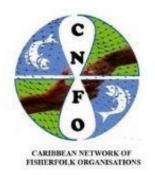


IN THE CARIBBEAN COMMUNITY FOOD IMPORT BILL
BY 2025





CNFO/CRFM SMALLSCALE FISHERIES ACTION PLAN

2023-2025



CONTRIBUTING TO ACHIEVING THE 25% BY 2025 REDUCTION IN THE CARIBBEAN COMMUNITY FOOD BILL



CNFO/CRFM Small-scale Fisheries Action Plan 2023 – 2025 © 2022, Caribbean Network of Fisherfolk Organizations and the Caribbean Regional Fisheries Mechanism

Cover images: Montserrat; Mr. Richie Blair from petite Martinique



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The CNFO/CRFM Small-Scale Fisheries Action Plan is the output from an initiative by the CRFM and CNFO to devise an action plan to address the challenges and seize the opportunities to make a significant contribution to the CARICOM Heads of Government commitment to reducing the Region's large food import bill by 25% by 2025. The Small-Scale Fisheries Action Plan was devised by two teams, comprised of the Executive members, Programme Coordinator and Administrative Officer of the CNFO as well as the Executive Director, Deputy Executive Director (DED) and Programme Managers of the CRFM Secretariat, who used their knowledge and experience of Caribbean small-scale fisheries to identify the issues and the solutions for significantly increasing fisheries production as well as to pursue market driven value addition.

The CRFM would like to acknowledge the invaluable collaboration of the two teams from the CNFO and the CRFM Secretariat in the preparation of the CNFO/CRFM Small-Scale Fisheries Action Plan, within a tight timeframe. We would also like to thank the DED, CRFM Secretariat, and Administrative Officer, CNFO, for coordinating the activities to develop the CNFO/CRFM Small-Scale Fisheries Action Plan.

ACRONYMS

ACP African, Caribbean and Pacific states

BE-CLME+ CAF/FAO/CRFM/GEF Promoting National Blue Economy Priorities Through Marine Spatial Planning in the

Caribbean Large Marine Ecosystem Plus

CAF Latin American Development Bank
CANARI Caribbean Natural Resources Institute

CARICOM Caribbean Community

CARIFICO Caribbean Fisheries Co-Management Project **CCCFP** Caribbean Community Common Fisheries Policy

CC4FISH FAO/GEF Climate Change Adaptation of the Eastern Caribbean Fisheries Sector

CCRF Code of Conduct for Responsible Fisheries

CFPA Central Fish Processors Association

CITES Convention on International Trade in Endangered Species of Wild Fauna and Flora

CLME+ Sustainable Management of the Shared Living Marine Resources of the Caribbean and North Brazil Shelf

Large Marine Ecosystem

CNFO Caribbean Network of Fisherfolk Organisations

CNFO LI CNFO Leadership Institute

COASTFISH Project for Strengthening Sustainable Use and Management of Coastal Fisheries Resources in the CARICOM

Countries

CRFM Caribbean Regional Fisheries Mechanism **CSME** CARICOM Single Market and Economy

CTA Technical Centre for Agricultural and Rural Cooperation

EAF Ecosystem Approach to Fisheries

EAF4SG FAO/GEF Enhancing capacity for the adoption and implementation of EAF in the shrimp and groundfish

fisheries of the North Brazil Shelf Large Marine Ecosystem

EU European Union

FAC Fisheries Advisory Committees

FAD Fish Aggregating Device

FAO Food and Agriculture Organization of the United Nations

GEF Global Environment Facility

ICT Information and Communications Technology

IUU Illegal, Unreported and Unregulated

IYAFA International Year of Artisanal Fisheries and Aquaculture

JICA Japan International Cooperation Agency

MC Ministerial Council
MPA Marine Protected Area

MS Member States

MSP Marine Spatial Planning

NFO National Fisherfolk Organization

NIC National Intersectoral Coordinating Mechanism

OECS Organization of Eastern Caribbean States

PFO Primary Fisherfolk Organization

REBYCIII Strategies, technologies, and social solutions to manage bycatch in tropical Large Marine Ecosystem

CLME+FAO/GEF Fisheries

SSF Small-Scale Fisheries

SSF Guidelines Voluntary Guidelines on Securing Sustainable Small-Scale Fisheries in the context of Food Security and

Poverty Eradication

StewardFish FAO/GEF Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean

Small-Scale Fisheries

SVGNFO St. Vincent and the Grenadines National Fisherfolk Co-operative Limited UBEC OECS/WB Unleashing of the Blue Economy of the Caribbean Project

UN United Nations

UNCTAD United Nations Conference on Trade and Development

UWI-CERMES University of the West Indies - Centre for Resource Management and Environmental Studies

WB World Bank

WECAFC Western Central Atlantic Fishery Commission

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	BACKGROUND



1. BACKGROUND

Importance of fisheries in CARICOM

In CARICOM, in 2019/2020, the fisheries sector contribution to GDP ranged from 0.06% (Barbados 2019) to 3.21% (Anguilla 2020). In 2019, the number of persons engaged in direct production in the commercial marine capture fisheries and aquaculture subsectors was approximately 118,053 (113,257 persons employed in marine capture fisheries and 4,796 persons in aquaculture), with indirect employment for an estimated 472, 212 (particularly women)¹ who are involved in fish processing, marketing, boat construction, net repairs, and other support services. In the same year, the total number of fishing vessels operating in the commercial capture fisheries was estimated at 33,201. The annual average production for the period 2019 to 2020 was estimated at approximately 132,877 tonnes, with the 2020 production being 132,267 tonnes. The 2020 production is the lowest production since 2011, with most Member States attributing the decreases in production to the impacts and restrictions imposed by the COVID-19 pandemic².

In 2019, total exports of fish (including exports of fish for food, bait and live ornamental fish for breeding or rearing) was approximately 67,824 tonnes, with fish exported for food accounting for 99.9% of the total. The total value of these exports was US\$292.5 million. In the same year, 98,566 tonnes of fish (including imports of fish for food, bait and live ornamental fish for breeding or rearing) were imported, with fish imported for food accounted for approximately 99.9% of the total. The total value of the fish imports was approximately US\$341.7 million³.

Small-scale fisheries in CARICOM/CRFM States make a valuable contribution to poverty alleviation, food and nutrition security, employment and income generation, economic growth, and social stability. They provide livelihood security for vulnerable members of society, including women and marginalized youth⁴.

¹ Project Document - Developing Organizational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-Scale Fisheries (StewardFish) project.

² CRFM, 2021. CRFM Statistics and Information Report – 2020. Belize City, Belize. 92pp.

³ CRFM, 2021. CRFM Statistics and Information Report – 2020. Belize City, Belize. 92pp.

⁴ Strategic Action Programme (SAP) for the Sustainable Management of the shared Living Marine Resources of the Caribbean Large Marine Ecosystem and Adjacent Regions (CLME+ SAP) [Final Version (26 April 2013)]

Caribbean Network of Fisherfolk Organisations (CNFO)

During the period 2006 to 2009, fisherfolk leaders in CARICOM, with support from the Technical Centre for Agricultural and Rural Cooperation (CTA) and the Caribbean Regional Fisheries Mechanism (CRFM), initiated a dynamic process which led to the development of a regional network of fisherfolk organizations, called the Caribbean Network of Fisherfolk Organisations (CNFO). The CNFO, which has been in operation since 2009, became a formal organization in 2016, under the Belize Companies Act (Chapter 250 of the Laws of Belize, revised Edition, 2000). The Network's vision is "Primary, national and regional fisherfolk organizations with knowledgeable members collaborating to sustain fishing industries that are mainly owned and governed by fisherfolk, who enjoy a good quality of life achieved through the ecosystem-based management of fisheries resources" Its mission is to improve the quality of life for fisherfolk and develop a sustainable and profitable industry through networking, representation and capacity building.

The CNFO comprises National Fisherfolk Organizations (NFOs) and Lead Primary Fisherfolk Organizations (PFOs) from the CRFM/CARICOM Member States, including Anguilla, Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago and Turks and Caicos Islands⁵. The Board of Directors is made up of representatives from each NFO, and Lead PFOs for countries in which there are no NFOs. The seven member Executive of the CNFO is elected from among the NFO representatives on the Board, and is chaired by the Chair of the Board of Directors⁶. Figure 1 shows the Organizational Structure for the CNFO. The Network operates at the local and national levels through its Primary and/or National Fisherfolk Organizations, depending on the situation at-hand and which organizations are present in-country. At the regional and global levels, the CNFO collaborates mainly through the regional umbrella body.

The CNFO is committed to promoting and contributing to participatory fisheries governance and sustainable fisheries development, within the framework of the Code of Conduct for Responsible Fisheries (CCRF), Voluntary Guidelines on Securing Sustainable Small-Scale Fisheries in the context of Food Security and Poverty Eradication (SSF Guidelines), Caribbean Community Common Fisheries Policy (CCCFP), CCCFP Protocol on securing sustainable small-scale fisheries for Caribbean Community fisherfolk and societies, CCCFP Protocol on Climate Change Adaptation and Disaster Risk Management in Fisheries and Aquaculture, and the Regional Code of Conduct for Caribbean Fisheries 2020 – 2025.

⁵ https://cnfo.fish/cnfo-members/

⁶ https://cnfo.fish/organisational-structure/

CNFO/CRFM Small-Scale Fisheries Action Plan: 2023-2025 CHAIR EXECUTIVE DEPUTY CHAIR TREASURER GENERAL SECRETARY PUBLIC RELATIONS OFFICER FISHERIES LAISION OFFICER ORGANSIATION(AL) LAISION OFFICER **BOARD OF DIRECTORS** REPRESENTATIVES FROM 18 MEMBER COUNTRIES EMPLOYEE/STAFF COORDINATOR ADMINISTRATIVE SECRETARY NATIONAL/COMMUNITY FISHERFOLK NOT ORGANISATION AND PRIMARY FISHERFOLK BASED FISHERFOLK ASSOCIATED WITH ANY INDIVIDUALS WITH **ORGANISATION** ORGANISATION MEMBER ORGANISATION SIMILAR I NTEREST MEMBER COUNTRIES SAINT SAINT KITTS AND ANTIGUA TRINDAD TURKS AND CAIOS BARBADOS DOMINICA GRENADA GUYANA HAITI JAMAJCA MONSTERRAT VINCENT AND SAINT ANGUILLA BELIZE SURINAME BAHAMAS LUCIA THE GRENADINES

Figure 1: Organizational Structure of the CNFO

The areas of strategic focus from which its aims and objectives are developed include:

- Representation, including Advocacy and Policy influence
- Capacity building
- Knowledge sharing

The CNFO participated in the development of the Castries Declaration of IUU Fishing and the CCCFP. The Network was instrumental in championing the development of the SSF Guidelines at the national, regional, and global levels. The CNFO, in collaboration with the University of the West Indies - Centre for Resource Management and Environmental Studies (UWI-CERMES), Caribbean Natural Resources Institute (CANARI) and CRFM Secretariat, led on the initiative to incorporate the SSF Guidelines into the CCCFP, which resulted in the "Protocol on securing sustainable small-scale fisheries for Caribbean community fisherfolk and societies." The Protocol was endorsed by the CRFM Ministerial Council (MC) in 2018 and made effective immediately. It is the first protocol under the CCCFP, and explicitly requests the participating parties to incorporate the SSF Guidelines into the policy, and into programs, plans and other initiatives of their fisheries authorities and competent agencies, with special attention to gender equality, equity, and human rights-based approaches. In accordance with this Protocol, and other global and regional policy instruments and programmes, the CNFO further spearheaded the development of Code of Conduct for Responsible Caribbean Fisheries 2020 – 2025, which was endorsed by the MC in May 2021.

The Code of Conduct for Responsible Caribbean Fisheries 2020 – 2025 sets out principles and standards of behaviour to ensure the well-being of fisherfolk through sustainable use, management, and development of both marine and freshwater living aquatic resources in the Caribbean. The objectives of the Code are to: promote the contribution of SSF to an economically, socially and environmentally sustainable future for the Caribbean; enhance ecosystem stewardship for fisheries sustainability; provide guidance for the development and implementation of participatory policies, strategies and legal frameworks for the enhancement of responsible and sustainable small-scale fisheries; and enhance public awareness as well as promote the advancement of knowledge on the culture, role, contribution and potential of SSF, considering traditional knowledge, and related constraints and opportunities. Among its ten principles is Principle II - Social Development, Employment, Decent Work, with sub-principles such as promoting decent work for all SSF workers in both the formal and informal sectors; and promoting social security and healthcare protection for workers in small-scale fisheries along the entire value chain. The CNFO is spearheading its implementation, monitoring and evaluation.

The Network has partnered with CRFM and other global, regional, and national organizations in the delivery of such projects as the EU funded "ACP Fish II" and "Strengthening Caribbean Fisherfolk to Participate in Governance" projects as well as the GEF

CNFO/CRFM Small-Scale Fisheries Action Plan: 2023-2025

funded CC4FISH and StewardFish. Under the StewardFish project, the CNFO realized its objective to pilot and develop the CNFO Leadership Institute in April 2020, which facilitates peer to peer learning and capacity building.

The CNFO is a well-recognized fisherfolk organization within CARICOM and the wider Caribbean, with observer status at the CRFM Forum and WECAFC. The Network has made progress in empowering its members through affirmation of their personal scientific expertise and experience (due to their numerous years of practicing their trade and observing processes and changes). It has been promoting food security and food sovereignty. However, it recognizes the need for more advocacy in this area in order to ensure evaluation of the importance of fish and its nutritional value when weighing investment decisions. It recognizes that the impacts of climate change and other threats like COVID-19 are of significant importance to fisherfolk and their livelihoods as they are among the most vulnerable to such events.



Impact of COVID-19 pandemic on Small-Scale Fisheries

With small-scale fisheries being the main component of the marine capture fisheries in the region, many countries have a large portion of informal workers operating in the sector. These workers tend to be outside of the reach of routine fisheries monitoring activities and social protection programmes. The COVID-19 pandemic, and the restrictions put in place to contain the spread of the virus had a severe impact on the fisheries and aquaculture sector, which was also dependent on a vibrant tourism sector. As a result, there was a significant decrease in demand for seafood locally, owing to reduced visits by tourists to the region, and low demand by importing countries experiencing their own restrictions and economic slowdown. There was also a disruption in the importation of requisites needed to maintain operations in the fisheries sector. Such developments, set off a series of disruptions along the fisheries value chain, including losses in production, unpredictability of markets and consumer access, and fluctuating market prices; stock-piling of processed forms of seafood that affected fresh seafood sales; reduced cash-flow and access to credit for small-scale operators; worker absences and skeleton work teams; fishing vessel crew anxiety about contracting COVID-19 and access to health care; reduced repair and maintenance services; and loss of post-harvest jobs to reduce running costs and for better adherence to social distancing rules. The COVID-19 disruption resulted in several social impacts among the mainly informal work force, especially for those in low-skilled or part-time jobs, who tended to be the first to be laid off work, and who had difficulty in accessing social protection measures put in place. In addition, the lockdowns were accompanied by closure of schools, which meant an increase in daily childcare duties at home. Women were at greater risk for negative coping practices in societies and households with gender-related power imbalances⁷.

In dealing with the pandemic, many countries adopted a variety of measures to safe-guard public health, and to alleviate the accompanying negative economic and social impacts. Besides the protocols put in place to deal with public health and safety, economic and social actions were taken to cushion economic hardships and provide some level of livelihood protection. Cash transfers were very popular among the social protection measures, including new transfer arrangements, increases in the disbursement amounts or expansion of the list of beneficiaries, and earlier delivery of disbursements. Provision of food packages or food cards for acquiring food were also popular. There were gender-based measures, with focused mainly on education and case management support for gender-based violence towards women. In many countries, these measures were supported by specially developed legislation and regulations ⁸. The COVID-19 disruption highlighted the need for adequate social

⁷ WECAFC/XVIII/2022/18 - Effects of the COVID-19 pandemic on the fisheries and aquaculture sector in the region and responses for recovery

⁸ WECAFC/XVIII/2022/18 - Effects of the COVID19 pandemic on the fisheries and aquaculture sector in the region and responses for recovery

protection for all workers along the small-scale fisheries value chain as well as the inclusion of SSF operations among essential services.

International Year of Artisanal Fisheries and Aquaculture 2022 (IYAFA 2022)

The United Nations General Assembly has declared 2022 the International Year of Artisanal Fisheries and Aquaculture (IYAFA 2022), with the vision being a world in which small-scale artisanal fishers, fish farmers and fish workers are fully recognized and empowered to continue their contributions to human well-being, healthy food systems and poverty eradication through the responsible and sustainable use of fisheries and aquaculture resources⁹.

CARICOM: 25% by 2025 Reduction in the Regional Food Bill

According to the document "Regional Food Production and Productivity Towards a Sustainable Import Replacement Programme: 25% by 2025 Reduction in the Regional Food Bill (February 2022)", agriculture is a major pillar of CARICOM Member States economies and has the potential to build economic resilience and drive inclusive socio-economic development of the Region, taking into consideration the current challenges being faced as a result of the COVID-19 pandemic. The sector offers opportunities in several areas for employment generation, wealth creation, food and nutrition security and increased economic activity. With this in mind, as well as the need to reduce a food bill that is rapidly moving towards US\$5 billion, the CARICOM Heads of Government have committed to reducing the Region's large food import bill by 25% by 2025. The implementation of the CARICOM Agri-Food Systems Strategy is expected to assist in achieving this target, by giving special attention to priority crops and products, such as poultry, corn, soya, meat, rice, and niche vegetables which are highly imported products in the region. The commodities which are being targeted for increased production and to be sourced regionally include livestock: beef, sheep, fish, and goat¹⁰.



⁹ https://www.fao.org/artisanal-fisheries-aquaculture-2022/home/en/

¹⁰ Regional Food Production and Productivity Towards a Sustainable Import Replacement Programme: 25% by 2025 Reduction in the Regional Food Bill (February 2022).

In keeping with the CARICOM Heads of Government commitment to reducing the Region's large food import bill by 25% by 2025, and within the context of the CCCFP and supporting instruments and the CRFM Strategic Plan 2022 – 2030, the CRFM and CNFO have devised a CNFO/CRFM Small-Scale Fisheries Action Plan 2023 - 2025 which is aimed at:

- contributing to food security and food sovereignty through the provision of high-quality nutritious fish
- increasing and diversifying fish and fish product availability through strengthening/developing sustainable and resilient small-scale fisheries value chains, including for key commercial species, underutilized and unutilized fish species as well as small scale aquaculture
- mainstreaming gender along the sustainable and resilient small-scale fisheries value chain, and creating opportunities for the participation of women and youth
- improving livelihood opportunities along the sustainable and resilient small-scale fisheries value chains by increasing access to financing and facilitating capacity building.

The development of the CNFO/CRFM Small-Scale Fisheries Action Plan 2023 - 2025 to support the sustainable increase in fish and fish products along the value chain to improve availability and accessibility to consumers, while contributing to achieving the CARICOM goal of reducing food import by 25% by 2025, is a joint initiative by the CRFM and CNFO, utilizing a participatory approach. Those involved in the development of the Small-Scale Fisheries Action Plan, included the technical staff of the CRFM Secretariat and the and Executive members and programme staff of the CNFO.

2. CHALLENGES & OPPORTUNITIES

CHALLENGES

During discussions among the CRFM Secretariat and CNFO leadership, over the period 11 June – 16 September 2022, as well as from literature review, the key challenges to achieving the objective were identified as follows:

- uncertainty about the placement of small-scale fisheries in the context of developing a blue economy (BE) in the CARICOM region
- concern about the application of marine spatial planning (MSP) to achieve balanced interventions in sectoral development in the coastal and marine space
- inadequate implementation of the CCCFP, CCCFP Protocols, Regional Code of Conduct for Caribbean Fisheries, and CSME
- inadequate application of EAF management within the CARICOM/CRFM coastal and marine fisheries

- inadequate National Intersectoral Coordinating Mechanisms (NICs)/Fisheries Advisory Committees to facilitate participatory governance and sustainable development of CARICOM/CRFM coastal and marine fisheries
- inadequate capacity of fisherfolk organizations to take up leadership positions in practicing stewardship for the coastal and marine environment, including the living coastal and marine resources, as well as to make use of the opportunities along the small-scale fisheries value chains
- inadequate capacity for analysis and development of sustainable and resilient small-scale fisheries and small-scale aquaculture value chains
- inadequate capacity and access to financial resources to grasp opportunities for value adding and marketing, including e-marketing, along small-scale fisheries, and small-scale aquaculture value chains
- ongoing disruption since the COVID-19 pandemic in the importation of requisites needed to maintain small-scale fisheries operations, and the slow return to exports of fish and fish products
- limited access to national and regional markets due to inadequate transportation, inadequate cold chain management, non-tariff barriers, etc.
- inadequate access to climate smart technologies and climate proofing of onshore infrastructure for small-scale fisheries
- inadequate access to social protection to build resilience to cope with climate change and other major events (e.g., COVID-19 pandemic and St. Vincent and the Grenadines volcanic eruption).

OPPORTUNITIES

According to Béné et al (2015), fish provides more than 4.5 billion people with at least 15 % of their average per capita intake of animal protein, and it has unique nutritional properties which makes it essential to the health of these consumers in both the developed and developing countries. Fish is one of the most efficient converters of feed into high quality food and its carbon footprint is lower compared to other animal production systems. Through fish-related activities (fisheries and aquaculture, including processing and trading), fish contributes significantly to the income, and, as such, to the indirect food security of more than 10 % of the world population, especially in developing and emergent countries. Despite this, limited attention has been given to fish as a key element in food security and nutrition strategies at national level and in broader development discussions and interventions. As a result, the tremendous potential for enhancing food security and nutrition embodied in the strengthening of the fishery and aquaculture sectors goes untapped¹¹.

¹¹ Christophe Béné et al. 2015. Feeding 9 billion by 2050 – Putting fish back on the menu (Abstract).

In addition to addressing the challenges, the CRFM Secretariat and CNFO Board and Executive also identified opportunities to improve the contribution of SSF to reducing the region's import bill, with these being set out below:

- developing/strengthening sustainable and resilient small-scale fisheries value chains for key commercial species, underutilized and unutilized fish species, and small-scale aquaculture, including aquaponics, through gap analyses, policy interventions, capacity building, including accessing funds, targeting men, women, youth, would contribute to the Goal: 25% by 2025 reduction in the regional food bill
- including SSF as an integral component of CARICOM 25% by 2025 intraregional trade initiatives in order to address the barriers to trade, such as transportation, cold chain management, not-tariff barriers, etc., would lead to improved conditions for marketing and trade of fish and fish products in the region
- in developing/improving school feeding programmes, promoting the utilization of more locally produced nutritious food, such as fish, including underutilized and unutilized fish and fish products would contribute to healthy diets for children as well as develop a culture for the consumption of locally produced fish and fish products
- promoting and facilitating market diversification through intraregional trade initiatives, including strengthening of the links with the tourism sector (use of local fish and fish products in hotels, restaurants, culinary tourism) would reduce the food import bill while creating opportunities for increased employment and income in both sectors
- identifying and pursuing opportunities for the utilization of fish and fish products in the rapidly developing oil and gas
 sectors in Guyana and Suriname, such as provision of national/regional fish and fish products for offshore operations;
 likely increased demand for fish products due to improved incomes within the expanding populations, and the surge in
 brand hotels and restaurants would encourage increased value-added fish production as well as reduce the food import
 bill
- using the SPS roadmap as guide to improving the implementation of SPS measures at the national and regional levels
- upscaling fish silage production (CFPA/SVGNFO) from StewardFish and other projects, and promoting the utilization of fish silage in animal feed and fertilizer production could lead to reduction in the cost for animal feed and fertilizer
- strengthening capacity of the CNFO and its members would improve participation in the CRFM Forum (with access to the MC) to better advocate for and influence decisions on the role of SSF in the blue economy; application of MSP; etc.
- strengthening FFOs at the national and local levels would enable them to better advocate for the improvement of participatory fisheries governance and co-management arrangements
- strengthening national intersectoral linkages among the fisheries, tourism and oil and gas sectors, as appropriate, would encourage a more ecosystem-based management approach to development in the coastal and marine space



3. OBJECTIVE & SCOPE

The objective is to support a sustainable increase in fish and fish product along the value chain to improve availability and accessibility to consumers, while contributing to achieving the CARICOM goal of reducing food import by 25% by 2025. The CNFO/CRFM Small-Scale Fisheries Action Plan will seek to address the challenges identified by the CNFO and its membership in the CARICOM/CRFM Member States in order to better engage in governance and stewardship of the living coastal and marine resources as well as utilize the opportunities to improve their livelihoods along the small-scale fisheries value chain. It will also seek to contribute to an increase in marine capture fisheries production by 10 % by 2025. However, this will be dependent on the improvements in participatory governance and management of the region's living coastal and marine fisheries resources at the national and regional levels; overcoming the supply chain challenges posed by the COVID-19 disruption; the rate at which resources are mobilized to facilitate the development/strengthening of sustainable and resilient small-scale fisheries value chains, especially for underutilized and unutilized species; and the removal of the barriers to intraregional trade, while strengthening the linkages with small-scale fisheries and the tourism and oil and gas sectors.

4. SMALL-SCALE FISHERIES ACTION PLAN 2023 - 2025

The CNFO/CRFM Small-Scale Fisheries Action Plan 2023 - 2025 as set out in Tables 1 and 2 seeks to identify the priority actions and objectives to be achieved in order to address the challenges to support a sustainable increase in fish and fish products to improve availability and accessibility to consumers, while contributing to achieving the CARICOM goal of reducing the food import bill by 25% by 2025 as well as strengthening the framework for sustainability within the context of food security and food sovereignty. The priority actions identified are not exhaustive, but they are considered critical to establishing/improving the institutional framework and building capacity for sustainable and resilient small-scale fisheries development along the value chain, with the resulting benefits to the economy, society and the fisherfolk themselves. Table 3 (at Appendix 1) includes a set of recently completed, ongoing and upcoming projects which can contribute to the delivery of the Small-Scale Fisheries Action Plan through being able to access resources, and to facilitate policy interventions and capacity building for the countries taking part in these projects. The potential areas for linkages/synergies with these projects are identified in the Small-Scale Fisheries Action Plan. The list of contributing projects can be improved by further identification of related projects by Member States, including Fisheries Authorities and National Fisherfolk Organizations.

The immediate to medium term actions mainly targets: improvement of participatory fisheries governance and management at the regional and national levels; identification, evaluation, and development/improvement of sustainable and resilient small-scale fisheries value chains; and promotion of market diversification within the region in order to contribute to the achievement of food security and food sovereignty. It should be noted that in relation to the development/improvement of sustainable and resilient small-scale fisheries value chains the selection of species for attention may be influenced by tradition, culture, state of the resource, potential for value addition, etc. so such actions may be more national and/or local. The priority actions over the long term would be more focused on overall evaluation of the delivery of the Small-Scale Fisheries Action Plan (with lessons learned, best practices being documented and shared) towards the end of 2025, making any required adjustments, and strengthening the framework for sustainability within the context of food security and food sovereignty.

The budget at this stage is indicative, but the amounts identified can be utilized to initiate implementation of the Small-Scale Fisheries Action Plan, while linkages/synergies with ongoing and upcoming projects are being established/strengthened. It will be refined as resources are mobilized through strengthened links with ongoing projects, finalization, and approval of upcoming Project Documents (e.g., BE-CLME+, EAF4SG, REBYC III CLME+), and from other sources.

Table 1: Immediate - Medium Term Responses to address challenges to contributing to 25% by 2025

Foc	Focus Area – Governance and Management								
#	Priority Action	Objective	Lead / Partners	Target Countries/ NFOs & Lead PFOs	Indicative Budget (USD)	Links to Ongoing/ Upcoming projects - Components			
1.	Develop a narrative around fisheries that acknowledges the positive contributions of fisheries and fisherfolk to sustainability and recognize the opportunities for food security, nutrition, and poverty eradication. (This narrative should be based on human dignity and recognize the cultural, social, and economic value and relevance of fishing communities to the broader life of the countries in the region) ¹²	To promote the importance of fish in all aspects of Caribbean lives, employment, food and nutrition security, and its role in small-scale fisheries	CNFO CRFM	All CARICOM/CRFM countries	USD 20, 000	UBEC: C1 BE:CLME+: C1			
2.	Improve participatory governance and ecosystem based-management in the coastal and marine space, inclusive of small-scale fisheries operators	To promote and strengthen the regional and national arrangements, including improving the linkages between NFAs and NFOs, for sustainable use of	CRFM CNFO OECS UWI-CERMES CANARI	ALL CARICOM/CRFM countries/NFOs and Lead PFOs	USD 200,000	 BE:CLME+:C1 UBEC: C1 EAF4SG: C1 & C2 REBYC III CLME+: C2 COASTFISH: PA 1, PA 3, PA 4, PA 5 			

¹² FAO. 2020. Proceedings of the International Symposium on Fisheries Sustainability: strengthening the science-policy nexus. FAO Headquarters, 18–21 November 2019. FAO Fisheries and Aquaculture Proceedings No. 65. Rome.

		living coastal and marine fisheries resources for economic growth, improved livelihoods, and job creation, while maintaining a healthy environment, in the context of food security and food sovereignty					
		To evaluate national intersectoral linkages for the coastal and marine related sectors and identify the challenges to and opportunities for sustainable and resilient development of small-scale fisheries	CRFM CNFO UWI-CERMES	ALL CARICOM/CRFM countries/NFOs and Lead PFOs	USD 100,000	•	BE:CLME+: C1 UBEC: C1 EAF4SG C1 and C2 REBYC III CLME+: C2
Foc	us Area - Sustainable and Re	esilient Small-Scale Fisherie	es Value Chain	Development			
3.	Increase production through the development/ strengthening of inclusive sustainable and resilient small-scale fisheries value chains, while incorporating appropriate SPS measures	To assess small-scale fisheries value chains, including for key species, underutilized and unutilized species, small-scale aquaculture, including aquaponics, and identify the gaps (e.g., policy and capacity) and opportunities for market driven value-added fish and fish products	CRFM CNFO CANARI UWI (St. Augustine) FAO	ALL CARICOM/CRFM countries/NFOs and Lead PFOs	USD 100,000	•	BE:CLME+: C2 EAF4SG: C3 REBYC III CLME+: C1 & C3 StewardFiish: Fisheries value chain analyses and challenges to intraregional trade UNCTAD/OECS/CITES / EU Blue BioTrade: Key outputs

		To (based on the analysis) strengthen/ develop sustainable and resilient small scale fisheries value chains for selected key species and underutilized and unutilized species by addressing the gaps and utilizing the opportunities along the value chain	CRFM CNFO CANARI UWI (St. Augustine) FAO	ALL CARICOM/CRFM countries/NFOs and Lead PFOs	USD 500,000	BE:CLME+: C2 EAF4SG: C3 REBYC III CLME+: C1 & C3 StewardFiish: Fisheries value chain analyses and challenges to intraregional trade UNCTAD/OECS/CITES / EU Blue BioTrade Key outputs
4.	Reduce imports and increase production through market diversification of fish and fish products in: intraregional trade, the tourism and oil and gas sectors, and school feeding programmes	To identify the challenges and opportunities for market diversification within the CARICOM region in: intraregional trade, the tourism and oil and gas sectors and school feeding programmes	CRFM CNFO UWI (St. Augustine) FAO	ALL CARICOM/CRFM countries/NFOs and Lead PFOs	USD 50,000	BE:CLME+: C2 EAF4SG: C3 REBYC III CLME+: C1 & C3 StewardFiish: Fisheries value chain analyses and challenges to intraregional trade UNCTAD/OECS/CITES / EU Blue BioTrade Key outputs
		To address the policy gaps, create linkages and build the capacities among FFOs and other SMEs along the small-scale fisheries value	CRFM CNFO	ALL CARICOM/CRFM countries/NFOs and Lead PFOs	USD 200,000	 BE:CLME+: C2 EAF4SG: C3 REBYC III CLME+: C1 & C3 StewardFiish: Fisheries value chain analyses and

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		chains to facilitate market diversification				•	challenges to intraregional trade UNCTAD/OECS/CITES / EU Blue BioTrade Key outputs
Foc	us Area - Capacity Building 1	for CNFO, its members, an	d SMEs along t	he small-scale fish	eries value cha	in	
5.	Improve participation in	To strengthen the CNFO	CNFO	ALL	USD 50,000	•	UBEC: C1
	governance and	Leadership Institute to	CRFM	CARICOM/CRFM		•	BE:CLME+: C3
	management by CNFO and	conduct ongoing capacity	UWI-CERMES	countries/NFOs		•	EAF4SG+: C3
	its members at the regional	building for its members		and Lead PFOs		•	REBYC III CLME+: C3 &
	and national levels	in participatory					C4
		governance and					
		management					
6.	Improve utilization of	To strengthen the CNFO	CNFO	ALL	USD 150,000	•	BE:CLME+: C2 & C3
	opportunities along the	LI to conduct ongoing	CRFM	CARICOM/CRFM		•	EAF4SG+: C3
	value chain through	capacity building for its	UWI-CERMES	countries/NFOs		•	REBYC III CLME+: C3 &
	capacity, including training,	members and SME		and Lead PFOs			C4
	access to technology and	operators along the value					
	other resources, for CNFO,	chain					
	its members and other						
	SMEs	To interest to a constitution of	CDEM	All	LICD TO OOC		LIDEC: C1
		To identify accessible and	CRFM	ALL	USD 50,000	•	UBEC: C1
		sustainable financing for	CNFO	CARICOM/CRFM		•	BE:CLME+: C2
		actions related to capacity		countries/NFOs			
		development along the small-scale fisheries value		and Lead PFOs			
		chain					

Table 2: Long Term - sustainable SSF contribution to CARICOM food security and food sovereignty

	Focus Area – Governance and Management									
#	Priority Action	Objective	Lead/ Partners	Target Countries/ NFOs & Lead PFOS	Indicative Budget	Links to ongoing/ upcoming projects				
1	Integrate SSF Guidelines Protocol into national legal and institutional framework for fisheries governance and management	To promote a human rights-based approach to sustainable small-scale fisheries development	CNFO CRFM UWI-CERMES	ALL CARICOM/CRF M countries/NFOs and Lead PFOs	USD 100,000	UBEC: C1				
2	Integrate the small-scale fisheries and small-scale aquaculture sub-sectors into the sectoral and national social protection arrangements	social protection for fisherfolk and fish farmers along the value chain	CRFM CNFO FAO	ALL CARICOM/CRF M countries/NFOs and Lead PFOs	USD 200,000	UBEC: C1BE:CLME+: C2 & C3EAF4SG+: C3REBYC III CLME+: C4				
	us Area - Sustainable and Re		ſ		T					
3	Review and revise the CNFO/CRFM Small-Scale Fisheries Action Plan	To evaluate and undertake any required adjustments to the CNFO/CRFM Small-Scale Fisheries Action Plan, and share lessons learned, best practices and success stories to facilitate upscaling/replication of opportunities along the value chain to contribute to the achievement of food security and food sovereignty	CRFM CNFO UWI-CERMES	ALL CARICOM/CRF M countries/NFOs and Lead PFOs	USD 150, 000					

4	Improve access to funds for	Identify appropriate	CRFM	ALL	USD 100, 000	UBEC: C1
4	•	, , , ,			וטט, טטט עכט ן	
	capital investment by FFOs,		CNFO	CARICOM/CRF		CRFM/New Zealand/Plant
	SMEs and other fisherfolk			M		and Food Research
	operators for sustainable	0		countries/NFOs		Sargassum Products for
	small-scale fisheries value			and Lead PFOs		Climate Resilience in the
	chain development	necessary capital by				Caribbean project: C 4
		FFOs, SMEs and other				
		fisherfolk operators to				
		utilize livelihood				
		opportunities along				
		the small-scale				
		fisheries value chain				
5	Provision of climate proof	To assess existing SSF	CRFM	ALL	USD	
	onshore infrastructure for	onshore	CNFO	CARICOM/CRF	1,000,000	
	small-scale fisheries	infrastructure, make		М		
	operations to deal with the	recommendations for		countries/NFOs		
	impacts of climate change	climate proofing and		and Lead PFOs		
		implement them				
Foc	us Area - Capacity Building	for CNFO, its members,	and SMEs along sm	nall-scale fisherie	s value chains	
6	Establish the CNFO LI as a	To evaluate the	CNFO	ALL	USD 100,000	
	center of excellence	performance of the	CRFM	CARICOM/CRF		
		CNFO LI in building the	UWI-CERMES	М		
		capacity of its	FAO	countries/NFOs		
		members in	CANARI	and Lead PFOs		
		governance and				
		management and				
		along the value chain,				
		and strengthen its				
		capacity as a key				
		institution for SSF				
		capacity building in the				
		region				

5. IMPLEMENTATION RECOMMENDATIONS

In implementing the Small-Scale Fisheries Action Plan 2023 - 2025, it should be recognized that the priority actions are relatively broad as the situation/status in relation to a particular action may vary within each country, so execution of such an action in a specific country should entail an evaluation to determine the actual gaps to be addressed and the policy interventions, capacity building and other resources required. This would call for ongoing engagement among the CNFO, its membership and CRFM in the implementation of the Plan. As part of this engagement and recognizing the limited timeframe, the CNFO and its members, in consultation with the CRFM, should identify from among the various priority actions, two or three of these actions that they consider most critical to achieving the objective by 2025 and focus on getting those off the ground.



In developing an implementation plan for the CNFO/CRFM Small-Scale Fisheries Action Plan, the following recommendations should also be considered:

- Raising awareness about the CNFO/CRFM Small-Scale Fisheries Action Plan to the CNFO membership, key national, regional, and international partners, and other key stakeholders.
- Using the CNFO/CRFM Small-Scale Fisheries Action Plan as an instrument to mobilize resources for its execution.
- CNFO should take the lead in the operationalization of the Action Plan, utilizing its network at the national and local levels in a participatory approach that includes members and non-members.
- Placing the CNFO/CRFM Small-Scale Fisheries Action Plan on the agendas (maybe under agenda item: 25% by 2025
 Reduction in the Caribbean Community Food Import Bill) of the meetings of the CNFO Executive and Board, CRFM Forum,
 CRFM Ministerial Council and NICs/FACs to facilitate implementation, monitoring and evaluation, and reporting by the
 CNFO.
- Utilizing existing partnerships with CRFM (including the Secretariat and Fisheries Authorities), UWI-CERMES, CANARI, FAO
 to work with/support CNFO in implementing the Small-Scale Fisheries Action Plan, as required.

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- Strengthening the capacity of the CNFO and its membership to deliver the Small-Scale Fisheries Action Plan through promoting and facilitating its engagement in relevant ongoing and upcoming fisheries projects (with some having been identified above) at the regional, national, and local levels.
- Promoting and supporting the formation of communities of practice to catalyze and support execution of the Small-Scale Fisheries Action Plan, including through knowledge sharing, collaboration, and upscaling/replicating.

APPENDIX 1

Table 3: Recent and ongoing/upcoming Small-Scale Fisheries related projects

Recently Completed	Recently Completed							
Project	Time Frame	Objective	Countries	Synergies with proposed activities in the CNFO/CRFM Small-Scale Fisheries Action Plan				
JICA/CRFM Reinforcement of community-based FAD fisheries management through Caribbean Fisheries Co-Management Project (CARIFICO) ¹³	2013 - 2018	To establish real examples of fisheries co-management	Antigua & Barbuda, Dominica, Grenada, St. Kitts & Nevis, Saint Lucia, St. Vincent & the Grenadines	Key outputs: Livelihood stability and social status of fisherfolk improved through the establishment and management of fish aggregating devices (FADs)- Qualification for FAD fisheries Rules for FAD fisheries Fisheries information to be utilized for FAD management Fisheries Co-management mechanism for FAD fisheries				
FAO/GEF Climate Change Adaptation of the Eastern Caribbean Fisheries Sector (CC4FISH) ¹⁴	2017 - 2022	To increase resilience and reduce vulnerability to climate change impacts in the eastern Caribbean fisheries sector, through introduction of adaptation measures in fisheries management and	Antigua and Barbuda, Dominica, Grenada, Saint Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines, Trinidad & Tobago	 Key outputs: Developed Sargassum and EAF Management Plans Identified Best practices for Caribbean Fishers coping with sargassum Undertook local level vulnerability and capacity assessment of 				

¹³ CARIFICO Approach for Co-management, Nariaki Mikuni, JICA Fisheries Expert and COASTFISH Brochure

¹⁴ Climate Change Adaptation of the Eastern Caribbean Fisheries sector. 2020 International Forum on the Effects of Climate Change on Fisheries & Aquaculture, 25-26 February 2020, Rome. Dr. Iris Monnereau, Regional Project Coordinator

		and the shouldest of the con-		
		capacity building of fisherfolk		climate change of the fisheries
		and aquaculturists		sector
				• Improved safety at Sea in the
				Eastern Caribbean through
				training and provision of
				equipment
				 Improved value adding in the fish
				chain
				Supported aquaculture
				Development, including sea moss
				farming and aquaponics
				Identification of
				underutilized/unutilized species,
				such as swordfish, blackfin tuna,
				ocean triggerfish, rainbow runner,
				and diamond back squid for value
				added development
FAO/GEF Developing	2018 - 2021	To implement the CLME+ SAP	Antigua and Barbuda,	Key outputs:
Organisational Capacity for	2010 2021	within CRFM Member States	Barbados, Belize,	• Strengthened capacity of
Ecosystem Stewardship		by empowering fisherfolk	Guyana, Jamaica,	NFOs/Lead PFO
and Livelihoods in		throughout fisheries value	Saint Lucia, St.	• Improved use of ICT in
Caribbean Small-Scale		chains to engage in resource	Vincent and the	Governance
Fisheries (StewardFish)		management, decision-	Grenadines	Established CNFO LI
risileries (stewardrisii)		making processes, and	Grenaumes	
		sustainable livelihoods with		 Identified gaps in relation to gender in leadership
				·
		strengthened institutional		Conducted Fisheries Institution Assessments
		support at all levels.		Assessments
				Assessments • Strengthened capacity for EAF
				Assessments • Strengthened capacity for EAF application and ecosystem
				 Assessments Strengthened capacity for EAF application and ecosystem stewardship among fisherfolk and
				Assessments • Strengthened capacity for EAF application and ecosystem stewardship among fisherfolk and other stakeholders
				 Assessments Strengthened capacity for EAF application and ecosystem stewardship among fisherfolk and

UNCTAD/OECS/CITES/EU Blue BioTrade: Promoting sustainable livelihoods and conservation of marine biodiversity in the Caribbean region ¹⁵	2020 - 2022	To empower small-scale coastal producers from OECS member states to produce and trade queen conch products in domestic, regional, and international markets under the Blue BioTrade environmental, social, and economic sustainability criteria, including CITES.	St. Vincent and the Grenadines, Grenada, and Saint Lucia	 Draft Shock Responsive Social Protection Strategy and Action Plan for SVG SSF Key outputs: Stakeholder Maps of the Conch Value Chains of Grenada, Saint Lucia and Saint Vincent and the Grenadines Blue Bio Trade Regional Plan of Action for the Eastern Caribbean Queen Conch Value Chain Summary of country case study recommendations for policy makers, exporters, and investors Blue BioTrade in Grenada: Developing value for the sustainable trade and production
				Caribbean (Case Study) Blue BioTrade in Saint Lucia: Developing value for the sustainable trade and production of queen conch in the Eastern Caribbean (Case Study)
Ongoing/Upcoming				
OECS/WB Unleashing of the Blue Economy of the Caribbean Project (UBEC) ¹⁶	2022 – 2027 (Phase 1)	To establish a regional and national investment platform to further develop the Caribbean blue economy and promote sustainable and	Grenada, St. Lucia, St. Vincent, and the Grenadines	Components: C 1 Strengthening governance, policies, and capacity building at the national and regional levels.

 $^{^{15}}$ https://unctad.org/project/blue-biotrade-promoting-sustainable-livelihoods-and-conservation-marine-biodiversity 16 https://sdgs.un.org/partnerships/unleashing-blue-economy-caribbean-

[&]quot;https://sdgs.un.org/partnerships/unleashing-blue-economy-caribbean-ubec#:~:text=Unleashing%20the%20Blue%20Economy%20of%20the%20Caribbean%20(UBEC)%20Project%20is,integrated%20use%20of%20marine%20resources

		I		T
		integrated use of marine		
		resources for economic		
		growth, improved		
		livelihoods, and job		
		generation while preserving		
		the health of ocean systems		
FAO/CNFO Promoting	2021 - 2022	To promote the implement of	CRFM Member States	Key outputs:
fisher-led Implementation		the SSF guidelines and raise		• Draft policy Implementation Plan:
of the SSF Guidelines in the		awareness of the small-scale		Anguilla Fisherfolk and Fisheries
Caribbean Region ¹⁷		fishing sector		Policy - Leading implementation of
				CCCFP and SSF Guidelines
				• Draft policy Implementation Plan:
				Jamaica Fisherfolk and Fisheries
				Policy - Leading implementation of
				CCCFP and SSF Guidelines
				 Draft policy Implementation Plan:
				St. Kitts and Nevis Fisherfolk and
				Fisheries Policy -Leading
				,
				implementation of CCCFP and SSF
UCA (OFCC (CDEA)	2020 2025	T	A .: 0 D I I	Guidelines
JICA/OECS/CRFM Project	2020 – 2025	To establish a framework in	Antigua & Barbuda,	Priority Actions (PA):
for Strengthening		which local fisherfolk and	Dominica, Grenada,	PA 1 Establishment and strengthening
Sustainable Use and		their organizations, and	St. Kitts & Nevis, Saint	of marine managed areas
Management of Coastal		fisheries authorities will work	Lucia, St. Vincent &	PA 2Research / Monitoring activities
Fisheries Resources in the		together to manage fishery	the Grenadines	PA 3 Resource management planning
CARICOM Countries		resources around coral reefs		PA 4 Restoration of coastal ecosystem
(COASTFISH) ¹⁸		such as lobsters, conch,		such as coral reefs, mangrove areas
		groupers, snappers, and		and seagrass bed
		other reef associated fishes,		PA 5 Resource enhancement activities
		for their sustainable use		

¹⁷ Letter of Agreement between the Food and Agriculture Organization of the United Nations ("FAO") and Caribbean Network of Fisherfolk Organisations (CNFO) for provision of Promoting fisher-led Implementation of the SSF Guidelines in the Caribbean Region ¹⁸ COASTFISH Brochure

	1			
CAF/FAO/CRFM/GEF Promoting National Blue Economy Priorities Through Marine Spatial Planning in the Caribbean Large Marine Ecosystem Plus (BE:CLME+) ¹⁹	(October) 2022 – 2026	To promote blue economy development in the CLME+ through marine spatial planning and marine protected areas (MPAs), ecosystem approach to fisheries (EAF), and sustainable seafood value chains	Barbados, Belize, Guyana, Jamaica, Panama, Saint Lucia	Components: C 1 Implementing cross-sectoral Marine Spatial Planning C 2 Developing inclusive Sustainable Fisheries Value Chains C 3 Regional Coordination, Project Management & Knowledge Management
FAO/GEF Enhancing capacity for the adoption and implementation of EAF in the shrimp and groundfish fisheries of the North Brazil Shelf Large Marine Ecosystem (EAF4SG) ²⁰	ProDoc being prepared (Project duration: 4 years/48 months)	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	Guyana, Suriname, Trinidad and Tobago	Components: C 1 Enhancing or developing national and sub-regional EAF-based fisheries management information systems, supporting countries implementation of CLME+ SAP priorities C 2 Strengthening national and subregional governance arrangements for EAF fisheries management C 3 Encouraging SSFs to adopt more sustainable fishing practices through new business opportunities C 4 Supporting Knowledge Management and lesson learning for EAF
FAO/GEF Strategies, technologies, and social solutions to manage bycatch in tropical Large Marine Ecosystem	ProDoc being prepared (Project duration: 4	To manage bycatch and reduce discards in the Caribbean and North Brazil Shelf Large Marine	Barbados, Guyana, Suriname, Trinidad and Tobago	Components: C 1 Improving fishing practices to manage bycatch and reduce discards and the negative impacts of fishing gears in CLME+ fisheries, supporting

¹⁹ GEF-7 Request for Project Endorsement/Approval: Project Title: "BE-CLME+": Promoting National Blue Economy Priorities Through Marine Spatial Planning in the Caribbean Large Marine Ecosystem Plus.

²⁰ Enhancing capacity for the adoption and implementation of EAF in the shrimp and groundfish fisheries of the North Brazil Shelf Large Marine Ecosystem (EAf4SG) PIF

Field and a s	(DED)/C !!		Farmer (CLMF) th		tile indicate of CIME
Fisheries	(REBYC II	J	Ecosystems (CLME+) thereby		countries implementation of CLME+
CLME+) ²¹		months).	promoting sustainable and		SAP priorities
		Likely start	· ·		C 2 Strengthening governance and
		1 st Quarter	1 •		management frameworks and
		2023.	opportunities while		enforcement measures to better
			ensuring the conservation of		manage bycatch and reduce discards
			marine living resources,		in CLME+ fisheries
			supporting country		C 3 Encouraging behavioural change
			implementation of the		for adoption of effective bycatch
			CLME+ SAP, and with		mitigation and discard reduction
			successful solutions for		measures in target CLME+ fisheries
			potential		C 4 Knowledge Management and
			scale up to other LMEs		lesson learning
CRFM/New	Zealand/Plant	2020 - 2023	To mitigate these economic	Barbados, Bahamas,	Components:
and Food	d Research	1	and environmental impacts	Belize, Jamaica	C 1 Review raw material safety testing
Sargassum	Products for	-	of Sargassum influx in the		and harvest operations to use raw
Climate Res	silience in the		Caribbean		material to produce products
Caribbean p	roject ²²				C 2 Develop sargassum-derived
·	•				product formulations and scalable
					processes for manufacturing
					C 3 Develop a commercialization
					strategy to support marketing of
					sargassum-derived products
					C 4 Transfer technical capabilities and
					attract private sector
					engagement/investment into the
					development of sargassum-derived
					product supply chain
					product supply chair

²¹ Strategies, technologies, and social solutions to manage bycatch in tropical Large Marine Ecosystem Fisheries (REBYC-III CLME+) PIF ²² Plant and Food Research Sargassum Project PowerPoint

