives (many identified above), to explore the potential for joint activities and avoid duplication, and to ensure that GEFTF resources effectively build on the progress and achievements made to date through these other projects and initiatives. Preliminary discussions between the agencies involved have been held.

The project will complement and add-value to other on-going and proposed GEF-funded projects in the region such as the BE-CLME+ and PROCARIBE+ projects, as well as other initiatives and stakeholders (listed above in stakeholder section), including interventions funded by WWF (actively involved with sustainable fisheries in Suriname), as well as link to the implementation of the CLME+SAP. The project executing agency and the national co-executing partners will collaborate with FAO to identify opportunities and mechanisms to facilitate synergies and collaboration with other relevant projects. The project will particularly coordinate and collaborate with the REBYC III CLME+ project (the 'sister project' to the EAF4SG project) in which four countries are participating, including Guyana, Suriname and Trinidad and Tobago.

These strengthened regional and global linkages will help support future collaborative efforts to address responsible fisheries and sustain project results beyond the project period. An initial stakeholder engagement strategy and plan for collaboration with relevant on-going and planned initiatives will be prepared during the PPG phase, including defining the roles and responsibilities of critical partners and stakeholders in project implementation.

As described in the baseline section above, the project design has been informed by a number of lessons learned from other projects and interventions, particularly by the results of the FAO-CLME+ Sub-project on shrimp and groundfish of the NBSLME and the findings and recommendations from its Terminal Evaluation. A deeper review of experience of approaches to adopting and implementing EAF in SSF and industrial fisheries in the wider Caribbean region will be undertaken during the PPG phase with the identification of appropriate measures for the target fisheries which will be further refined during full project implementation.

## **7. Consistency with National Priorities**

**Is the Project consistent with the National Strategies and plans or reports and assessments under relevant conventions?**

Yes

**If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc**

The project will help participating countries meet their responsibilities and commitments under numerous conventions and associated national strategies. The project directly addresses fisheries and marine conservation policies, plans and programmes supporting the implementation of current initiatives for sustainable use of marine resources as well as socio-economic development, including implementation of priorities in the CLME+ SAP and other international commitments of the target countries. More generally, it also supports the widely recognised need to further operationalise the EAF in the region.

### **National level priorities**

At the national level, the institutional structures for fisheries management include fisheries and environmental ministerial functions and stakeholder associations. The policy and legal context in support of EAF and sustainable fisheries management is covered by a wide variety of instruments, including: parent Acts governing the access, use, and management of biological resources such as Acts covering Fisheries, Wildlife Protection, Protected Areas, Coastal Zone Management, Environmental Protection; regulations dealing with Species Protection, Marine Reserves; policies relating to National Fisheries, National Tourism, Integrated Coastal Zone Management; and planning documents concerned with Fisheries Management, Natural Resources Management, and Integrated Coastal Zone Management. Specifically, the project is consistent and fully in line with the following key national priorities and policies in the three participating countries (some of which are under review and have been delayed during to the Covid pandemic):

- In Guyana, the main policy and legislation relating to fisheries includes the Fishery Act 2002, Maritime Boundaries Act 2010, Guyana Marine Fisheries Regulations 2018, and the Captain's Code of Conduct. The Fisheries Act addresses the management of fisheries and refers to the sustainability, safety and quality of the resources and products derived from fisheries. Guyana's marine fishery sector is guided by the Fisheries Management Plan (FMP), which enables the Fisheries Department to manage and regulate the utilization of the fisheries resources in a sustainable manner to benefit all stakeholders. There are various fisheries specific management plans under the scope of the FMP, such as the Seabob Management Plan, Penaeid Management Plan and an Artisanal Fisheries Framework and Management Plan (2019-2024), the delivery of which is supported by the EAF4SG project. The current marine FMP covered the period 2013-2020, while the Seabob Management Plan (SMP) ran from 2015-2020. The current FMP was updated in 2018 and adopted in 2019. Cross-cutting elements contained in the FMP included data collection; monitoring, control and surveillance (MCS) and piracy; and capacity building for all stakeholders, all of which the EAF4SG project addresses.
- In Suriname, policy and legislation guiding the fisheries sector include the Fishing Decree, 1980 (S.B. 1980 No. 144, as amended by Act S.B. 2001 No. 120) and regulations contained in the License Conditions Decree, and the Fish Protection Act, 1961 (G.B. 1961 No. 44 as amended by Act S.B. 1981 No. 66) which prohibits the taking or disturbance of fish within Suriname's territorial waters (except during established fishing seasons). The Suriname Fisheries Act is currently under revision with support of FAO and will incorporate EAF elements. The first integrated Fisheries Management Plan 2014-2018 was recently updated to the FMP 2020-2024. The Seabob Management Plan 2019-2022 was in line with the National Fisheries Management Plan (2014-2018).

- In Trinidad and Tobago, regulations governing the trawl fleet deal with controls on entry to the fishery of non-artisanal trawlers as well as regulations covering zoning of trawl areas by depth and distance from shore, prohibited trawling areas, minimum mesh sizes, and mandatory use of Turtle Excluder Devices (TEDs) by non-artisanal trawlers. However, an updated Fisheries Management Bill 2020 is at the Parliamentary review stage, and there will be a need to develop Regulations and other subsidiary legislation to facilitate implementation of the new Act. Standard Operating Procedures (for inter-agency collaboration and for internal processes) for the laws will also still need to be drafted and implemented. An Integrated FMP is under development that incorporates and updates all draft management plans including for shrimp trawl and hard substrate resources.

- Although none of the three participating countries has a specific fisheries sector policy covering measures following recovery from the Covid pandemic, each country does focus on the need for economic recovery following the pandemic, and the fisheries sector (and associated sectors such as tourism in some cases) is seen as an important sector that can support recovery (particularly at the local level) in these countries and to secure more sustainable food security. For instance, the 'Roadmap for Trinidad and Tobago Post COVID-19 Pandemic' identifies the Agriculture Sector (which includes fisheries and aquaculture) as an essential service and adopts 'policy positions to immediately and aggressively boost the agriculture sector and launch (TT)\$500 million Stimulus Programme for the Sector' in order to make Trinidad and Tobago a more food secure nation by 'reducing the country's dependence on specific imported foods, increasing productive capacity and accessibility to domestic produce'. Consequently, the EAF4SG project will help to support national post-Covid recovery efforts.

### **Fit with regional level priorities**

The 2015-2025 Strategic Action Programme for the Sustainable Management of the Shared Living Marine Resources of the Caribbean and North Brazil Shelf Large Marine Ecosystems (CLME+ SAP), which has been politically endorsed by over 25 States of the Caribbean region, constitutes a major driver fostering consistent and converging strategies and policies among regional and national institutions concerned by challenges to restore a better state of the Caribbean marine environment, including fishery resources, biodiversity, coastal habitats and reduced pollution. The project outcomes 1.1, 2.1, 2.2, 2.3, 3.1, 3.2 and 4.1 all support the CLME+ SAP aims to improve management of shared living marine resources and address unsustainable fisheries, habitat degradation and marine pollution, particularly strategy S6 - Implement EBM/EAF of the Guianas-Brazil continental shelf with special reference to the shrimp and groundfish fishery which is the specific focus of the EAF4SG project, but also S1 (Enhance the regional governance arrangements for the protection of the marine environment) and S2 (Enhance the regional governance arrangements for sustainable fisheries).

The 2014 Caribbean Community Common Fisheries Policy (CCCFP) is a regional treaty designed to help countries work together to ensure that the region's fisheries and other aquatic resources make a contribution to the region's development in a sustainable manner, and it calls for more scientific and market research, and attention to develop better and easier access to export markets, to support fishers and coastal communities and economic development. The CCCFP seeks to expand the data and information used in decision-making and resource management, enabling States and fishers to better

protect their interests and manage the resources. The CRFM Strategic Plan (2013-2021) operationalizes the CRFM Agreement and CCCFP through goals and objectives that frame the workplan for the CRFM. Project outcomes 1.1, 2.1, 2.2, 2.3, 3.1, 3.2 and 4.1 all support development of the region's fisheries in a sustainable manner.

The Caribbean Regional Fisheries Mechanism (CRFM) Agreement is a legally binding agreement established in 2002 and seeks to establish a regional fisheries body to promote cooperation in the sustainable use and management of fisheries in the countries party to the Agreement. The region's priorities for fisheries development and management are further elaborated in the CRFM Strategic Plan (2013-2021, and updated for the forthcoming 2022-2030 period). The CRFM Strategic Plan is not binding, but it operationalizes the CRFM Agreement and CCCFP through goals and objectives that frame the work plan for the CRFM. The basic objective is to achieve sustainable social, economic and nutritional benefits, while preserving the health and productivity of the fish stocks, the integrity of the marine ecosystems, and ensuring a better standard of living and quality of life for fishermen and fishing communities that rely on fisheries. The EAF4SG project outcomes 1.1, 2.1, 2.2, 2.3, 3.1, 3.2 and 4.1 specifically address Strategic Goals 1 (Sustainable management and utilization of fisheries and aquaculture resources in the Caribbean region for the benefit of future generations) and 2 (Improve the welfare and sustainable livelihoods of fishing and aquaculture communities in the Caribbean region, by providing income and employment opportunities in fisheries and aquaculture sectors) and is aligned to Strategic Objective C (Sustainable management of fisheries resources as the project supports adopting and implementing the EAF), and to Strategic Objective G (Capacity building and institutional strengthening) as the project has capacity building elements built into each component and is particularly relevant to organizational result G2 (Fisherfolk organizations and their representatives are competent and capable to collaborate and participate actively in fisheries management and conservation processes at local, national and regional level), but is also relevant to G1 (Fisheries governance is benefiting from strengthened national fisheries administrations and other supporting institutional frameworks) as it stresses improvement in fisheries governance (under Component 2).

All three participating countries are members of the Western Central Atlantic Fishery Commission (WECAFC), and the project is aligned with WECAFC's Programme of Work as it relates to the following Technical Focus Area 1 (Improve regional fisheries governance), Area 2 (Increase regional information and collaboration in fisheries) and Area 3 (Strengthen regional fisheries management and best-practice approaches for fisheries and aquaculture development). The 2016 Interim Coordination Mechanism is a formal collaboration between WECAFC, OSPESCA and CRFM, which seeks to increase the uptake of information and fisheries management advice generated at national and sub-regional level to the regional level (under Outcome 1.1), support dissemination of best practices, improve harmonization and boost the impact of measures, decrees and regulations adopted within the frameworks of these RFBs. The three RFBs agreed to work on a number of priority areas such as the provision of advice in support of management of several fisheries including shrimp and groundfish, as well as addressing IUU fisheries. As WECAFC members the three countries endorsed recommendations on shrimp and groundfish management in the Guianas-Brazil shelf in the 15th, 16th, and 17th sessions of WECAFC. Joint Working Groups on these species and fisheries have been established in recent years, and the Coordination Mechanism has built on these initiatives, and relevant Working Groups will provide technical advice to the EAF4SG project, particularly contributing to project outcomes 1.1, 2.1, 2.2, 2.3, 3.2 and 3.2. As members of WECAFC and CRFM, the national

priorities of three participating countries are reflected in WECAFC's current Programme of Work (2019-2020) and in CRFM's Strategic Plan (2013-2021).

The Regional Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (RPOA-IUU)<sup>[1]</sup> was developed with support from the GEF funded FAO CLME+ sub-project on shrimp and groundfish of the NBSLME and endorsed by WECAFC in July 2019. IUU fishing is one of the critical challenges facing the region. The WECAFC RPOA-IUU is an important link between the implementation of the IPOA-IUU and the formulation of National Plans of Action to Prevent, Deter and Eliminate IUU fishing (NPOA-IUU) and corresponding measures to combat IUU fishing in WECAFC Member States. The RPOA-IUU has been developed in accordance with the principles and provisions of the IPOA-IUU, the PSMA and other complimentary international instruments. It contains 28 measures and actions to combat IUU fishing through effective regional cooperation among its 34 Member States and other sub-regional organizations to ensure that countries collaborate to implement their port, flag, coastal and market State responsibilities. Outcomes 2.2 and 2.3 support the target countries in contributing to improve their MCS framework thus contributing to addressing IUU fishing.

The Castries (St. Lucia) Declaration on IUU fishing, approved by the Ministerial Council of CRFM in 2010, is a voluntary declaration. It seeks to prevent, deter and eliminate IUU fishing by enhancing effectiveness of monitoring, control and surveillance at the national and regional level by creating and sustaining the necessary harmonized and contemporary legislative and regulatory regime. It complements the PSMA. Project Outcomes 2.2 and 2.3 support the target countries in contributing to improve their MCS framework thus contributing to addressing IUU fishing and implementation of the PSMA.

The project may also directly support the Cartagena Convention (1986) and its Protocol Concerning Specially Protected Areas and Wildlife (SPAW, 2000), which has been ratified by Guyana and Trinidad and Tobago.

### **Relevance to global level agreements**

The countries participating in this project are signatories to numerous conventions and agreements at the global and regional levels related to environment and development. Those listed below are the most relevant for the adoption and implementation of EAF in the shrimp and groundfish fishery of the NBSLME.

The 1982 United Nations Convention on the Law of the Sea (UNCLOS)<sup>[2]</sup> sets out the legal framework within which all activities in the oceans and seas must be carried out, including fisheries activities, and it sets out the sovereign rights of coastal States for the purposes of exploring and exploiting, conserving and managing living resources within areas under national jurisdiction, as well as their duties with regard to the conservation and utilization of such resources. While it does not explicitly state the need for an ecosystem approach to fisheries (EAF), it is one of its underlying principles. Current considerations in the NBSLME and Caribbean include maritime boundary delimitation negotiations, extending jurisdiction to the edge of the continental shelf where applicable, and a regime to be negotiated for the areas beyond national jurisdiction. All of these will impact fisheries, but few have the active involvement of fisherfolk organisations. Project Outcomes 1.1, 2.1, 2.2, 2.3, 3.1 and 3.2 all support the target countries in meeting obligations under this agreement to sustainably manage living resources (including fisheries) within their jurisdiction.

The 1992 Convention on Biological Diversity (UNCBD)<sup>[3]</sup> is a binding agreement that seeks to ensure the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of benefits arising out of the utilization of genetic resources. The 1995 Jakarta Mandate further develops the ecosystem approach adopted by the CBD. It encourages the use of integrated management of coastal areas as the most suitable framework for addressing human impacts on marine and coastal biological diversity and for promoting conservation and sustainable use of it. The three participating countries are all signatories of the UNCBD and have developed National Biodiversity Strategies and Action Plans (NBSAP), all of which contain specific references to the government commitment to sustainable use of coastal and marine resources. The project is in line with these NBSAPs, each of which outlines fisheries and marine conservation as a high priority. The CBD-linked Caribbean Challenge Initiative (CCI) to 'effectively conserve and manage at least 20 percent of the marine and coastal environment by 2020' has brought fisheries into close contact with biodiversity conservation and coastal management in several places. However, the fishing industry is often not well represented or fully involved in decisions that affect fisheries. Project Outcomes 1.1, 2.1, 2.2, 2.3, 3.1 and 3.2 all support the target countries in meeting obligations under this agreement to ensure the conservation of biological diversity and the sustainable use of its components.

The FAO Code of Conduct for Responsible Fisheries 1995 (CCRF)<sup>[4]</sup> was adopted by FAO in October 1995 by 80 countries as a voluntary instrument to promote principles and international standards of behaviour for sustainable and responsible fishing and aquaculture on a global scale. It seeks to establish: (i) principles for responsible fishing and fisheries activities, taking into account all their relevant biological, technological, economic, social, environmental and commercial aspects; (ii) policies for the conservation of fisheries resources and fisheries management; (iii) fisheries for food security; (iv) facilitation of the legal and institutional framework for sustainable fisheries; (v) the protection of living aquatic resources and their environments; and (vi) the trade of fishery products. The CCRF calls on States to adopt measures to minimize catch of non-target species, waste, and discards that include, 'to the extent practicable, the development and use of selective, environmentally safe and cost-effective fishing gear and techniques'. In addition, it calls for the involvement of all stakeholders and emphasizes the need for a participatory approach in the decision-making process and calls for an ecosystem-based approach to fisheries management. The CCRF calls for Regional Fishery Bodies to play a role in collaborating in the implementation of the objectives and principles of the CCRF. National institutions have a key role to play as the CCRF can only be effectively achieved when governments incorporate their principles and goals into their national fishery policies and legislation [46]. The principles of the CCRF appear within national policies and plans to differing extents in the NBSLME sub-region, such as through Fisheries Management Plans, as well as the regionally binding Caribbean Community Common Fisheries Policy (CCCFP). Project Outcomes 1.1, 2.1, 2.2, 2.3, 3.1 and 3.2 all support the target countries in meeting obligations under this agreement with particular regard to Flag State duties, fishing operations and fishing gear selectivity.

The 1995 Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (1995 UN Fish Stocks Agreement)<sup>[5]</sup> is a legally binding agreement that complements the UNCLOS, and entered into force in 2001. The UNFSA aims to ensure that measures taken for the conservation and management of straddling fish stocks and highly migratory fish stocks in areas under national jurisdiction and in the adjacent high seas are compatible and coherent and that there are effective mechanisms for compliance and enforcement of those measures on the high seas. Project Outcomes

1.1, 2.1, 2.2, 2.3, 3.1 and 3.2 all support the target countries in meeting their obligations under this agreement by contributing to the conservation and management of straddling fish stocks and highly migratory fish stocks.

The 2001 International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU)<sup>[6]</sup> is a voluntary instrument developed within the framework of the CCRF. It seeks to prevent, deter and eliminate IUU fishing by providing States with comprehensive, effective and transparent measures by which to act, including appropriate regional fisheries management organisations. Essentially, it encourages countries to implement international fisheries instruments in their National Plan of Action to Prevent, Deter, and Eliminate Illegal, Unreported and Unregulated Fishing (NPOA-IUU). National level activities to address IUU fishing vary. For instance, in Trinidad and Tobago an Action Plan to address IUU Fishing in the Ports and Waters under the Jurisdiction of Trinidad and Tobago has been developed and is being implemented under a Development Programme Project, whereas Suriname has no national plan of action for IUU. Outcomes 2.1, 2.2 and 2.3 support the target countries in meeting their obligations under this agreement to prevent, deter and eliminate IUU fishing, and project Outcome 1.1 supports better fisheries data to inform decision-making on addressing IUU.

The 2009 FAO Agreement on Port State Measures to Prevent, Deter and Eliminate IUU Fishing (PSMA)<sup>[7]</sup> aims to prevent IUU-caught fish from entering international markets through implementation of harmonized measures by countries and through regional fisheries management organizations (RFMOs) and focuses on IUU through implementing robust port state measures. It aims to enhance regional and international cooperation and block the flow of IUU-caught fish into national and international markets. In 2014 a WECAFC workshop on the Port State Measures Agreement was conducted to focus on the implementation of the Agreement from a legal and policy, institutional and capacity development, and operations point of view. Many opportunities for regional cooperation to implement port state measures were addressed. FAO/WECAFC continues to support implementation of the PSMA through national level training in each of the countries that acceded to the Agreement. Of the three participating countries in the project, two - Guyana and Trinidad and Tobago - are Parties to the Agreement. Outcomes 1.1, 2.2 and 2.3 support the target countries in meeting their obligations under this Agreement by improving overall levels on fisheries data collection, Monitoring Control and Surveillance (MCS) which are vital components of risk assessment in determining where to target port inspection resources.

The 1993 FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (1993 FAO Compliance Agreement)<sup>[8]</sup>, addresses the responsibilities of Flag States and seeks to stop vessels that are flagged by States that are not a member of a regional fisheries management organization (RFMO) from fishing in contravention with the conservation measures taken by the RFMO. Outcomes 2.2 and 2.3 support the target countries in contributing to their obligations under this agreement by facilitating transposing of conservation measures into national legislation and related MCS activities required to monitor implementation.

The 2014 Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication<sup>[9]</sup> are complementary to the CCRF and seek to enhance the

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contribution of small-scale fisheries to global food security and nutrition. They seek to support responsible fisheries and sustainable social and economic development, with an emphasis on small-scale fishers and fish workers, including vulnerable and marginalized groups. Caribbean fisherfolk have been engaged in promoting and implementing the SSF Guidelines and have advocated for a protocol to incorporate them in the CCCFP. Outcomes 1.1, 2.1, 2.2, 2.3, 3.1, 3.2 and 4.1 all support and promote the target countries in meeting their obligations under this agreement by contributing to support responsible fisheries and sustainable social and economic development.

The project also responds to a recent report from the High Level Panel for a Sustainable Ocean Economy on the science-based priorities for post-Covid-19 recovery. The project specifically addresses the call to 'invest in coastal and marine ecosystem restoration and protection'. More generally the project responds to all five 'areas of transformation' - ocean health, ocean wealth, ocean equity, ocean knowledge and ocean finance. It also contributes to the ambitions of the UN Decade of Ocean Science for Sustainable Development, as well as the UN Decade of Ecosystem Restoration (2021-2030). Outcomes 1.1, 2.1, 2.2, 2.3, 3.1, 3.2 and 4.1 all support the target countries in meeting their obligations under this agreement by contributing to investment in coastal and marine ecosystem restoration and protection.

The Sustainable Development Goals (SDGs) were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity. EAF4SG project outcomes 1.1, 2.1, 2.2, 2.3, 3.1, 3.2 and 4.1 all support the target countries to meet obligations of several SDGs in particular with regard to SDG14 Conserve and sustainably use the oceans, seas and marine resources for sustainable development, target 14.2 to sustainably manage and protect marine and coastal ecosystems and 14.4 to effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices.

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**Footnotes:**

- [1] <http://www.fao.org/fi/static-media/MeetingDocuments/WECAFC/SAG2019/3.pdf>
- [2] UNCLOS - [http://www.un.org/depts/los/convention\\_agreements/texts/unclos/unclos\\_e.pdf](http://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf)
- [3] CBD - <https://www.cbd.int/doc/legal/cbd-en.pdf>
- [4] Code of Conduct for Responsible Fisheries - <http://www.fao.org/3/a-v9878e.pdf>
- [5] UN Fish Stocks Agreement - [http://www.un.org/depts/los/convention\\_agreements/texts/fish\\_stocks\\_agreement/CONF164\\_37.htm](http://www.un.org/depts/los/convention_agreements/texts/fish_stocks_agreement/CONF164_37.htm)
- [6] IPOA-IUU - <ftp://ftp.fao.org/docrep/fao/012/y1224e/y1224e00.pdf>
- [7] PSMA - [http://www.fao.org/fileadmin/user\\_upload/legal/docs/2\\_037t-e.pdf](http://www.fao.org/fileadmin/user_upload/legal/docs/2_037t-e.pdf)
- [8] Compliance Agreement - <http://www.fao.org/docrep/meeting/003/x3130m/X3130E00.htm>
- [9] SSF Guidelines - <http://www.fao.org/3/a-i4356e.pdf>

## 8. Knowledge Management

**Outline the knowledge management approach for the Project, including, if any, plans for the Project to learn from other relevant Projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.**

Knowledge Management (KM) is an integral part of the project, essential for generating awareness, promoting learning and continuous improvement (linked to project M&E activities), generating content for up-scaling of project achievements, lessons and good practices, strengthening institutional memory, and supporting stakeholder engagement on key issues such as ecosystem-based fisheries management in the Caribbean. The use of knowledge to strengthen capacity is seen as particularly critical to the project's success. Consequently, the project has dedicated KM activities under Component 4 but will use KM to support capacity building and training actions under all the components. A core element of Component 4 will be the development of a KM Strategy and Plan that will direct the project's knowledge generation, lesson learning, information storage and sharing/exchange, and awareness-raising activities with clear identification of roles and responsibilities, deliverables, resources and timing (what, how, when, who and with what resources). The project's aims to promote lessons learned in EAF adoption and implementation to a wide range of GEF-eligible countries in the NBSLME and in other LMEs, and a broader dissemination of experience and lessons learnt generated by the project will be pursued through engaging national and regional technical and educational institutions, and regionally and internationally through South-South cooperation mechanisms. Consequently, the project's KM approach will place particular emphasis on stakeholder engagement and the KM Strategy and Plan will be linked to the project's Stakeholder Engagement Strategy and Plan that ensures robust information dissemination and exchange to increase awareness and engagement on the topics of EAF in the public domain.

The project will benefit from a broad range of both innovative and established KM services, products and expertise provided by FAO. These will be available for the entire data cycle from data collection (e.g. locally adaptable SMARTForms /mobile apps for data collection, monitoring and reporting including on catch statistics, adoption of EAF practices), data analytics, generation of statistics, and indicator dashboards (such as through the new FAO/NFI geospatial infrastructure, Reference data and Metadata management (EBX5, Ckan), and the Calipseo national statistical system ? see above), as well as publication and dissemination (e.g. new fact sheets engine on EAF measures). In terms of document and publication management, and data persistence and re-use, which are also key for the project's sustainability strategy, and the project will be able to draw on FAO capacity and experience with regional multi-topic metadata-driven on-line Atlases, such as the prototype Regional Database for WECAFC, which enable flexible, locally owned, secure, and spatially explicit KM. In addition, other relevant FAO specialized KM capacity, such as OpenASFA<sup>[1]</sup>, is already available in the region. The selection of the most appropriate tools for the project will be explored in more detail at the PPG stage.

Online/virtual training and information exchange are expected to play a significant role in the project's KM approach and will be supported through the creation of a dedicated digital project KM platform

(part of the project website), linked to other relevant national, regional and global platforms, including existing FAO, CRFM, WECAFC, CARICOM and CLME+ websites. The project will also be able to draw on a broad range of innovative KM services provided by FAO to connect local data platforms to global data infrastructures to contribute to data standardization and harmonization, including on effective EAF management measures, capacity development for SFF, and fisheries value chains, and ensure a broad dissemination of knowledge for informed decision-making. In addition, the FAO eLearning Academy will support the project's remote learning activities. FAO is particularly well capacitated for this effort with alignments to numerous fisheries management organizations globally. These formal and informal links, including the FAO Fisheries and Resources Monitoring System (FIRMS) partnership, provide a platform to discuss and design locally adapted KM services.

The project will be an active partner of IW:LEARN, LME:LEARN and the CLME+ HUB to further effective dissemination of knowledge and project successes and lessons learned in EAF adoption and implementation to other countries operating fisheries in the NBSLME, the wider Caribbean and other LMEs, as well as the wider IW community. The project will also draw on the profound expertise and experiences available via these platforms especially participating in exchanges on topics related to EAF, SSF development, and marine conservation issues at the national and regional levels, and be an active learner from past experiences in other regions by participating in trainings, workshops, IW Conferences (by the project management unit and government representatives from each participating country) and any other exchange formats pertaining to EAF at the national and regional levels. It will further contribute to GEF Experience Notes, Results Notes, Good Practice Briefs and other relevant knowledge products during project implementation. A minimum of 1% of the GEF IW grant financing will be ring-fenced to support participation in IW:LEARN activities, which will be identified by a specific budget line within the project budget (to be developed at the PPG stage and included in the Project Document). To ensure effective and impactful delivery of knowledge products through IW:LEARN, the project will be able to draw upon the experiences and lessons learned from engagement in IW:LEARN by previous FAO-GEF projects (e.g., REBYC II LAC project and GEF-5 Common Oceans ABNJ programme).

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**Footnotes:**

[1] The Aquatic Sciences and Fisheries Abstracts (ASFA) database is the premier reference in the field of fisheries, aquatic and marine sciences. It is produced under the auspices of the ASFA Partnership, a network that includes 4 United Nations sponsoring agencies and more than 50 international and national partners as well as further 45 collaborating institutions and the ASFA Publisher. FAO provides the Secretariat for the ASFA Partnership.

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

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

**Overall Project/Program Risk Classification\***

<b>PIF</b>	<b>CEO Endorsement/Approva I</b>	<b>MTR</b>	<b>TE</b>
<b>Low</b>			

**Measures to address identified risks and impacts**

Provide preliminary information on the types and levels of risk classifications/ratings of any identified environmental and social risks and potential impacts associated with the project (considering the GEF ESS Minimum Standards) and describe measures to address these risks during the project design.

**Supporting Documents**

Upload available ESS supporting documents.

<b>Title</b>	<b>Submitted</b>
<b>FAO ES Risk Identification Screening Checklist-EAf4SG</b>	
<b>FAO ES Risk Certificate</b>	

**Part III: Approval/Endorsement By GEF Operational Focal Point(S) And GEF Agency(ies)**

**A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).**

<b>Name</b>	<b>Position</b>	<b>Ministry</b>	<b>Date</b>
Kemraj Parsram	Executive Director - GEF Operational Focal Point	Environmental Protection Agency	11/26/2021
Ivette Pengel- Patterzone	GEF Operational Focal Point	Ministry of Spatial Planning and Environment Suriname	11/30/2021
Hayden Romano	GEF Operational Focal Point	Environmental Management Authority	11/23/2021

**ANNEX A: Project Map and Geographic Coordinates**

Please provide geo-referenced information and map where the project intervention takes place

Coordinates

9°37' N, 61°14' W

02°46' S, 41°48' W

00°23' S, 40°35' W

12°05' N, 59°39' W

