



Caribbean Natural Resources Institute

INSTITUTIONAL ANALYSIS AND ORGANISATIONAL ASSESSMENT
OF FISHERIES-RELATED STATE AGENCIES FOR ENABLING
ECOSYSTEM STEWARDSHIP IN CARIBBEAN FISHERIES SECTORS

September 2020

CARIBBEAN NATURAL RESOURCES INSTITUTE

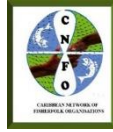
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1 Introduction

In 2013, countries bordering and/or located within the Caribbean and North Brazil Shelf Large Marine Ecosystems (CLME+ region) adopted a 10-year 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)¹. The 10-year CLME+ SAP aims to contribute to the achievement of the regionally adopted long-term vision of “a healthy marine environment in the CLME+ that provides benefits and livelihoods for the well-being of the people of the region.” The CLME+ SAP consists of 6 Strategies and 4 Sub-strategies. SAP strategies 1-3, with a focus on governance, are cross-cutting, while strategies 4-6 tackle the three main marine ecosystems (reef, pelagic and continental shelf) in the CLME+ region. One of the key strategies of the CLME+ SAP is to achieve sustainable fisheries, including of small-scale fisheries which are important economic drivers for the sustainability of coastal communities and rural livelihoods and a vital source of employment, food and income for Caribbean people.

The *Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in the Caribbean Small-Scale Fisheries (StewardFish)* project is therefore aimed at implementing the CLME+ SAP within seven Caribbean Regional Fisheries Mechanism (CRFM) member states (Antigua and Barbuda, Barbados, Belize, Guyana, Jamaica, Saint Lucia, St. Vincent and the Grenadines) that have politically endorsed the CLME+ SAP by empowering small-scale fisherfolk throughout fisheries value-chains to engage in resource management, decision-making processes and sustainable livelihoods with strengthened institutional support at all levels.² The project aims to deliver enhanced stewardship of fisheries resources and livelihood benefits through implementation of the four core project components (See Figure 1).

StewardFish recognises that there are several challenges that hinder the engagement of fisherfolk and their organisations in the sustainable use and management of fisheries in the region including fisheries-related state agencies not having adequate capacity to support fisherfolk and their organisations with ecosystem stewardship initiatives. Because state agencies, including fisheries authorities, vary widely in their support of fisherfolk organisations for different reasons, some within their control and others beyond, a situation specific analysis is required.

In support of this, CANARI conducted an Institutional Analysis and Organisational Assessment in each of the project countries to contribute to Outcome 1.2 “*Fisheries-related state agencies have capacity to support fishing industry stewardship*” and Output 1.2.1 “*state agency implementation gaps are assessed regarding support for fisherfolk organisations and their role in stewardship*” of the project.

The aim of the analysis was to identify current strengths, as well as opportunities for improvement in each project country’s fisheries-related state agencies, in order to improve their capacity to support ecosystem stewardship by fisherfolk and their organisations.

The analysis included:

- Designing an institutional analysis tool adapted from the Adaptation: Rapid Institutional Assessment (ARIA) methodology, including an organisational assessment survey targeted at the fisheries authorities
- Conducting desk studies, surveys, virtual and in-country interviews and focus groups with fisherfolk, fisheries authorities and other key state agencies in the project countries

¹ CLME+ Strategic Action Programme <https://www.clmeproject.org/sap-overview/>

² CANARI. 2019. StewardFish – Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-Scale Fisheries (StewardFish) project. [March 2020]

- Facilitating national workshops³ to present, validate, refine and receive input on the preliminary findings and identify priorities for improvement, in each project country
- Producing country reports of findings, including recommended priorities for improvement

This report provides a brief summary of the common findings and recommendations from the institutional analyses and organisational assessments that were conducted in the seven target countries between December to September 2020.

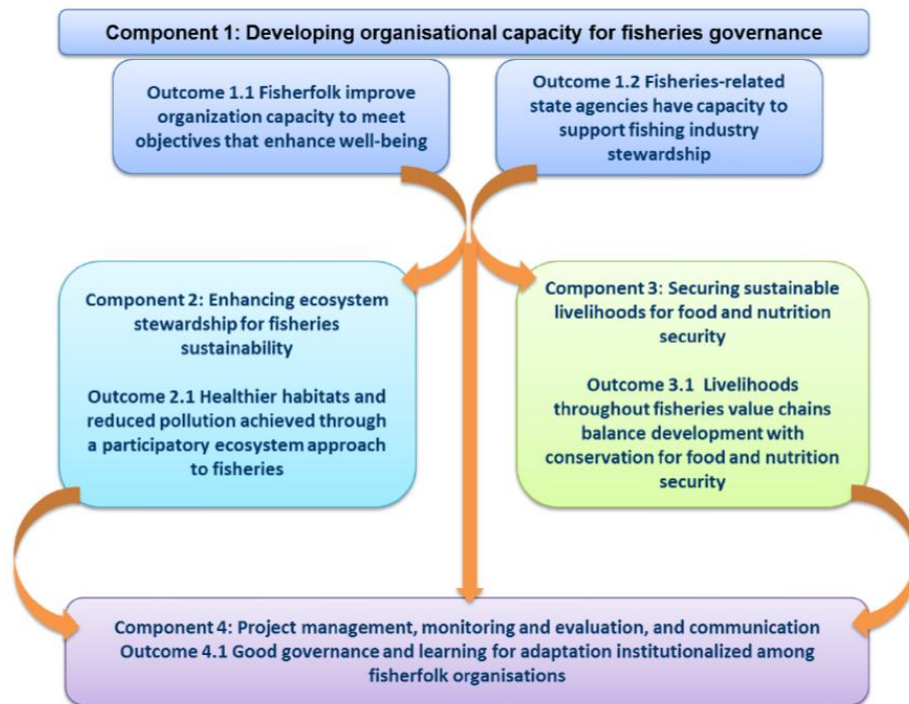


Figure 1.1: StewardFish Project Framework. Credit: FAO

1.1 How strong institutions can support ecosystem stewardship by fisherfolk

Stewardship is a terminology related to rights and responsibilities in governance processes. Application in natural resource management has expanded the understanding of stewardship to relay that “stewards” are stakeholders with responsibility for proper resource use, who will “take care” of a resource under communal or public property rights.⁴ The term also importantly encompasses responsibility not only for proper use of resources but also right to life of other species and for future generations.⁵ The concept of ecosystem stewardship, particularly in the fisheries sector; includes reducing the vulnerability of the sector by promoting resilience and making use of opportunities to transform undesirable paths.

³ National workshops were initially carded to be conducted in-country for all project countries, however, due to the COVID-19 pandemic as declared by the World Health Organisation on March 11, 2020, and subsequent restrictions on air travel, all workshops following the declaration date were conducted virtually through webinars.

⁴ Medeiros, R. P., Serafini, T. Z., McConney, P. 2014. Enhancing Ecosystem Stewardship in Small-Scale Fisheries: Prospects for Latin America and the Caribbean. *Desenvolv. Meio Ambiente*, n. 32, 181-191.

⁵ Medeiros, R. P., Serafini, T. Z., McConney, P. 2014. Enhancing Ecosystem Stewardship in Small-Scale Fisheries: Prospects for Latin America and the Caribbean. *Desenvolv. Meio Ambiente*, n. 32, 181-191.

A fundamental concern of stewardship is capacity – i.e. whether individuals or groups are able to steward their resources. Capacity, which is in part determined by broader governance -including systems of institutions (i.e. laws and policies, formal and informal organisations, and decision-making processes and structural processes related to power and politics (i.e. economic inequality, discrimination, exclusion from decision-making)) (?)—can either empower or constrain

“Local environmental stewardship is the actions taken by individuals, groups or networks of actors, with various motivations and levels of capacity, to protect, care for or responsibly use the environment in pursuit of environmental and/or social outcomes in diverse social-ecological contexts.”

(Bennet et al. 2018)

the sense of agency, available options and capacity of would-be stewards⁶. From the paper “Environmental Stewardship: A Conceptual Review and Analytical Framework” Bennet *et. al* note for the small-scale fisheries sector that stewardship efforts can be supported by national laws or policy frameworks that protect local fisher’s rights and tenure, formalise local fishers’ stewardship responsibilities, or that provide resources to support local community efforts to steward their own resources. Conversely, the paper notes that even when local small-scale fishers want to take action, the broader policy landscape may undermine their efforts by creating bureaucratic challenges.

Ensuring that the fisheries institution adequately enables ecosystem stewardship by fisherfolk, and their organisations will not only contribute to sustainable fisheries but will also help to ease the burden of already under-resourced fisheries state agencies to monitor and enforce fisheries regulations.

2 Methodology

To conduct the rapid analysis CANARI developed and piloted an institutional analysis tool (see attached at Annex 1) which was adapted from the World Resources Institute’s (WRI) Adaptation: Rapid Institutional Assessment (ARIA)⁷ methodology, including an organisational assessment survey targeted at national fisheries authorities. The tool analyses the institutional and organisational capacity of fisheries-related state agencies to support stewardship in the small-scale fisheries sector. The tool was used to conduct a baseline assessment and can subsequently be used for monitoring and evaluation as part of an institutional strengthening process.

The tool examines four conceptual components- fisheries-related policies, laws and plans, advisory and/or decision-making mechanisms, fisheries-related organisations and processes and practices to determine the capacity of the fisheries institution- to support the role of fisherfolk and their organisations in ecosystem stewardship. Refer to Table 2.1 for a description of each conceptual component.

Table 2.1: The four conceptual components assessed in the rapid institutional analysis

Conceptual component	Description of component
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⁶ Bennett, N.J., Whitty, T.S, Finkbeiner, E., *et. al.* 2018. *Environmental Stewardship: A Conceptual Review and Analytical Framework.*

⁷ WRI’s Rapid Institutional Analysis for Adaptation Tool. <https://accessinitiative.org/resources/adaptation-rapid-institutional-analysis-phase-1-workbook>

Policies, laws and plans	Examined fisheries and fisheries-related policies, plans and legislation (including rules and regulations) to determine how they may be empowering or constraining the ability to integrate ecosystem stewardship practices within the country's small-scale fisheries sector.
Advisory and/or decision-making mechanisms	Examined the presence, composition and functioning of existing multi-stakeholder mechanisms (e.g. Fisheries Advisory Committee) established for advising or making decisions for fisheries management.
Fisheries-related organisations	Examined the roles and responsibilities of fisheries-related state agencies, as well as other fisheries-related organisations [e.g. FFOs, civil society organisation (CSOs), private sector organisations and academia] which play a key role in the fisheries-related institutional arrangements of the project country. Additionally, an organisational capacity assessment was carried out to examine the national fisheries authority's current ability to support ecosystem stewardship by small-scale fisherfolk and included an examination of the authority's: <ul style="list-style-type: none"> ○ Vision, mandate, culture ○ Knowledge and skills ○ Resources ○ Partnerships
Processes and practices	Examined the various processes and practices in the country's fisheries institution related to: <ul style="list-style-type: none"> ○ Good governance- assessed the application of good governance practices, particularly fisherfolk inclusion, in decision-making processes in the fisheries sector. ○ Collaborative management- assessed the extent to which cooperative management exists in practice between fisheries-related state agencies and small-scale fisherfolk and their organisations. The degree of stakeholder collaboration in management practices was also assessed. ○ Effective communication- assessed the extent to which providers of fisheries information in the project country were using defined communication strategies, tools and channels to communicate with fisherfolk, as well as their capacity to use the tools and channels effectively; including the structures and systems in place for clear communication.

The tool was implemented using a variety of data collection methods in order to capture a broad range of stakeholder perceptions and input; as well as to gather perspectives on the realised benefit of existing laws, rules, regulations, processes, practices and procedures of the fisheries institutions.

Based on the information collected the institutional analyses and organisational assessments focused on the following key aspects in regard to the capacity of the fisheries institution to support the role of fisherfolk and their organisations in ecosystem stewardship:

- Policy, legal and planning context for ecosystem stewardship
- Mechanisms for fisherfolk participation in decision-making
- Support and resources available to fisherfolk and their organisations for ecosystem stewardship
- Partnerships and networks for ecosystem stewardship
- Communication of information on sustainable practices for fisheries resources use
- Organisational capacity of the fisheries authority to support fisherfolk and their organisations with ecosystem stewardship

3 Summary of findings and recommendations from the institutional analyses and organisational assessments

Below is a summary of key findings and recommendations from the institutional analyses and organisational assessments that were conducted across the seven target countries. The summary seeks to highlight areas of commonality across the assessments. More detailed and country-specific findings and recommendations can be found in the individual country reports at Annexes 2-8.

3.1 Policy, legal and planning context for ecosystem stewardship

In general, the institutional assessments found that policies, plans and laws related to the fisheries sector in all of the countries, including broader environmental instruments related to biodiversity management and climate change, addressed the key principles of the Ecosystem Approach to Fisheries (EAF) (i.e. ecosystem well-being, socio-economic well-being and good governance). For most of the instruments reviewed across the seven countries, ecosystem well-being was well addressed and there is an overall understanding of the need to conserve and sustainably use natural resources across the seven countries. Socio-economic well-being of fisherfolk, though addressed to some degree, is less explicit. Most of the instruments spoke broadly to stakeholder participation in decision-making with some, mostly those directly related to the fisheries sector, including direct reference to decision-making mechanisms that should include fisherfolk.

Stronger consideration of the socio-economic context, including livelihoods, poverty and gender should be given when designing policies, laws and plans related to the fisheries sector. Additionally, more direct reference to fisherfolk as key stakeholders in decision-making and collaborative management arrangements across a range of instruments, including those indirectly related to the fisheries sector, can contribute to more active roles for fisherfolk in natural resource management, enabling them to be better ecosystem stewards.

3.2 Mechanisms for fisherfolk participation in decision-making

Having legally established mechanisms for stakeholder participation is one way to engage fisherfolk in formal decision-making processes which can enable a sense of ownership in the management of shared resources. In most countries there was legal reference to some type of advisory council or body (e.g. Fisheries Advisory Committee or similar mechanism) in which fisherfolk and other key stakeholders involved in the fisheries sector have the role of advising the Minister responsible for fisheries management. However, in almost half (four of seven) of the countries analysed, these mechanisms were either not established, not functioning or had been dormant for an extended period of time⁸. The selection and appointment of fishing industry representatives on these mechanisms was a common area of contention among fisherfolk in various countries, where it was noted that the Minister was solely responsible for appointing the fishing industry representative with little or no input from fisherfolk. This process of appointment was seen as needing to be improved so that fisherfolk could ensure that the person selected to represent them on such a mechanism would be someone that truly understands the issues affecting small-scale fisherfolk. Inclusion of fisherfolk in decision-making mechanisms outside of the fishing sector was limited. Stakeholder consultations (i.e. public stakeholder meetings) seemed to be the most consistent way of engaging fisherfolk in decision-making, though fisherfolk often felt that their feedback was not incorporated into policies, plans and laws.

Stakeholder participation has the potential to improve the effectiveness of management measures and improve the rate of compliance with such measures by fisherfolk. In addition to wider public stakeholder consultations, it is important to legislate for mechanisms that inform and engage

⁸ It should be noted that the Fisheries Council which was enacted under the new Fisheries Resources Act No. 7 of 2020 is expected to be activated soon and will replace the administratively constituted Fisheries Advisory Board which is active.

fisherfolk in decision-making. Furthermore, it is important to ensure that these mechanisms are active and include suitable representation for fishing industry stakeholders.

3.3 Support and resources available to fisherfolk and their organisations for ecosystem stewardship

The institutional analysis found that support and resources are provided to fisherfolk in the areas of technology, equipment and materials, finance and capacity building (skills and knowledge). This support mainly came from projects, programmes and initiatives led by government agencies and civil society organisations with funding support from international development agencies (e.g. Inter-American Development Bank, World Bank, Global Environment Facility). Countries with more active civil society sectors (e.g. in Belize and Jamaica) appeared to have more opportunities to directly support fisherfolk in these areas through projects. However, due to the short-term nature of some projects and inadequate sustenance of project outcomes, sources of support may not have as significant of an impact as desired. There were only a few instances of initiatives led by fisherfolk organisations to provide support and resources to their members suggesting that fisherfolk organisations may be largely dependent on government and their relationships with other civil society organisations to access support and resources. One contributing factor is that fisherfolk and fisherfolk organisations may be disorganised, whether in formal or informal groups, with little engagement and support from membership which impairs their ability to pursue and access resources.

Fisherfolk organisations should seek strengthening to ensure that they have the capacity to access funding (e.g. through small-grant programmes) that would allow them to provide needed support and resources to their membership and fishing communities. Additionally, building and fostering long-term partnerships with government and other civil society and private sector organisations, that may have higher capacity and influence in decision-making, can help fisherfolk organisations access support and resources to address challenges that may require large investment, such as infrastructure upgrades, which they cannot access.

3.4 Partnerships and networks for ecosystem stewardship

Across the countries it was found that fisherfolk organisations collaborate with various stakeholders in government, civil society, academia and private sector through ecosystem stewardship projects or routine resource management activities (e.g. fisheries data collection, monitoring) of the organisation. Fisherfolk however, in most instances, are involved as beneficiaries or participants for the activity or intervention and may not necessarily be considered a partner with an equal sense of power and mutual benefits. For example, fishers may participate in data collection conducted by fisheries extension officers but may rarely benefit (or at least the benefits may not be obvious) from the information shared. In general, formalised partnerships and networks for ecosystem stewardship that included fisherfolk organisations were few. One limiting factor noted was the capacity for fisherfolk organisations to engage in long-term partnerships.

Where possible opportunities to formalise partnerships, including through multi-stakeholder networks, with fisherfolk organisations for resource management and ecosystem stewardship activities, should be sought. Additionally, partnerships that include fisherfolk organisations need to promote and demonstrate mutual benefits to be sustainable in the long-term.

3.5 Communication of information on sustainable practices for fisheries resources use

In general, the main providers of information on sustainable practices for fisheries resource use across the countries were the national fisheries authorities. Communication by these authorities were infrequently guided by an official communication strategy and to a large extent depended on public consultations and regular field extension exercises to get information to and from fisherfolk. Social media sites such as Facebook were also commonly used to share information, particularly where the authority did not have a dedicated website. One major gap across countries is a limited

understanding of the actual impact of what have become “go-to” or preferred communication strategies. Among fisherfolk, social media platforms and digital instant messaging applications such as WhatsApp appear to be gaining increased interest as a means of sharing information and have even been used as platforms for advocacy on key issues impacting fisherfolk. This finding is consistent with the findings of a 2020 study (Cox et. al) conducted by the Centre of Resource Management and Environmental Studies of the University of the West Indies on “Communication tools and practices in use for fisheries information” under the StewardFish project. However, there is certainly a technological gap, including limited access to digital hardware and software by fisherfolk, which precludes the wider impact of digital information sharing. Fisherfolk may also need to enhance their own skills in sharing information, both digitally and otherwise, especially about their positive efforts as ecosystem stewards and to advocate for their needs. This can help to counteract any negative perceptions of fisherfolk.

Efforts should be made by national fisheries authorities as the key providers of fisheries information to understand the best means of sharing information with fisherfolk. Improving capacity, particularly among fisherfolk, to access and share information digitally is also likely to contribute positively to information exchange among fisheries stakeholders.

3.6 Organisational capacity of fisheries authorities to support fisherfolk and their organisations with ecosystem stewardship

As part of the institutional analysis, an organisational assessment of the of the state agency with direct responsibility for fisheries management was conducted in the seven countries to identify gaps and develop recommendations to better adopt the EAF approach and subsequently support fisherfolk and their organisations in actioning ecosystem stewardship. The assessment was conducted via survey to provide a rapid assessment of the state agency’s internal capacity to support ecosystem stewardship by fisherfolk and their organisations. The questions in the survey examined the following four capacity areas to explore the organisational motivation and capacity for supporting ecosystem stewardship by fisherfolk:

1. Vision, mandate, culture- the organisation’s visions and goals, its operational culture and its internal governance mechanisms and how they promote ecosystem stewardship.
2. Practices – the translation of the organisation core beliefs into actions that support ecosystem stewardship by fisherfolk organisations as it relates to decision making, collaboration and information sharing.
3. Knowledge and skills- the organisation’s capacity to provide fisherfolk and fisherfolk organisations with the relevant knowledge and skills support required for improved stewardship actions.
4. Resources- focuses on the finance, equipment, materials, tools and methods that the organisation has access to for supporting fisherfolk with ecosystem stewardship activities and initiatives.

Most of the agencies surveyed had a clear vision and mandate which they felt supported ecosystem stewardship by fisherfolk. Organisational culture was also generally seen as being supportive of ecosystem stewardship by fisherfolk with agencies noting having the following beliefs or values: “ecosystem stewardship by fisherfolk is important for sustainable use of fisheries and marine resources”, “fisherfolk can be effective ecosystem stewards” and “fisherfolk should be included in decisions made about how fisheries and marine resources are managed”. Agencies also believed that their practices, both formal and informal, reflected their beliefs and that systems and processes were generally in place to support fisherfolk with ecosystem stewardship including processes to incorporate local knowledge into decision-making processes.

In terms of knowledge and skills, agencies generally agreed that their staff were technically competent with a few noting that building capacity of technical staff to facilitate participatory approaches such as participatory monitoring and evaluation, participatory planning and participatory management would be beneficial. The need for capacity building in the application of various communication tools and techniques to better engage with fisherfolk was also noted. 'Resources' was perhaps the one capacity area where most agencies felt they were lacking, in particular noting having inadequate capacity to provide materials, equipment or technology to fisherfolk to support ecosystem stewardship activities or initiatives. Agencies did note however, that they had the capacity to mobilise resources through partnerships with other national regional and international organisations, through which they were able to access projects, programmes and funding for the development of the sector.

It should be noted that the organisational assessment was conducted as a self-assessment by the national authorities and so there may be some inherent bias in the responses provided. Nonetheless, national authorities should seek opportunities to build their capacity in participatory approaches which can help to strengthen their relationships with fisherfolk and fisherfolk organisations and reduce the economic and manpower burden of their organisations for management of fisheries resources including enforcement of fisheries regulations. Participatory approaches can also help to foster a greater sense of stewardship among resource users.

4 Conclusion

Strengthening of the fisheries institution across the seven target countries would support improved ecosystem stewardship by fisherfolk. In particular efforts should be made in all countries to actively practice the EAF principles that are set out in existing national policies, laws and plans. Efforts in this regard would benefit from strategic, goal-oriented interventions rather than ad hoc attempts at institutional strengthening. Countries should also leverage the benefit of learning and growing together and building on lessons learned from peer countries that have had relative success with supporting and improving ecosystem stewardship by fisherfolk.

ANNEX 1

Definitions of conceptual components for the institutional analysis framework

Conceptual component	Worksheet
A. Policies. Laws and plans	<p>This component focuses on the existing legal framework within the target country to address and guide fisheries management and planning. It involves the formal governance of a nation's fisheries management which can either empower or constrain the ability to integrate <i>ecosystem stewardship</i>⁹ practises within small-scale fisheries. The assessment of this component also involves regulations, rules and management plans that resulted from the policies and legislation identified. This can be used as an indicator of fisheries-related state agencies capacity to support fishing industry stewardship. For example, to determine whether legislation is adequate as Stewardship is an evolving concept for management of natural resources such as fisheries. Policy and legislation need to be assessed in order to identify the barriers at the institutional level that may hinder the promotion of ecosystem stewardship. This component is divided into:</p> <p>A.1 Fisheries Policy</p> <p>A.2 Fisheries Management Plan</p> <p>A.3 Fisheries Legislation</p>
B. Advisory and/or decision-making mechanisms	<p>Institutional arrangements - examine the institutional frameworks and mechanisms established for governing fisheries management and fostering ecosystem stewardship. This includes the establishment of multi-stakeholder committees or similar structures, which play an advisory or decision-making role in resource management. The relationship between these mechanisms and the agencies/stakeholders involved will also be analysed.</p>
C. Fisheries-related Organisations	<p>This conceptual component will map the fisheries-related state agencies as well as other fisheries-related organisations which play a key role in the fishery-related institutional arrangements of each country. This includes the core fisheries management organisations such as Fisheries Divisions/Departments/Authorities/Agencies and other associated departments, such as Environment, Coastal Management, Agriculture, Cooperatives, Markets and others. It will also include non-state organisations such as fisherfolk organisations (FFOs), civil society organisation (CSOs), private sector and academia, where relevant. Given that the level of involvement in the fisheries sector will differ within and among project countries. This section will investigate agencies roles and particularly their mandated role in fisheries management. Furthermore, an organisational capacity assessment will be carried out to examine the core fisheries state agencies' current ability to support stewardship activity.</p> <p>Organisational Capacity Assessment: Under this key conceptual component, core capacities¹ of fisheries-related state agencies capacity to support and enable ecosystem stewardship will be assessed. The capacities to be examined are:</p> <ol style="list-style-type: none"> <li>i. Vision, mandate, culture- this section looks at the organisation's visions and goals, its operational culture and its internal governance mechanisms and how they promote ecosystem stewardship. It is reflected in the everyday organisational culture, how they communicate with fisherfolk and their organisations and the relationships they build.

⁹ *Ecosystem Stewardship* is understood as "a strategy to respond to and shape social-ecological systems under conditions of uncertainty and change to sustain the supply and opportunities for use of ecosystem services to support human well-being".

	<p>II. Knowledge and skills- this focuses on assessing the fisheries-related state agency's capacity to provide fisherfolk and fisherfolk organisations (FFOs) with the relevant knowledge and skills support required for improved stewardship actions. This section assesses the capacity in technical knowledge, skills and ability related to ecosystem stewardship.</p> <p>III. Resources- assesses the capacity, availability, and efficient access to resources related to organisations– in particular the resource support made available to FFOs from the state agency, as well as resources provided for execution of any ecosystem stewardship actions and practices.</p> <p>IV. Partnerships - is an assessment of the organisations capacity to foster partnerships and link activities, plans, projects and initiatives which involves ecosystem stewardship. It will look at their ability to build networks, and assist in building the networks of fisherfolk organisations, as resource users and ecosystem stewards.</p>
D. Processes and practices	<p>For this conceptual component, the operational procedures for fisheries-related state agencies will be examined more closely. The processes and practices will be assessed in three sub-components. These are:</p> <p>C.1 Promotion of good governance- This is determined by probing the inclusivity of the decision-making process in fisheries governance. The system of institution (i.e. the decision-making process applied) determines the relative success of the structural processes to a certain degree in institutional capacity for improved fisheries management that integrates ecosystem stewardship (i.e. levels of exclusion, discrimination). This also assesses organisations internal structures and systems ability to create an environment that encourages and facilitates stewardship. It includes the channels of communication for sharing or receiving information from fisherfolk, and transparent and accountable systems. This will also assess the structures and systems in places for clear communication, involvement and integration within and among fisheries-related state agencies.</p> <p>C.2 Collaborative management- This sub-component focuses on the extent of cooperative management that exists in practice between fisheries-related state agencies and small-scale fisheries groups such as FFOs, as well as fisherfolk individuals and the local communities. It also identifies the degree of stakeholder collaboration in management practises (government, private sector and civil society/local communities).</p> <p>C.3 Adaptive management - This assesses the ability of the fisheries-related state agencies to budget, manage and implement activities, using internal structures and mechanisms which are flexible and adaptive to internal or external changes, changes in the resources, or changes in the resource users. This looks at the organisations ability to learn actively, develop practices and policies for promoting stewardship; and implement, monitor and evaluate plans, projects, programmes of work for actions or systems enabling stewardship.</p> <p>C.4 Communication -This sub-component assesses the extent to which fisheries information providers in StewardFish project countries are using communication tools/channels to communicate with fisherfolk, as well as their capacity to use the tools/channels effectively. It includes the channels of communication for sharing or receiving information from fisherfolk, and transparent and accountable systems. This will also assess the structures and systems in places to for clear communication, involvement and integration within and among fisheries-related state agencies.</p>



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JUNE, 2020



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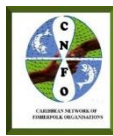
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List of acronyms and abbreviations

ARIA	WRI's Adaptation: Rapid Institutional Analysis
CANARI	Caribbean Natural Resources Institute
CARICOM	Caribbean Community
CARIFICO	Caribbean Fisheries Co-Management Project
CBD	Convention on Biological Diversity
CCCFP	Caribbean Community Common Fisheries Policy
CNFO	Caribbean Network of Fisherfolk Organisations
CLME+ SAP	Strategic Action Programme for the Sustainable Management of the Shared Living Marine Resources of the Caribbean and North Brazil Shelf Large Marine Ecosystems
CRFM	Caribbean Regional Fisheries Mechanism
CSO	Civil Society Organisations
EAF	Ecosystem Approach to Fisheries
EEZ	Exclusive Economic Zone
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FMP	Fisheries Management Plan
GEF	Global Environmental Facility
GDP	Gross Domestic Product
ICCAT	International Commission for the Conservation of Atlantic Tunas
IWC	International Whaling Commission
JICA	Japan International Cooperation Agency
NIC	National Intersectoral Coordinating Mechanism
NFO	National Fisherfolk Organisation
OECS	Organization of Eastern Caribbean States
UNCLOS	United Nations Convention for the Law of the Sea
UNFSA	United Nations Fish Stocks Agreement
UWI-CERMES	Centre for Resource Management and Environmental Studies of the University of the West Indies
UWI CIRP	Caribbean ICT Research Programme of the University of the West Indies
WECAFC	FAO Western Central Atlantic Fisheries Commission
WRI	World Resources Institute

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Executive Summary

The Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in the Caribbean Small-Scale Fisheries (StewardFish) project is aimed at implementing the 10-year 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) within seven Caribbean Regional Fisheries Mechanism (CRFM) member states (Antigua and Barbuda, Barbados, Belize, Guyana, Jamaica, Saint Lucia, St. Vincent and the Grenadines). The project aims to deliver enhanced stewardship of fisheries resources and livelihood benefits.

CANARI conducted an Institutional Analysis and Organisational Assessment in Antigua and Barbuda to contribute to Outcome 1.2 “Fisheries-related state agencies have capacity to support fishing industry stewardship” and Output 1.2.1 “state agency implementation gaps are assessed regarding support for fisherfolk organisations and their role in stewardship” of the project. The aim of the analysis was to identify current strengths, as well as opportunities for improvement in Antigua and Barbuda’s fisheries-related state agencies, in order to improve their capacity to support ecosystem stewardship by fisherfolk and their organisations as it related to the following areas (i) policies, laws and plans (ii) advisory and/or decision making mechanism (iii) fisheries related organisations (iv) processes and practices. The methods utilised included desk studies, interviews and validation workshops.

Laws, policies and plans in Antigua and Barbuda were assessed to determine whether they were in line with the principles of the ecosystem-approach to fisheries (EAF) and if they were supporting or constraining ecosystem stewardship. Consideration was given to local laws such as the Fisheries Act (2006), Fisheries Regulations (2013) and the Barbuda Fisheries Regulations (2014) as well as regional policies such as the Caribbean Community Common Fisheries Policy (CCCFP), including its associated Protocol on Securing Sustainable Small-Scale Fisheries and the Eastern Caribbean Regional Ocean Policy (ECROP) (2013) which are used to guide local fisheries management. Even though the Barbuda Regulations does not directly speak to socio-economic wellbeing of resource users, the regulations fall under the ambit of the national fisheries legislation and so the principles of EAF can be considered as represented in all instruments identified.

To determine the extent to which fisherfolk were being included in decision-making processes, the institutional analysis examined the existence, composition and functioning of current National Intersectoral Coordinating Mechanisms (NICs) which are essential to successfully implementing and achieving ecosystem-based management and an EAF. Apart from the Barbuda Local Council Coastal Management Advisory Committee, there are no NICs which currently include fisherfolk. The main mechanism for engaging fisherfolk in decision making at a national level, the Fisheries Advisory Committee, is inactive, and the existing National Ocean Governance Committee only comprises of state agencies. Despite this, fisherfolk are still engaged through legally mandated consultations.

Projects, programmes and initiatives in Antigua and Barbuda that have provided or are providing finances, technology and equipment and capacity building to fisherfolk and their organisations were examined to determine whether fisherfolk have adequate support and resources to undertake ecosystem stewardship actions. Support and resources for fisherfolk are available from a range of sources including from government, civil society and international development organisations either through ongoing programmes, projects or ad hoc efforts in response to crises such as hurricanes. Examples of support and resources provided include (i) training in topics such as sustainable fishing practices through training facilitated by Fisheries Division, (ii) provision of financial aid for the purchase of fishing equipment through the Japan International Cooperation Agency (JICA) and provision of small grants through the Global Environmental Fund Small Grants Programme.

Partnerships and networks are important as they help facilitate information flows, fill knowledge gaps, and strengthen expertise for ecosystem management, including stewardship. General partnerships are between fisherfolk and Fisheries Division, mainly through consultative processes to discuss amendments to regulations. While most partnerships within the fisheries sector are among state agencies, an important highlight is that of conch fishers working with the Fisheries Division to conduct research of the conch fishery. Also fishing aggregating devices (FAD) fishers collaborate with the Fisheries Division by sharing of information on fisheries catch data. It was noted that there is a need to strengthen inter-sectoral linkages between fisherfolk and tourism tour operators.

The extent to which providers of fisheries information were using communication strategies, tools and channels to communicate with fisherfolk, as well as their capacity to use the tools and channels effectively was examined. Technical information on sustainable practices are mainly communicated to fisherfolk through the Fisheries Division and the various fisherfolk organisations through the training sessions for obtaining licenses. The Fisheries Division has found that the most effective way to communicate with fisherfolk has been through face to face meetings with fisherfolk (e.g. at landing sites) and through the use of WhatsApp. All fisheries officers act as extension officers and most have a background in education, and are guided by a training manual, which allows for the simple communication of information. There is a need for the Fisheries Division to develop an interagency communication policy to transfer relevant information from state agencies or civil society organisations to fisherfolk as needed. Social media platforms were highlighted as a way to promote ecosystem stewardship practices by fisherfolk.

The structure and operational procedures of organisations such as government agencies, can reinforce local actions, as well as support in providing resources and facilitating learning as it relates to stewardship. The vision, mandate and culture of the Fisheries Division is aligned to ecosystem stewardship values and is reflected through its practices of collaborating with / including opinions of fisherfolk, supporting training of fisherfolk, and using external networks to seek resources for fisherfolk. Senior staff are well versed in the ecosystem approach to fisheries approach supported by competent technical staff.

Coming out of the report, the main enabling factors were the support provided by the Fisheries Division through its license training programme as well as the range of support available to fisherfolk through external agencies. The major gap was the lack of a national participatory mechanism for fisherfolk to be involved in decision making along with the absence of a formalised umbrella organisation for fisherfolk. Major recommendations included the establishment of intersectoral coastal management organisation through the fisheries division to reduce user conflict and allow proper representation of fisherfolk and the need for a formal fisherfolk umbrella organisation.

1 Introduction

In 2013, countries bordering and/or located within the Caribbean and North Brazil Shelf Large Marine Ecosystems (CLME+ region) adopted a 10-year 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)¹. The 10-year CLME+ SAP aims to contribute to the achievement of the regionally adopted long-term vision of “a healthy marine environment in the CLME+ that provides benefits and livelihoods for the well-being of the people of the region.” The CLME+ SAP consists of 6 Strategies and 4 Sub-strategies. SAP strategies 1-3, with a focus on governance, are cross-cutting, while strategies 4-6 tackle the three main marine ecosystems (reef, pelagic and continental shelf) in the CLME+ region. One of the key strategies of the CLME+ SAP is to achieve sustainable fisheries, including of small-scale fisheries which are important economic drivers for the sustainability of coastal communities and rural livelihoods and a vital source of employment, food and income for Caribbean people.

The *Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in the Caribbean Small-Scale Fisheries (StewardFish)* project is therefore aimed at implementing the CLME+ SAP within seven Caribbean Regional Fisheries Mechanism (CRFM) member states (Antigua and Barbuda, Barbados, Belize, Guyana, Jamaica, Saint Lucia, St. Vincent and the Grenadines) that have politically endorsed the CLME+ SAP by empowering small-scale fisherfolk throughout fisheries value-chains to engage in resource management, decision-making processes and sustainable livelihoods with strengthened institutional support at all levels.² The project aims to deliver enhanced stewardship of fisheries resources and livelihood benefits through implementation of the four core project components (See Figure 1).

StewardFish recognises that there are several challenges that hinder the engagement of fisherfolk and their organisations in the sustainable use and management of fisheries in the region including fisheries-related state agencies not having adequate capacity to support fisherfolk and their organisations with ecosystem stewardship initiatives. Because state agencies, including fisheries authorities, vary widely in their support of fisherfolk organisations for different reasons, some within their control and others beyond, a situation specific analysis is required.

In support of this, CANARI conducted an Institutional Analysis and Organisational Assessment in each of the project countries to contribute to Outcome 1.2 “*Fisheries-related state agencies have capacity to support fishing industry stewardship*” and Output 1.2.1 “*state agency implementation gaps are assessed regarding support for fisherfolk organisations and their role in stewardship*” of the project.

The aim of the analysis was to identify current strengths, as well as opportunities for improvement in each project country’s fisheries-related state agencies, in order to improve their capacity to support ecosystem stewardship by fisherfolk and their organisations.

The analysis included:

- Designing an institutional analysis tool adapted from the Adaptation: Rapid Institutional Assessment (ARIA) methodology, including an organisational assessment survey targeted at the fisheries authorities

¹ CLME+ Strategic Action Programme <https://www.clmeproject.org/sap-overview/>

² CANARI. 2019. StewardFish – Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-Scale Fisheries (StewardFish) project. Posted on October 10, 2019 (March 20, 2020) by admin. Available: <https://canari.org/stewardfish-project/>

- Conducting desk studies, surveys, virtual and in-country interviews and focus groups with fisherfolk, fisheries authorities and other key state agencies in the project countries
- Facilitating national workshops³ to present, validate, refine and receive input on the preliminary findings and identify priorities for improvement, in each project country
- Producing country reports of findings, including recommended priorities for improvement

This report provides the findings and recommendations from the institutional analysis and organisational assessment that was conducted for Antigua and Barbuda, between February to June 2020.

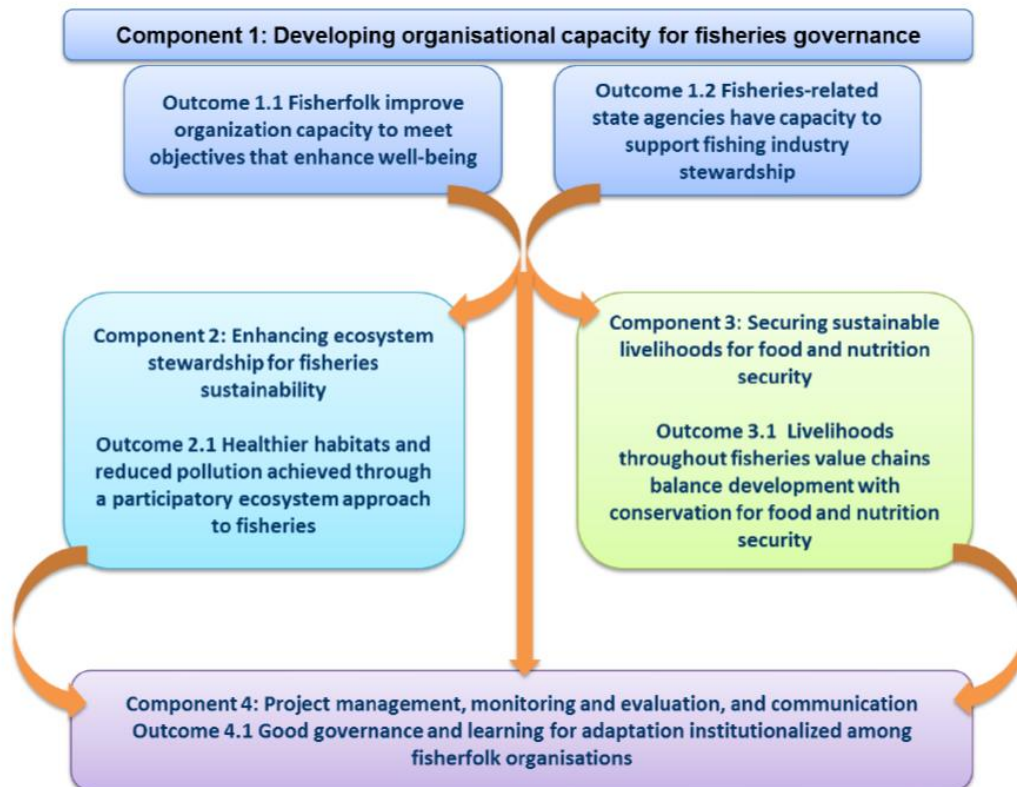


Figure 1: StewardFish Project Framework. Credit: FAO

³ National workshops were initially carded to be conducted in-country for all project countries, however, due to the Covid19 pandemic as declared by the World Health Organisation on March 11, 2020, and subsequent restrictions on air travel, all workshops following the declaration date were conducted virtually through webinars.

1.1 How strong institutions can support ecosystem stewardship by fisherfolk

Stewardship is a terminology related to rights and responsibilities in governance processes. Application in natural resource management has expanded the understanding of stewardship to relay that “stewards” are stakeholders with responsibility for proper resource use, who will “take care” of a resource under communal or public property rights. The term also importantly encompasses responsibility not only for proper use of resources but also right to life of other species and for future generations.⁴ The concept of *ecosystem stewardship*, particularly in the fisheries sector; includes reducing the vulnerability of the sector by promoting resilience



Figure 2: Members of the Caribbean Network of Fisherfolk Organisations (CNFO), a regional fisherfolk organisation, at the StewardFish project Regional Fisherfolk Mentors training workshop Oct 28-Nov 1,

and making use of opportunities to transform undesirable paths. Stewardship activities may range from actions targeted at species, habitats, ecosystems or even human-environment systems. Stewardship actions may include limiting / prohibiting harvest of vulnerable species,

LOCAL ENVIRONMENTAL STEWARDSHIP

“Local environmental stewardship is the actions taken by individuals, groups or networks of actors, with various motivations and levels of capacity, to protect, care for or responsibly use the environment in pursuit of environmental and/or social outcomes in diverse social-ecological contexts”- (Bennet et al. 2018)

protecting/restoring degraded habitats, establishment of protected areas and promotion of alternate livelihoods so as to reduce dependency on limited resources. Purposeful in-action can be considered a form of stewardship through making a conscious choice not to extract resources so as to allow for regeneration.⁵

A fundamental concern of stewardship is capacity – i.e. whether individuals or groups are able to steward their resources. Capacity, which is in part determined by broader governance -including systems of institutions (i.e. laws and policies, formal and informal organisations, and decision-making processes and structural processes related to power and politics (i.e. economic inequality, discrimination, exclusion from decision-making)—can either empower or constrain the sense of agency, available options and capacity of would-be stewards⁵. From the paper “Environmental Stewardship: A Conceptual Review and Analytical Framework” Bennet *et. al* noted for the small-scale fisheries sector that stewardship efforts can be supported by national laws or policy frameworks that protect local fisher’s rights and tenure, formalise local fishers’ stewardship responsibilities, or that provide resources to support local community efforts to steward their own resources. Conversely, the paper notes that even when local small-scale fishers want to take action, the broader policy landscape may undermine their efforts by creating bureaucratic challenges.

⁴ Medeiros, Rodrigo Pereira, Thiago Zagonel Serafini, Patrick McConney. 2014. Enhancing Ecosystem Stewardship in Small-Scale Fisheries: Prospects for Latin America and the Caribbean. *Desenvolv. Meio Ambiente*, n. 32, p. 181-191.

⁵ Bennett Nathan J., Tara S. Whitty, Elena Finkbeiner, et. al. 2018. Environmental Stewardship: A Conceptual Review and Analytical Framework *Environmental Management*. Vol. 61, pp. 597-614. <https://doi.org/10.1007/s00267-017-0993-2>

Ensuring that the fisheries institution adequately enables ecosystem stewardship by fisherfolk and their organisations will not only contribute to sustainable fisheries but will also help to ease the burden of already under-resourced fisheries state agencies to monitor and enforce fisheries regulations.

2 Institutional Analysis Framework

An institution is the set of arrangements for making decisions about the development, management, and use of a natural resource, including the stakeholders, as well as, the laws, formal and informal policies, plans and structures that guide how these stakeholders interact with each other and with the resources ⁶.

To conduct the rapid analysis CANARI developed and piloted an institutional analysis tool which was adapted from the World Resources Institute’s (WRI) Adaptation: Rapid Institutional Assessment (ARIA) ⁷ methodology, including an organisational assessment survey targeted at national fisheries authorities. The tool analyses the institutional and organisational capacity of fisheries-related state agencies to support stewardship in the small-scale fisheries sector. The tool was used to conduct a baseline assessment and can subsequently be used for monitoring and evaluation as part of an institutional strengthening process.

The tool examines four conceptual components- fisheries-related policies, laws and plans, advisory and/or decision-making mechanisms, fisheries-related organisations and processes and practises to determine the capacity of the fisheries institution- to support the role of fisherfolk and their organisations in ecosystem stewardship. Refer to Table 1 for a description of each conceptual component. Appendix 13.1 includes more detailed definitions of conceptual components.

Table 2.1 The four conceptual components assessed in the rapid institutional analysis

Conceptual component	Description of component
Policies, laws and plans	Examined fisheries and fisheries-related policies, plans and legislation (including rules and regulations) to determine how they may be empowering or constraining the ability to integrate ecosystem stewardship practices within the country’s small-scale fisheries sector.
Advisory and/or decision-making mechanisms	Examined the presence, composition and functioning of existing multi-stakeholder mechanisms (e.g. Fisheries Advisory Committee) established for advising or making decisions for fisheries management.
Fisheries-related organisations	Examined the roles and responsibilities of fisheries-related state agencies, as well as other fisheries-related organisations [e.g. fisherfolk organisations, civil society organisation (CSOs), private sector organisations and academia] which play a key role in the fisheries-related institutional arrangements of the project country. Additionally, an organisational capacity assessment was carried out to examine the national fisheries authority’s current ability to support ecosystem stewardship by small-scale fisherfolk and included an examination of the authority’s: <ul style="list-style-type: none"> ○ Vision, mandate, culture

⁶ CANARI. 2011. Facilitating participatory natural resource management: A toolkit for Caribbean Managers. Laventille: CANARI.

⁷ WRI’s Rapid Institutional Analysis for Adaptation Tool. <https://accessinitiative.org/resources/adaptation-rapid-institutional-analysis-phase-1-workbook>

	<ul style="list-style-type: none"> ○ Knowledge and skills ○ Resources ○ Partnerships
Processes and practices	<p>Examined the various processes and practices in the country's fisheries institution related to:</p> <ul style="list-style-type: none"> ○ Good governance- assessed the application of good governance practices, particularly fisherfolk inclusion, in decision-making processes in the fisheries sector. ○ Collaborative management- assessed the extent to which cooperative management exists in practice between fisheries-related state agencies and small-scale fisherfolk and their organisations. The degree of stakeholder collaboration in management practices was also assessed. ○ Effective communication- assessed the extent to which providers of fisheries information in the project country were using defined communication strategies, tools and channels to communicate with fisherfolk, as well as their capacity to use the tools and channels effectively; including the structures and systems in place for clear communication.

The tool was implemented using a variety of data collection methods (See Section 3 on Methodology) in order to capture a broad range of stakeholder perceptions and input; as well as to gather perspectives on the realised benefit of existing laws, rules, regulations, processes, practices and procedures of the fisheries institutions.

Based on the information collected the institutional analysis and organisational assessment report will discuss the following key aspects in regard to the capacity of the fisheries institution to support the role of fisherfolk and their organisations in ecosystem stewardship:

- Policy, legal and planning context for ecosystem stewardship
- Mechanisms for fisherfolk participation in decision-making
- Support and resources available to fisherfolk and their organisations for ecosystem stewardship
- Partnerships and networks for ecosystem stewardship
- Communication of information on sustainable practices for fisheries resources use

3 Methodology

A rapid analysis of the institutional and organisational capacity of fisheries-related state agencies to enable stewardship in the fisheries sector was conducted for Antigua and Barbuda during the period February – March 2020. The analysis piloted an institutional and organisational capacity assessment tool developed by CANARI (Refer to Section 2). The rapid analysis included the following key research methods:

- **Desk study:** CANARI collated and reviewed information readily available (e.g. through online sources and those referenced at workshops) on the project country's small-scale fisheries sector and its institutional environment; particularly as it relates to capacities to support ecosystem stewardship by small scale fisherfolk and their organisations. This was carried out at an early stage of the analysis to inform and guide the subsequent methods.

- **Validation workshop:** Following the initial desk study; a validation workshop was held in-country on March 10-11th, 2020 at the Fisheries Department, Antigua which included participants from government (e.g. Fisheries Division), civil society [e.g. Environmental Awareness Group (EAG)] and representatives from fisherfolk organisations. The full participants list is attached at Appendix 13.2.1. This validation workshop provided an opportunity to validate information collated during the desk study phase as well as acquire additional information from in-country sources.
- **Interviews:** in-country face-to-face key informant interviews were conducted on March 12th and 13th with officers from the Fisheries Division as well as individual fisherfolk in Antigua. Virtual interviews were conducted during the month of May with government, fisherfolk and civil society stakeholders. A list of interviewees' associated organisations is attached at Appendix 13.2.2.
- **Survey:** an online organisational capacity assessment survey was administered to the Antigua and Barbuda Fisheries Division to collect information on the organisation's current ability to support ecosystem stewardship by small-scale fisherfolk.

4 Background

4.1 Geography

Antigua and Barbuda is a twin island state that forms part of the Leeward Islands in the Eastern Caribbean. The country consists of three islands: Antigua (280 km²), Barbuda (161 km²) and Redonda (1.6 km²), covering a total land area of 442.6km² and coastline of 153km. There are also other tiny uninhabited islands surrounding Antigua. Antigua and Barbuda has an exclusive economic zone of 111,914 km², so its marine space is approximately 250 times the size of its land area. Climate is tropical maritime with little variation in seasonal temperature ^{8,9,10,11}.

There are limited natural freshwater resources and rainfall runoff is fast due to clearing of trees. Although considered to be drier than most Caribbean islands and vulnerable to periods of drought, it is susceptible to hurricanes and tropical storms from July to October ⁸.

Antigua is mainly a low-lying coral and limestone island, with the highest peak being Boggy Peak (renamed Mt. Obama) at 402m, comprising of volcanic rock. Its indented coastlines provide ideal natural harbours and beaches. Barbuda is relatively flat with lagoon area on the western side of the island and has a large western harbour. Redonda is a small precipitous uninhabited rocky island ^{8,11,11}.

Antigua has three distinct geological regions: (i) Volcanic region at the south / southwest of the island (where past eruptions, andesite and basalt flows shaped the valleys and hills in the landscape), (ii) Central plains (delineates the volcanic and limestone regions; extends from the northwest to the southeast) and (iii) Limestone region making up about a third of the island. Barbuda's topography is uniformed as most of the island is only 3m above sea level, reaching a maximum height of only 38m⁹.

⁸ Commonwealth Secretariat.n.d. "Antigua and Barbuda". Accessed 2nd March 2020. Available at <https://thecommonwealth.org/our-member-countries/antigua-and-barbuda>.

⁹ Government of Antigua and Barbuda. 2014. Antigua and Barbuda Fifth National Report to the Convention on Biodiversity. Accessed 2nd March 2020. Available at <https://www.cbd.int/doc/world/ag/ag-nr-05-en.pdf>

¹⁰ FAO.2018. Fishery and Aquaculture Country Profile – Antigua and Barbuda. Accessed 2nd March 2020. Available at <http://www.fao.org/fishery/facp/ATG/en>.

¹¹ The World Factbook. 2020. Antigua and Barbuda. CIA. Accessed 2nd March 2020. Available at <https://www.cia.gov/library/publications/the-world-factbook/geos/ac.html>

Antigua and Barbuda's ecosystems include: forested areas, shrub land, mangrove wetland, seagrass beds and coral reefs. Barbuda has similar ecosystems including coastal lagoons, salt ponds, tidal flats, sand bars, sand dunes, caves and blue holes⁹.

Antigua and Barbuda's total population in 2018 was 96,286. Ninety-seven percent (97%) of the population lives in Antigua with most of Barbuda's population settled in the main town, Codrington. The capital St. John is located on the island of Antigua and is the most populated of all the main towns (21,000 in 2018)^{11,12}.

4.2 Governance

Antigua and Barbuda is a commonwealth country and is governed as a parliamentary democracy presided by a constitutional monarchy. The chief of state is recognised as the Queen of England and the head of government is the Prime Minister chosen through elections. Its parliament consists of two chambers (Senate and House of Representatives) and the highest court is recognised as the Eastern Caribbean Supreme Court of the Organisation of Eastern Caribbean States (OECS)¹¹. The Barbuda Local Government Act of 1976 gives the locally elected Barbuda Council authority to make by laws¹³.

4.3 Economy

In 2018, Antigua and Barbuda's Gross Domestic Product (GDP) was USD 1.611 billion with an annual growth rate of 7.4%¹². In 2017, the broad sectors of services accounted for the highest contribution to GDP at 77.3%, and in 2018 industry contributed 21% whilst agriculture, forestry and fishing contributed 2%^{11,12}. The global economic recession in 2009 affected Antigua's economy and despite GDP growth, it has not yet recovered to growth levels pre-economic crisis. In 2017, Hurricanes Irma and Maria caused significant damages to Barbuda¹¹.

As with most Caribbean islands, Antigua and Barbuda's tourism industry makes up the backbone of the economy with a total contribution of 51.8% of GDP and 46.1% of total employment in 2017, ranking amongst the highest countries within the Caribbean for total GDP contribution and total employment. Antigua and Barbuda is also among the highest tourism investing countries accounting for USD 0.2 billion in 2017¹⁴.

4.4 Overview of fisheries sector

Although fisheries on its own contributes 0.96% to GDP, its contribution to the economy is measured through its support to livelihoods, with an estimated 7,584 jobs in the fisheries sector in 2015/2016. The majority of fishers are based in Antigua with approximately 4% of fishers being women. Women are mostly involved in the processing and marketing sector. One quarter of Barbuda's population is estimated to be involved in fisheries related activities. As most of the population lives close to the coast, the sector acts as a 'safety net' during periods of low income. Fisheries also provide a main source of animal protein with per capita consumption of 42.27 kg/capita in 2013. The sector also contributed to an export trade value of USD 558,000 in 2017. However, lobster and conch exports are

¹² World Development Indicators database. 2018. World Bank. 2018. Antigua and Barbuda Country Profile. Available at <https://data.worldbank.org/country/antigua-and-barbuda>. Accessed on 2nd March 2020.

¹³ Horsford, I and M. Lay. 2012. Case Study: A Comparative Analysis of Different Approaches to Fisheries Co-management in Antigua and Barbuda. Proceedings of the 65th Gulf and Caribbean Fisheries Institute November 5 – 9, 2012 Santa Marta, Colombia

¹⁴ WTTC. 2017. Travel and Tourism Economic Impact 2018 – Antigua and Barbuda. Available at <https://www.wttc.org/economic-impact/country-analysis/country-reports/>. Accessed 02 March 2020.

not accounted for and lobster exports alone are estimated at USD 0.5million /year. Lobster is mainly exported to Guadeloupe, Martinique and Sint Marteen ^{10, 15, 16, 17} .

An extensive shelf area totalling 3568 km² supports fisheries in Antigua which mostly relies on coastal fishes and molluscs (abalones, winkles, conchs). For the period 2006-2017, coastal fisheries accounted for 15,860 tonnes in catch and molluscs at 18,462 tonnes. Out of these two main groups, main species caught include snappers, grouper, Caribbean spiny lobster and queen conch. Although crustaceans (lobster, spiny-rock lobsters) contributed significantly less to catch over the same period (2575 tonnes), along with queen conch, it is considered a high valued species and sold to businesses in the tourism industry for tourist consumption ^{10, 17, 18} .

Though status of resource is suggested as being fully exploited, fish capture production has remained relatively stable with a significant peak in 2012 of 5,951 tonnes. The peak in production was due to increased harvest in reef fishes such as grouper and snapper, as well as queen conch and use of more fish aggregating devices (FADs) in the pelagic fisheries ^{10, 17} .

The sector ranges from small-scale to commercial fisheries. The fishing fleet consisted of approximately 340 boats in 2016 and the fleet has transitioned from small wooden boats (known as sloops and dories with lengths of up to 5.9m) to fibreglass pirogues and launches (lengths 6.7m). Despite increases in fishing technology, the main gear used is traps. There are 32 landing sites ranging from rural beaches to fisheries complexes. All landings are marketed directly for human consumption with two fisheries facilities that provide basic processing for retail. Traditional processing of salting and dryings occurs at a subsistence level mostly in Barbuda. Seamoss products are packaged as either bottled, canned or dried and sold to local and regional markets. In general, there is an underdeveloped processing sector due to high costs. The aquaculture sector has been limited to private operations with 2 commercial operations and several backyard operations, mostly producing tilapia. Recreational fishery is highlighted through the annual Antigua and Barbuda Fishing Tournament ^{10, 16} .

Fisheries is mainly governed by the Fisheries Act No. 22 of 2006 and fisheries management falls under the Fisheries Division of the Ministry of Agriculture, Lands, Housing and the Environment. The Barbuda (Coastal Zoning and Management) Regulations, 2014, empowers the Barbuda Council to amend declared or create specific fishery zones and impose restrictions within these zones. Closed seasons, closed areas and gear restrictions exist for the lobster and queen conch fisheries. Special permits are required for queen conch and lobster fisheries. Closed seasons also exist for parrot fish, red hind, Coney and Nassau grouper ¹⁰ .

Challenges to fisheries industry in Antigua and Barbuda include the importation of cheap fish, fish poisoning (ciguatera), poaching from French island fishers, limited investment in capital, inadequate legislation enforcement and restricted access to European markets ¹⁰ .

¹⁵ Singh-Renton, S. & McIvor I. 2015. Review of current fisheries management performance and conservation measures in the WECAFC area. FAO Fisheries and Aquaculture Technical Paper No. 587, Bridgetown, Barbados, FAO. 293 pp.

¹⁶ CRFM. 2018. CRFM Statistics and Information Report - 2016. 82pp

¹⁷ FAO FishStat. 2018. Global Statistical Collections. Accessed on 2nd March 2020. Available at <http://www.fao.org/fishery/topic/16140/en>.

¹⁸ CRFM, 2016. Promoting Regional Trade and Agribusiness Development in the Caribbean: Case Studies on Linking Fisheries to Tourism-Related Markets. CRFM Technical & Advisory Document, No 2016 / 3. Belize City. pp101.

Antigua and Barbuda is party to the following international agreements related to fisheries¹⁵:

- United National Convention of the Law of the Sea,
- Compliance Agreement or Port State Measures Agreement,
- Convention on Fishing and Conservation of Living Resources of the High Seas,
- Convention on the International Trade in Endangered Species of Wild Flora and Fauna,
- Convention on Biological Diversity,
- Convention on the Conservation of Migratory Species of Wild Animals,
- Convention on Wetlands of International Importance Especially as Waterfowl Habitat,
- International Convention for the Regulation of Whaling.

Antigua and Barbuda has membership in regional fisheries bodies such as Caribbean Regional Fisheries Mechanism (CRFM), International Whaling Commission (IWC) and the Western Central Atlantic Fishery Commission (WECAFC). The country participates in OECS Agreement (1991), Caribbean Regional Fisheries Mechanism establishing Agreement (2004) and Caribbean Community Common Fisheries Policy Agreement (2014) ^{10, 19}.

4.5 Stakeholder involvement in the fisheries Institution of Antigua and Barbuda

Antigua and Barbuda's fisheries institution includes a range of governmental, civil society, and private sector stakeholders with various roles, mandates, responsibilities and interests. As part of the institutional analysis, key stakeholders were briefly identified and analysed to get an understanding of the range of stakeholders involved in the sector (Refer to Table 4.1). The stakeholder identification and analysis was informed by the desk study and stakeholders who participated in the validation workshop. During the validation workshop, a stakeholder analysis exercise was conducted to understand stakeholders' perceptions of decision-making power and relationships among the various stakeholders in the fisheries institution. During the exercise, workshop participants identified stakeholders with the highest level of decision-making power as those who were perceived to have access or connections to the 'halls of power'; be more involved or skilled in lobbying and/or have a higher priority in the national economy.



Figure 3 Stakeholders at workshop participating in the stakeholder identification and analysis exercise, Tuesday 9th March 2020, Fisheries Division Antigua and Barbuda. Credit: CANARI 2020

Among fisherfolk organisations, the South Coast United Fisherfolk Cooperative was perceived to have high decision-making power due to their organisation as a community to lobby for their views. Most other fisherfolk organisations were considered to hold mid-level decision-making powers with the exception of the Spear Fishers Association which was perceived as having a lower level of decision-making power due to their lack of voice in fisheries management. Most fisherfolk organisations in Antigua are informal and often lack the capacity, including resources, to become formalised, though the informal groups are recognised by the Fisheries Division. However, support from the public sector

¹⁹ FAO. 2016. Caribbean Fisheries Legal and Institutional Study: Findings of the comparative assessment and country reports, by Cristina Leria. FAO Fisheries and Aquaculture Circular No. 1124. Bridgetown, Barbados

requires accountability which informal groups lack. The relationships to the 'halls of power' by certain stakeholders were also perceived as constraining the ability of fisherfolk to be fairly involved in decision-making processes.

The Fisheries Division, Barbuda Council Fisheries Department and the Environment Division were perceived as mid-level players in terms of decision-making powers, and were mainly viewed as facilitators in the process of acquiring permission or information for the higher-level stakeholders. Fisheries Division decision-making power was also felt to be mitigated by higher-level stakeholders that were able to influence decisions, for example through lobbying, and as such their decision-making power was seen as not being cohesive. Decision-making power was also perceived to be stronger with the Ministry of Tourism, due to the benefits of tourism to the national economy. Enforcement agencies were not perceived to be directly involved in decision-making processes and private sector stakeholders were considered as stakeholders with the lowest level of decision-making power. Regional and international development organisations (e.g. Japan International Cooperation Agency JICA, Food and Agriculture Organization of the United Nations (FAO), OECS Commission, European Union, GEF) were not seen as having direct decision-making power but were rather considered to be strong influencers of decisions due to their ability to provide needed financial and technical support. However, CRFM was listed as a high-level direct stakeholder due to their influence on national fisheries policy.

In terms of relationships, those amongst the fisherfolk organisations were noted as the ones needing the most strengthening, particularly in regard to improving cohesiveness.

The Antigua and Barbuda Fishermen Co-operative Society Ltd. is the only formally registered umbrella fisherfolk organisation in the island, however the organisation is not currently operational and is not seen as being representative of all fishing groups. In the absence of a more formal arrangement, the Antigua and Barbuda Fisheries Alliance, an informal group, has been making efforts to bring together the different fisherfolk organisations (net fishers, spear-fishers, south-coast fishers, FAD fishers and Barbuda fishers). The Alliance is currently a support structure, operated by fishers, that provides a forum for discussion and sharing as well as sharing benefits of networking with the different fisherfolk groups. While the Alliance is currently made up of fisherfolk leaders (two members from each fisherfolk organisation/group), it does not have a rigid membership structure, and more fisherfolk are encouraged to join. Decisions are made by consensus and any member can request a meeting to be convened. However, it was noted that fisherfolk organisations in Antigua mainly tend to come together when there is an issue or as needed²⁰. This was different from the Barbuda experience where the fishing community is organised through the formally registered Barbuda Fisherfolk Association which represents fishers in Barbuda. The Barbuda Fisherfolk Association is formally registered under the Friendly Societies Act (1928).

In general, workshop participants agreed that there was a need to have strong groups of stakeholders working from the grassroots level up with greater representation from fisherfolk organisations on the ground.

Table 4.1 below provides a list of key stakeholder types involved in the fisheries institution in Antigua and Barbuda in the governmental, civil society, and private sectors. The list provided in the table is not meant to be exhaustive, but rather to give the reader some insight into the various stakeholder groups that are likely to benefit by improved ecosystems stewardship among fisherfolk.

²⁰ Antigua and Barbuda Fishermen Alliance.2020. Personal Communication. 26th May.

Table 4.1: Analysis of key stakeholders in the fisheries institution in Antigua and Barbuda ^{13,15,19,21}

Stakeholder type	Role/Interests	How will they benefit from improved ecosystem stewardship by fisherfolk/fisherfolk organisations?
Government		
Fisheries Division, Ministry of Agriculture, Fisheries and Barbuda Affairs	<ul style="list-style-type: none"> • Responsible for the management and development of Antigua and Barbuda’s fisheries sector • Has authority to create new regulations for the management of fishery resources • Interest in conservation of fisheries resources for long-term sustainable use 	Collaborative co-management improves partnership between Fisheries Division and resource users (i.e. fisherfolk), creating a sustainable environment for resource conservation alongside development of the fisheries industry as stakeholders will share aligned goals (makes use of opportunities to transform undesirable paths i.e. unsustainable exploitation of resources). Efficient utilisation of Division resources by ‘sharing the burden’ of management alongside ecosystem stewards.
The Barbuda Local Council	<ul style="list-style-type: none"> • Local authority responsible for fisheries management in Barbuda including making by-laws. Administers through Fisheries, Coastal/Marine Protection subcommittee with Barbuda Fisheries as the implementing arm ²² • Interest in conservation of fisheries resources for long-term sustainable use 	Collaborative co-management improves partnership between Local Council and resource users (i.e. fisherfolk), creating a sustainable environment for resource conservation alongside development of the fisheries industry as stakeholders will share aligned goals (makes use of opportunities to transform undesirable paths i.e. unsustainable exploitation of resources). Efficient utilisation of Division resources by ‘sharing the burden’ of management alongside ecosystem stewards.

²¹ This list is not exhaustive, but meant to give insight into the various stakeholders in stakeholder categories of government, civil society, academia and private sector that will be affected by improved ecosystems stewardship

²² CLGF. n.d. The Local Government System in Antigua and Barbuda: Country Profile 2017-18. Accessed on 1st June 2020. Available at http://www.clgf.org.uk/default/assets/File/Country_profiles/Antigua_and_Barbuda.pdf

Department of Environment, Ministry of Health and the Environment ²³	<ul style="list-style-type: none"> National agency responsible for environmental management with particular regards to maintaining policies and plans related to wetlands, protected areas and coastal protection. Implementation of commitments to multilateral environmental agreements (MEAs) National CITES management authority Interest in effective natural resource management 	Greater support and understanding by fisherfolk for marine management decisions particularly for marine protected areas and zonation policies
Antigua and Barbuda Defence Force Coast Guard.	<ul style="list-style-type: none"> Responsible for ensuring compliance with Fishery Regulations 	<ul style="list-style-type: none"> Reduced need for monitoring and enforcement due to increased compliance of fisherfolk with regulations Assistance with monitoring by fisherfolk through increased reporting of illegal activities
Customs and Excise Division Ministry of Finance and Corporate Governance		
Royal Police Force of Antigua and Barbuda		
Barbuda Council Sea Wardens		
Ministry of Tourism / Tourism Hotel Association	<ul style="list-style-type: none"> Management of tourism industry and tourism related organisations 	<ul style="list-style-type: none"> Increased interests for projects highlighting fishery based tourism.
Civil society		

²³ Government of Antigua and Barbuda, Department of Environment. Strategic Plan: Strategy for the Protection of the Environment and the Sustainable Development of Antigua and Barbuda 2019-2020.

<p>Fisherfolk organisations e.g.</p> <ul style="list-style-type: none"> • Antigua and Barbuda Fishermen Alliance • Antigua and Barbuda FAD Fishing Association (formal) • Spear Fishers Association • Net Fishers Association • Conch Fishers • South Coast United Fisherfolk Cooperative • Sport Fishing Association • Barbuda Fisherfolk Association (formal) 	<ul style="list-style-type: none"> • Mostly informal fisher groups that represent interests of fisherfolk as it relates to policies, plans, market prices and liaising with fisheries division • Interest in long-term sustainability of fish stocks to support livelihoods, including sustainable business enterprises 	<ul style="list-style-type: none"> • Fishing cooperatives that adopt and promote more sustainable fishing practices among their membership are likely to have more sustainable and viable business enterprises. A positive reputation in this regard can potentially create opportunities for these cooperatives to form new partnerships with other organisations with similar values willing to provide capacity building and other resources to support development of these cooperatives. • Fisherfolk would be motivated to engage on issues related to management of fisheries resources leading to greater participation / collaboration at cooperatives meetings, and various consultations
<p>Marine Ecosystem Protected Areas Trust²⁴</p>	<p>Provision of sustainable finance to support marine biodiversity and ecosystem conservation initiatives by local community.</p>	<p>Empowered FFOs would be more motivated to access grant funding to support conservation activities and sustainable livelihoods projects</p>
<p>Environmental Awareness Group (EAG)</p>	<ul style="list-style-type: none"> • Management of protected areas and undertaking of conservation measures within marine environment. 	<ul style="list-style-type: none"> • Increased partnerships with fisherfolk organisations for conservation projects.
Private sector		
<p>Private aquaculture (aquaponics) farms e.g. Lincoln Farms Indies Green</p>	<p>Interest in expanding aquaculture and seamoss farms to make profits</p>	<p>Increased interest by fisherfolk to get involved in aquaculture and seamoss farming as alternative livelihood options reducing resource dependency</p>
<p>Caribbean Sea Moss Farms Antigua</p>		
<p>Fish vendors</p>	<ul style="list-style-type: none"> • Responsible for processing and marketing of fish and fish products • Interest in long-term supply of fish and fish products for livelihoods and revenue generation 	<p>Increased revenues from improved long-term sustainable supply of fish and fish products to market</p>
<p>Exporters e.g. General Craft Traders</p>		
<p>Fish processors e.g. White's Fish Market</p>		

²⁴ Weston Lennox. 2016. MEPA Trust Antigua and Barbuda draft operational manual 2015 - 2018

Fish retailers e.g. <ul style="list-style-type: none"> ○ Markets / Supermarkets ○ Hotels and Restaurants ○ Fish Retail Outlets 		
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5 Policy, legal and planning context for ecosystem stewardship

National policies, laws or plans can either encourage ecosystem stewardship by fisherfolk or undermine it.²⁵

To determine whether existing fisheries and coastal and marine related policies, laws and plans in Antigua and Barbuda were supporting or constraining ecosystem stewardship, selected priority policies, laws and plans were assessed to determine whether they were adequately in line with the principles of EAF, namely whether they considered:

- human well-being: a condition in which all members of society are able to determine and meet their needs and have a large range of choices to meet their potential; and
- ecosystem well-being: a condition in which the ecosystem maintains its diversity and quality — and thus its capacity to support people and the rest of life — and its potential to adapt to change and provide a viable range of choices and opportunities for the future.
- good governance: governance arrangements that enable broad stakeholder participation are similarly expected to confer support for management and foster stewardship among fisherfolk and other resource users.²⁶

EAF recognises the need to maintain the productivity of ecosystems for present and future generations, conserving critical habitats, reducing pollution and degradation, minimising waste and protecting endangered species. It also recognises that this will not be achieved without the cooperation of people, i.e. unless the ecosystem contributes to human well-being, providing sustainable goods and services and sources of livelihood.²⁷ Consideration of the latter is likely to encourage fisherfolk and other resource users to sustainably use, protect and conserve the resources they depend on for livelihoods. A holistic governance framework which considers importance of not only the ecological well-being of fisheries resources – but equally considers socio-economic well-being of fishery resource users and collaborative management mechanisms in the approach to fishery resources management – will increase the likelihood of ecosystem stewardship from fisherfolk in the small-scale fisheries industry.

²⁵ Bennett, N.J., Whitty, T.S., Finkbeiner, E., Pittman, J., Bassett, H., Gelcich, S. and Allison, E.H., 2018. Environmental stewardship: a conceptual review and analytical framework. *Environmental Management*, 61(4), pp.597-614.

²⁶ Viability and Sustainability of Small-Scale Fisheries in Latin America and https://books.google.tt/books?id=WBtfDwAAQBAJ&pg=PA475&lpg=PA475&dq=good+governance+definition+McConney&source=bl&ots=KCYRgCdVBF&sig=ACfU3U2DE3Aa8CDQ47L1iAbqrSv_J2NFOW&hl=en&sa=X&ved=2ahUKewjQ96zQ0MjpAhWrmOAKHRQ9C0AQ6AEwDHoECAoQAQ#v=onepage&q=good%20governance%20definition%20McConney&f=false

²⁷ FAO. 2002. The ecosystem approach to fisheries. <http://www.fao.org/3/a-y4773e.pdf>

5.1 Findings for policy, legal and planning context for ecosystem stewardship in Antigua and Barbuda

Table 5.1 identifies some of the national fisheries and coastal and marine related policies, laws and plans within the fisheries institution in Antigua and Barbuda. Policies, plans and laws identified are either directly related to the fisheries sector, for example the Fisheries Act which guides the utilisation of the fisheries resources in Antigua and Barbuda or indirectly related to the fisheries sector, for example the Antigua and Barbuda Food and Nutrition Security Policy which seeks to address critical food and nutrition security challenges in Antigua and Barbuda including those related to the fisheries sub-sector.

Table 5.1 Policies, laws and plans related to the fisheries institution in Antigua and Barbuda

Policies
<ul style="list-style-type: none"> • National Poverty Reduction Strategy (2011-2015) • National Maritime Policy, draft • Antigua and Barbuda Food and Nutrition Security Policy 2012.Date of text: 2012 • Strategy for the Protection of the Environment and the Sustainable Development of Antigua and Barbuda 2017 – 2018.Date of text: 2017
Laws
<ul style="list-style-type: none"> • Fisheries Act, 2006 • Fisheries Regulations (2013) • Barbuda (Fisheries) Regulations (2014) • Marine Areas (Preservation and Enhancement) Regulations (1973) • Barbuda (Coastal Zoning and Management) Regulations (2014) • Fisheries (Protection of Lobster) Regulations. • Importation of Live Fish Act (1975), the Beach Protection Act (1957), • Beach Protection (Amendment) Act (1993), the National Parks Act (1984) • Barbuda Local Government Act (1976) • National Parks (Amendment) Act (2004) • Port Authority Act (1973), the Physical Planning Act (2003) • Antigua and Barbuda Merchant Shipping Act (2006) • Forestry Act (1941) • Dumping at Sea Act (1975) • Oil Pollution of Maritime Areas Act (1995) • Environmental Protection and Management Act (2019) • Turtle Act (No. 17 of 1927) • Marine Areas (Preservation and Enhancement) Act (1972) • Maritime Areas Act (1992) • Disaster Management Act (2002) • Friendly Societies Act (1928) • The Cooperative Societies Act (2010)
Plans
<ul style="list-style-type: none"> • Draft Fisheries Development Plan 2006-2010 • Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (2010) • National Plan of Action for the Conservation and Management of Sharks (NPOA-Sharks (2015) • Sea Turtle Recovery Action Plan for Antigua and Barbuda (1992) • National Biodiversity Strategic Action Plan (2014-2020)

- Department of Environment Strategic Action Plan: Strategy for the Protection of the Environment and the Sustainable Development of Antigua and Barbuda 2019-2020.
- Action Plan for Implementing the Programme of Work on Protected Areas of the Convention on Biological Diversity, 2012
- Northeast Marine Management Area (NEMMA) 2007-2010 Management Plan
- National Environmental Strategy and Action Plan 2004-2009 (NEMS)
- Zero Hunger Challenge Proposed Plan of Action 2013-2014
- Medium Term Development Strategy 2016-2020
- Antigua and Barbuda's Intended Nationally Determined Contribution. Date of text: 01 December 2015
- Draft National Adaptation Plan (2017)

Selected key national policies, laws and/or plans were prioritised for deeper analysis. Instruments were selected based on their direct relevance to the fisheries sector (i.e. Fisheries policy, law or plan) as well as through a prioritisation process facilitated during the national validation workshop where participants were asked to select the national policies, laws and/or plans that they felt were most relevant to the sustainable development of the fisheries sector in Antigua and Barbuda. Participants were informed that the policies, laws and/or plans identified and selected did not have to be directly related to the fisheries sector but could be broad and cross cutting such as a national climate change policy or biodiversity management plan. During the exercise, participants agreed that, while the national level instruments were important, certain *regional* level policies were also relevant in terms of guiding the sustainable development of the fisheries sector in Antigua and Barbuda. The following instruments were identified and analysed against the principles of EAF in Table 5.2.

- Caribbean Community Common Fisheries Policy (CCCFP) Protocol on Securing Sustainable Small-Scale Fisheries; and the
- Eastern Caribbean Regional Ocean Policy (ECROP) (2013).
- Fisheries Act (2006)
- Fisheries Regulations (2013)
- Barbuda Fisheries Regulations (2014)

Table 5.2: Analysis of key fisheries-related policies, laws and plans in Antigua and Barbuda against the principles of EAF

Name of Policy, Law, Plan	Description	The policy/law/plan considers the ecological well-being of fisheries resources	The policy/law/plan considers socio-economic well-being of resource users including fisherfolk	The policy/law/plan considers collaborative management and inclusion of stakeholders in decision-making
Caribbean Community Common Fisheries Policy (CCCFP), 2014 including the Protocol on Securing Sustainable Small-Scale Fisheries for Caribbean Community fisherfolk and societies, (2018) which endorses the Small-Scale Fisheries (SSF) guidelines	The CCCFP is a binding treaty focusing on cooperation and collaboration of Caribbean fishermen and governments and committed to protecting livelihoods, capacity building, participatory approach and conserving, managing and sustainably utilising fisheries and related ecosystems. In the absence of a national fisheries policy, fisheries management in Antigua and Barbuda is guided by the CCCFP. It was noted at the national validation workshop that the use of a regional policy supersedes the long process of drafting and approving a national policy as there is greater political will to adopt an accepted regional policy. Similarly, the associated Protocol on Securing Sustainable Small-Scale Fisheries for Caribbean Community fisherfolk and societies, (2018) which endorses the Small-Scale Fisheries (SSF) in the Policy was highlighted as having key guidelines which are referred for national level management.	CCCFP refers to CRFM's mission of 'responsible utilisation of region's fisheries'	CCCFP considers socio-economic wellbeing of resource users, by: <ul style="list-style-type: none"> • highlighting a commitment to welfare and livelihoods of fisherfolk, and capacity building of fishers, • highlighting gender equality • recognising small-scale fisheries' contribution to well-being, and conscious of contribution of small-scale fisheries to nutrition security, poverty eradication and sustainable development 	CCCFP urges participating parties 'to establish, strengthen, support and engage fisherfolk organisations'
Eastern Caribbean Regional Ocean Policy (ECROP), 2013	ECROP is a sub-regional policy for the Eastern Caribbean that promotes sustainable use of marine resources in the region. It promotes sustainable development, wellbeing of coastal communities, ecosystem health, ecosystem-based management, public participation and the precautionary approach. ECROP has seven main guiding policies with associated sub-goals.	Policy 2 deals with maintaining and improving ecosystem integrity, with the goal of protecting and conserving marine resources	Policy 3 promotes social and economic development with the goal of sustainable use of new and emerging opportunities as it relates to marine resources e.g. under-utilised resources	Policy 5 promotes public awareness, community participation and accountability with one of the goals being that all citizens have an opportunity and the information to participate in decision making processes

	Though there was not much awareness of the ECROP among stakeholders at the validation workshop, the policy's importance was highlighted as it related to underlying regional management.			
Fisheries Act, 2006	Primary fisheries legislation for Antigua and Barbuda	Section 4(1) speaks to the goal of promoting sustainable and responsible management of fisheries to ensure optimum utilisation and conservation of fisheries resources and ecosystem	The Act considers socio-economic wellbeing through the support of user rights such as: <ul style="list-style-type: none"> • non -refusal for licences applications - Section 30(4) • establishment of locally based fishing operations – Section 31(1) • leasing of foreshore /seabed for aquaculture – Section 42(1) • declaration of fishing priority areas - Section 52. • prohibition on obstructing fisheries related activities and damaging / removing fishing gear - Section 60 	<ul style="list-style-type: none"> • Section 5(4) of the Act notes that consultations with fishers and other stakeholders are required for the preparation and review of fisheries plans • Section 7(1) of the Act makes provisions for Minister to appoint a Fisheries Advisory Committee (FAC) which shall consist of three persons nominated by professional fishers. • Section 9(1) of the Act makes provisions for local fisheries management areas and authority through designation of local fisheries groups
Fisheries Regulations, 2013	Secondary fisheries regulations for Antigua and Barbuda.	Conservation of fisheries resources are highlighted to a greater degree in the Fisheries Regulations through the following <ul style="list-style-type: none"> • Limiting permits for management programmes (Section 32) • Commercial Fishing Vessels require special 	<ul style="list-style-type: none"> • Section 35 of the Regulations gives provision to be licensed as a local fisher which then allows involvement in fisheries • Section 16 incorporates safety requirement for vessels 	Part II of Regulations speaks to the Fisheries Advisory Committee with the stipulation that committee shall have three persons nominated by professional fishers with one being from Barbuda

		<p>permit for lobster of conch (Section 32a)</p> <ul style="list-style-type: none"> • Limits on catch and restrictions on gear for sport and recreational fishing vessel (Section 33 and 34) • Restrictions on species such as lobsters (Section 42), turtles (Section 43 and 44), conch (Section 45), parrotfish, Nassau grouper, red hind and coney (Section 46 and 47) including gear restrictions and closed seasons. • Special permits required for certain species and gear (Sections 48-50; 54) • Gear specifications and incidental catch (Section 56 and 57) 		
Barbuda (Fisheries) Regulations, 2014	<p>Fisheries regulations for Barbuda are guided by the overarching national Fisheries Act and Regulations. Administered through the Barbuda Local Council and empowered by the Barbuda Local Government Act (1976), the existence of the Barbuda Regulations itself reflects the partial autonomy of fisheries management in Barbuda (by-laws can be made by the local council once in alignment with main legislation). Delegated co-management exists between the Barbuda Council and the local community with major fisheries decisions made in 'open house sessions' with voting used as necessary)¹³</p>	<p>The Barbuda Regulations considers the ecological well-being of fisheries resources by speaking to:</p> <ul style="list-style-type: none"> • Requirement for special permits for fishing in Barbuda with conditions determined by Council as it relates to species, gear or fishing method (Section 6) • Limiting fishing effort and number of permits (Section 6) 	<p>No direct mention but regulations are under overarching national legislation</p>	<p>Establishes a Barbuda Coastal Management Advisory Committee (Section 4) which includes a person nominated by fisheries interested groups with special area permit. Nominations sought for Committee by placing notices in fisheries complex.</p>

		<ul style="list-style-type: none">• Making provisions for traditional shark fishing with regulations possible through special permits (Section 11)• Requiring for escape gaps in traps and pots (Section 12)• Closed seasons for certain species (Section 13)		
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6 Mechanisms for fisherfolk participation in decision-making

Taking action is a fundamental part of ecosystem stewardship. Stewardship actions include the range of approaches, activities, behaviours, and technologies that are applied to protect, restore or sustainably use the environment. In the case of small-scale fisheries, stewardship actions by fisherfolk and/or their organisations are influenced by formal or informal decision-making processes about the use of fisheries resources that may or may not involve fisherfolk. Participatory decision-making, however, allows the views and knowledge of fisherfolk to be considered, including on decisions that would facilitate cooperation by fisherfolk in becoming better stewards. It gives a voice to an often marginalised group and mitigates against the overshadowing of their opinions by more powerful or influential stakeholders. To determine the extent to which fisherfolk were being included in decision-making processes related to the management of fisheries and other coastal and marine resources the institutional analysis examined the existence, composition and functioning of current NICs.

The CLME+ SAP identified interactive governance arrangements such as NICs essential to successfully implementing and achieving ecosystem-based management and EAF. In the CLME+ region NICs can be broad or narrow based on the scope and ecosystem approach being used. Examples of NICs include: Fisheries Advisory Committees or Councils, Ocean Governance Committees, sustainable development commissions, integrated coastal management institutions and climate change bodies. NICs operate within the policy cycle and involves interactions across multiple scales, stakeholders, sectors and levels of governance (local, national, regional and international). A NIC can be considered as the operational arm of good and effective governance or policy processes.²⁸

6.1 Findings for mechanisms for fisherfolk participation in decision-making in Antigua and Barbuda

During the national validation workshop, participants were asked to validate current NICs identified during the desk study as well as identify any missing current NICs related to the coastal and marine sector in Antigua and Barbuda. Participants were also asked to share information on the composition of the NIC, especially whether it included fisherfolk or not, or if this information was unknown to share where additional information could be sourced for further analysis.

Table 6.1 shows the NICs that were identified during the desk study and by participants during the national validation workshop. Additional information on selected instruments above is provided below.

Fisheries Advisory Committee

The mechanism which would allow fisherfolk a substantial voice at the national level, the FAC, is not currently functioning. The Fisheries Act (2006), gives provision that the Minister 'may' appoint a Fisheries Advisory Committee to advise on management and sustainable development of fisheries and the Fisheries Regulations state that it must include, among others, three professional fishers including one from Barbuda. However, according to Horsford and Lay (2012), during the period of 1985-1995, the Fisheries Advisory Committee did not demonstrate effective consultative co-management with fisherfolk due to a weak legislative mandate, perception of political allegiances on

²⁸ Compton, S. 2020. *Identifying suitable national intersectoral coordination mechanisms (NICs)*. Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-scale Fisheries (StewardFish) project. Project Report to FAO. 18 pp.

the committee, lack of accountability and transparency through lack of feedback to stakeholders, and appointment of fisherfolk representatives in a personal capacity.

At the validation workshop it was also noted that as fisherfolk cooperatives lacked members at the time, fisherfolk nominees for the Fisheries Advisory Committee were selected based on the Minister's appointment outside of fisherfolk organisations¹³. However, the representatives selected were not seen as representing the fisherfolk's views. There was also disagreement in the past that there were too many fishers from Barbuda represented on the Fisheries Advisory Committee.

The greatest achievement of the Fisheries Advisory Committee was the Fisheries Regulations (1990). After 1995, in the absence of the FAC, fishermen formed into various groups, one of which became the Antigua and Barbuda Fishermen's Alliance which aimed to provide a unified approach on issues affecting fisherfolk and to work with Fisheries Department on resource management. The Alliance influenced the change of site for dumping of dredged material away from fisheries' grounds¹³.

Despite not currently having a functioning FAC, fisherfolk are involved in fisheries management planning through consultations as the Chief Fisheries Office is legally obligated to consult with stakeholders through means such as townhall meetings and symposiums¹³. For example, for the 2004 review of the fisheries legislation, fisherfolk were consulted by the Fisheries Division. The consultation process was considered more open than the Fisheries Advisory Committee process and preferred by fisherfolk organisations as stakeholder input was sort at appraisal stage and not just at public reviews. Additionally, decisions were based on consensus and there was no restriction on attendees from fisherfolk organisations and the general public¹³ (Horsford and Lay 2012). At the aforementioned consultations for the fisheries regulations, conch fishers were able to share information on their local conch harvesting practices which was used to inform development of the regulations. In so doing, fisherfolk's traditional knowledge along with scientific research supported the decision-making process. However, it was noted at the validation workshop that while consultations are effective, and sufficient notice is given in advance for fishers to adjust their schedules, some fishers are not willing to attend, possibly due to fishing time loss²⁹.

While supportive of efforts to engage fisherfolk in fisheries management planning through consultations, fisherfolk at the validation workshop stated that the Fisheries Advisory Committee should also be reinstated with proper representation by fisherfolk. It was further recommended that fisherfolk should be actively involved in selecting their representative and that the Fisheries Advisory Committee should be enshrined in legislation as being a mandatory advisory committee.

Barbuda Local Council

In Barbuda, the Barbuda Local Government Act (1976) empowers the Barbuda Local Council to administer fisheries which includes the proclamation of by-laws in line with overall national legislation. Local fisheries are managed under a Council sub-committee (Barbuda Coastal Management Advisory Committee established by the Barbuda Fisheries Regulations, 2014) that is comprised of Council representatives and relevant stakeholders. The implementing arm of the Council as it relates to fisheries management is Barbuda Fisheries. Decisions are made in open house sessions through consensus, with voting used for more contentious issues¹³. The local community, inclusive of fisherfolk influences decisions as it relates to fisheries management. However, beyond the Council's election process, there is limited participation of stakeholders in open house sessions and village meetings due to lack of interest in governance¹³.

National Ocean Governance Committee

²⁹ Lobster Fisherman. 2020. Personal communications. 12th March.

The National Ocean Governance Committee, allows for a mechanism to mitigate conflicts between the entities associated with coastal and marine management. However, most of the work of the committee lies with the Fisheries Division due to their technical capabilities to conduct marine research and knowledge of issues affecting marine ecosystems. In order to expand the resources of the department needed for its growing mandate and the need for an integrated coastal management committee that considers ecosystem and human wellbeing, the Chief Fisheries Officer has requested that the Fisheries Division be upgraded to the Department of Fisheries and Oceans so that its broadening mandate is recognised through legislation.³⁰

Based on the findings of the analysis, apart from the Barbuda Local Council, fisherfolk organisations are not represented through the identified NICs. From the validation workshops and interviews with fisherfolk organisations, it was noted that fisherfolk perceived their decision-making power to be very low. The interview respondents and workshop participants opined that the lack of influence of fisherfolk in decision-making processes was likely due to the perception of fishers as lacking knowledge or capacity to be engaged in decision-making mechanisms hence creating isolation of fisherfolk organisations. It was agreed at the validation workshop that fisherfolk should engage in active lobbying to be engaged in decision making processes.

³⁰ Fisheries Division. 2020. Personal communication via email, 23rd May.

Table 6.1 Coastal and marine related NICs in Antigua and Barbuda

Name of NIC	Purpose	Composition	Are fisherfolk members of the mechanism?	Active/ Inactive
Barbuda Local Council - Coastal Management Advisory Committee ^{13, 31}	To advise Council on coastal management in Barbuda as it relates to licenses, permits, regulations enforcement and amendment, and coordination of coastal management policies. The local Council then administers fisheries management decision through Barbuda Fisheries.	Coastal Management Advisory Committee: <ul style="list-style-type: none"> ○ Local Council Member ○ Person nominated by CFO ○ Barbuda Park Commissioner or person responsible for National Parks ○ NGO member in the field of sustainable management of coastal resources ○ Member representing fishing interests ○ Member representing tourism interests ○ Coast Guard 	Yes	Active
Fisheries Advisory Committee ³²	To advise Minister on fisheries management as it relates to plans, legislation amendments, coordination of policy and proposals for access agreements or joint ventures.	Minister appointees (<i>At least one of the appointees must be a woman</i>): <ul style="list-style-type: none"> ○ Chairman ○ Deputy Chairman ○ Member ○ Three professional fishers (one from Barbuda) ○ Barbuda Council Member ○ Chief Fisheries Officer / representative 	Yes	Inactive

³¹ Barbuda (Fisheries) Regulations, 2014.

³² Fisheries Regulations, 2013

National Coordination Mechanism for Environmental Conventions ^{33, 34}	An inter-ministerial committee responsible for implementation of multilateral environmental agreements, settling environment related disputes and sustainable island resource management for both terrestrial and marine environments across different sectors. The Mechanism reports to the Minister for Foreign Affairs.	<ul style="list-style-type: none"> ○ Ministry of Foreign Affairs representative ○ Non-governmental organisation representative ○ Another 2 Cabinet appointed members (one from the business community) ○ Director of the Environment Department ○ Five public service members (Health, Fisheries, Agriculture, Forestry and Public works) ○ Public utilities representative 	No	Active
National Oceans Governance Committee ^{35, 36}	To coordinate policy and provide advice to the Government on maritime and marine resources management on issues related to maritime boundaries, sustainable use and protection of fisheries and marine resources, marine research, maritime customs and administration, immigration enforcement and exploitation of non-living marine resources. The Committee is formalised by ECROP and Chaired by the Chief Fisheries Officer	<ul style="list-style-type: none"> ○ Director of Marine Services and Merchant Shipping ○ Permanent Representative to the International Maritime Organisation ○ A senior representative of the Ministry of Foreign Affairs ○ A senior representative of the Ministry of Legal Affairs ○ Chief Fisheries Officer ○ Chief Environment Officer ○ Chief Immigration Officer ○ Comptroller of Customs ○ Director of the Organisation of Drug and Money Laundering Control Policy ○ The Chief of Defense Staff ○ Commissioner of Police 	No	Active

³³ McConney, P., I. Monnereau, B. Simmons and R. Mahon. 2016. Report on the Survey of National Intersectoral Coordination Mechanisms. Centre for Resource Management and Environmental Studies, The University of the West Indies, Cave Hill Campus, Barbados. CERMES Technical Report No. 84:75pp.

³⁴ Antigua & Barbuda's 2015-2020 National Action Plan: Combatting Desertification, Land Degradation and Drought

³⁵ McConney, P., I. Monnereau, B. Simmons and R. Mahon. 2016. Report on the Survey of National Intersectoral Coordination Mechanisms. Centre for Resource Management and Environmental Studies, The University of the West Indies, Cave Hill Campus, Barbados. CERMES Technical Report No. 84:75pp

³⁶ Oceans Governance Committee, Terms of Reference

Northeast Marine Management Area (NEMMA) Committee / NEMMA Management Partnership ³⁷	To manage NEMMA as it relates to implementing the three main programme areas: conservation, education and sustainable use and administration and finance.	<ul style="list-style-type: none"> ○ Fisheries Division ○ Forestry Division ○ Environment Division ○ National Parks Authority (NPA) ○ Department of Tourism or Tourism Authority ○ Development Control Authority ○ Hotel Association ○ Representative of Tour Operations ○ Environmental Awareness Group (EAG) ○ Antigua/Barbuda Fisheries Alliance ○ Representatives of Community Groups 	No	Inactive - not approved by Cabinet; NEMMA currently managed by Fisheries Division and EAG.
Poverty Reduction Strategy Committee	Implementation of National Poverty Reduction Strategy (2011-2015)	Committee normally includes government and civil society representatives	No	Inactive
Protected Areas Sub Committee. ^{36, 38}	Management and advisory committee for all protected areas	<ul style="list-style-type: none"> ○ Forestry Division ○ Development Control Authority ○ Agricultural Extension Division ○ Lands Division ○ Ministry of Tourism, Economic Development, Investment and Energy ○ Department of Environment/Barbuda Council ○ Department of Environment ○ Antigua Hotels and Tourist Association ○ MEPA Trust – Marine Ecosystem Protected Areas Trust Inc ○ National Parks Authority ○ Environmental Awareness Group ○ Rastafari Experience ○ Bendal Community Group ○ Three (3) representatives from separate regional scientific community agencies 	No	Inactive; to be established

³⁷ Jackson Ivor. 2008. Northeast Marine Management Area (NEMMA) 2007-2010 Management Plan. Prepared for: Organization of Eastern Caribbean States (OECS) Environment and Sustainable Development Unit (ESDU)

³⁸ Biodiversity Project Coordinator, Department of Environment.2020. Personal Communication via email. 18th June.

Sustainable Development Committee	Ad hoc committee focused on implementation of Sustainable Development Goals	<ul style="list-style-type: none"> ○ Ministry of Foreign Affairs (Coordinator) ○ Statistics Division ○ Fisheries Division ○ Department of Environment ○ Department of Marine Services and Merchant Shipping 	No	Active
Water Resources, Watershed and Wetlands Management Committee ³⁹	Preparation and implementing plans for watersheds and wetlands	<ul style="list-style-type: none"> ○ Director of Agriculture ○ Forest officer ○ Fisheries officer ○ Public Utilities Authority ○ Lands Division ○ Pesticide and Toxic Chemicals Control Board ○ Local residents within watershed ○ Representative of the National Parks Authority if located in watershed 	No	Inactive; to be established

³⁹ Environmental Protection and Management Act, 2019.

7 Support and resources available to fisherfolk and their organisations for ecosystem stewardship

To undertake ecosystem stewardship, would-be stewards must have the support and resources to do so. In this case “support and resources” refer to the finances, technology and equipment and education, skills and knowledge needed to effectively undertake ecosystem stewardship actions. Access to these resources may also ensure that aspects of fisherfolk’s human well-being (e.g. access to training to ensure safety at sea) are considered by support agencies and may provide motivation for stewardship actions ⁵.

To determine whether fisherfolk have adequate support and resources to undertake ecosystem stewardship actions the institutional analysis examined some projects, programmes and initiatives in Antigua and Barbuda that have provided or are providing finances, technology and equipment and capacity building (e.g. education, skills and knowledge) to fisherfolk and their organisations.

7.1 Findings for support and resources for ecosystem stewardship by fisherfolk and their organisations

Through desk study, interviews and the national validation workshop, various projects, programmes and initiatives aimed at providing support and resources to fisherfolk and fisherfolk organisations, set out in Table 7.1, were identified by stakeholders. While what is listed is not meant to be comprehensive, it provides some general insight into the type of support and resources that are available to fisherfolk and their organisations in Antigua and Barbuda.

The findings in Table 7.1. show that support and resources for fisherfolk in Antigua and Barbuda are available from a range of sources including from government, civil society and intergovernmental organisations either through ongoing programmes, *ad hoc* efforts in response to crises such as hurricanes or projects. Support and resources provided include training in sustainable fishing practices, provision of financial aid for the purchase of fishing equipment and provision of small grants for biodiversity or climate adaptation projects.

In terms of government programmes, as part of the commercial fisher licencing process in Antigua and Barbuda, fishers are required to undertake training with the Fisheries Division in technical and vocational areas including sustainable fishing practices, fisheries laws and policies, safety at sea and navigation. Licences are issued in a two-phased process; in the first phase a trainee commercial license is issued for a two-year period, and then a full commercial licence is issued for five years upon completion of the two-year training period⁴⁰. Training in business management is also offered by the Fisheries Division which can be applied to potential alternative livelihoods. A plan of the Fisheries Division is to have their training courses certified so that fishers’ education can be recognised in other areas apart from fisheries. It was noted that ongoing local training for Barbuda fisherfolk was not held for some time.

Projects implemented by civil society and international organisations are also an important source of support and resources for fisherfolk in Antigua and Barbuda. For example, the Caribbean Fisheries Co-management (CARIFICO) project, which was implemented by the JICA helped to strengthen FAD fisheries management and built the capacity of FAD fishers in Antigua and Barbuda in areas such as FAD use and design, marketing, financial management, data collection. The project also supported organisational strengthening of the FAD fishers group. As coming out of this project, the FAD Fishers Association was formed with support from the Fisheries Division. The Association is now incorporated through the Friendly Societies Act and its operations are governed by their own constitution with responsibility for managing their own finances. The Association demonstrates innovativeness through modifying and designing gear to target different species and reduce by-

⁴⁰ Fisheries Division. 2020. Personal Communications. 12 March

catch. It also ensures the continuous learning of its members through fisher exchanges with fishers in Barbuda, Montserrat and Grenada. ^{41,42}

One area identified by fisherfolk as requiring additional support is the unifying of the various fisherfolk groups and organisations in the country. Even with the informal organisation of the Fishing Alliance, which seeks to bring together leaders from the various groups, there is still conflict amongst the different groups based on disagreements on issues of lobbying, fishing practices, and perceptions of power⁴³.

It was also indicated that more support, through resources and capacity building, could be provided to fisherfolk to engage in ecosystem-based approaches such as mangrove restoration and maintenance⁴³.

Civil society organisations like the Marine Ecosystems Protected Area Trust Fund (MEPA) also make funding available to communities, including fishers, and assist them with writing project proposals. The Antigua and Barbuda Fishing Alliance also carries out ad hoc training with regional / international support as needed to develop capacity in areas of organisational management, leadership and communication strategies. ²⁰

Although resources are easily accessible to fisherfolk, there may be issues with the timeframe for accessing funding through various projects, and whilst steps are taken to identify donors and receive assistance from Fisheries Division through letters of support, funds are not granted within desired timeframe or proposals are sometimes not accepted ⁴³.

Overall, an impact analysis of projects, programmes and initiatives providing support to fisherfolk may be useful as there appears to be some uncertainty about the long term sustainability of certain initiatives. For example, for the Zero Hunger project, it was noted that many persons who were targeted for capacity building in business development (e.g. developing fish fries) under the project did not sustain their newly formed enterprises for very long beyond the end of the project ⁴⁴. Additionally, considerations need to be given to how provision of support is approached. For example, the Waitt Institute through its Barbuda Blue Halo Project strengthened fisheries legislation related to the protection of lobsters and conch, harvesting of shark and protected area zonation. It was felt that while the Waitt Institute held consultations with fishers on the legislation amendments and protected area consensus, there was not any consensus on proposals made⁴⁵. Fisherfolk felt that this was a top-down approach and that they were not engaged in a meaningful collaborative manner⁴⁶.

Through the Eastern Caribbean Marine Managed Area Network (ECMMAN) project capacity building workshops for regional fisherfolk were conducted, and included fisherfolk from Antigua and Barbuda. The topics covered included marine managed area co-management, Small-scale Fisheries Guidelines, disaster preparedness, by-catch reduction, business management, project management, grant proposal writing, marketing, leadership, conflict resolution, public speaking and information communication technology. The project also established a financing system which supported the

⁴¹ Tamura, Minoru, I. Mitsuhiro I., C.Sidman, N. Montes, K. Lorenzen. 2018. Facilitating Co-Managed Fisheries in the Caribbean Region: Good Practices and Guidance from the CARIFICO Experience.

⁴² CRFM, 2017. Report of the CRFM / CARIFICO Seminar: Strengthening Fisheries Co-management in the Region. CRFM Technical & Advisory Document, No. 2017 / 4. 68p.

⁴³ Spear Fishing Association. 2020. Personal Communications. 13 March.

⁴⁴ Fisheries Division. 2020. Personal Communications. 12 March

⁴⁵ Department of Environment of the Cordington Lagoon National Park in Barbuda. 2020. Personal Communication. 8th May.

⁴⁶ Barbuda Fisherfolk Association. 2020. Personal Communication.

Caribbean Marine Protected Area Management Network and Forum (CaMPAM) small grant programme targeted at non-governmental organisations wanting to develop projects based on supporting sustainable livelihoods and reducing user conflicts in marine managed areas. The Environmental Awareness Group received funding from ECMMAN through the CaMPAM-ECMMAN small grant programme to strengthen co-management skills in communities around the North East Marine Management Area (NEMMA). It was noted that these small grant opportunities allow capable fisherfolk organisations to propose their own ecosystem stewardship-related projects, or at least, to benefit through their participation in projects implemented by other non-governmental organisations such as EAG.^{47,48 49}

⁴⁷ TNC. n.d. Climate-Resilient Eastern Caribbean Marine Managed Areas Network (ECMMAN) Project: Project Accomplishments 2013-2017.

⁴⁸ EAG.n.d. "Another step towards strengthening management of NEMMA, Antigua and Barbuda."

⁴⁹ TNC. n.d. The CaMPAM-ECMMAN Small Grant Program.

Table 7.1 Projects, programmes and initiatives providing support and resources to fisherfolk and fisherfolk organisations in Antigua and Barbuda

Name of project/programme/initiative	Description of programme/initiative	Type of support /resources provided	Organisation delivering programme/initiative	Organisation type
Regular Work Programme of the Fisheries Division/FAD fishing ³⁰	Programme to diversify fisheries through new fishing methods so as to reduce dependency and pressure on traditional fisheries. Also focuses on integrating a variety of tools and methods in fishing practices assist with climate change adaptation strategies	Materials to FAD fishers to assist in building FADs	Fisheries Division	Government
Regular Work Programme of the Fisheries Division/Coastal Monitoring ³⁰	Programme aimed at enhancing search and rescue, and fisher safety through a coastal monitoring system	Communications technology	Fisheries Division	Government
Regular Work Programme of the Fisheries Division/ License Training Course ^{30, 50}	Programme aimed at providing required training to fishers to obtain fishing licenses	Training covering the following topics: <ul style="list-style-type: none"> ○ Fisheries laws and policies ○ Safety at Sea ○ Search and Rescue Training ○ Small business management ○ Navigation ○ Food Safety ○ Small Engine maintenance ○ Diver Safety 	Fisheries Division in collaboration with Coast Guard, Antigua and Barbuda Search and Rescue, Antigua and Barbuda Red Cross Society, Caribbean Fisheries Training and Development Institute	Government

⁵⁰ Fisheries Division, Ministry of Agriculture, Lands Housing & the Environment, Antigua. 2010. Antigua and Barbuda's Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing.

		<ul style="list-style-type: none"> ○ First Aid / Cardiopulmonary Resuscitation 		
Fisher-Training-Fisher Initiative ^{30, 50}	Initiative aimed at training fishers to improve fisheries governance at the grass root level	<p>Training covering the following topics:</p> <ul style="list-style-type: none"> ○ Sustainable fishing practices ○ Education on FAO Code of Conduct for Responsible Fisheries and EAF 	Fisheries Division / Barbuda Fisheries Department and Caribbean Network of Fisherfolk organisations	Government, Civil Society (regional)
Regular Work Programme of the Barbuda Local Council ⁴⁶	Programme aimed at providing financial and equipment support to support fisherfolk through requests	<ul style="list-style-type: none"> ● Equipment e.g. refrigeration system for storing fish ● Financial – e.g. covering cost of transportation and accommodation for fisherfolk from Barbuda to attend meetings in Antigua 	Barbuda Local Council	Government
Zero Hunger Challenge ^{10, 51}	Initiative focused on eliminating hunger and poverty and improving agriculture diversification, nutrition status, and income generating opportunities	<ul style="list-style-type: none"> ● Capacity building in fish trap making, vessel repair, fish processing, angling ● Training fishers to use underutilised species e.g. diamond back squid ● Training in post-harvest handling and processing of seafood ● Training in small scale fishing including subsistence line and hook fishing ● Support with organising fish fries ● Employment support services including job creation for women 	Government of Antigua and Barbuda in collaboration with- FAO, Inter-American Institute for Cooperation on Agriculture (IICA), Pan American Health Organisation (PAHO), Economic Commission for Latin America and the Caribbean (ECLAC), Gilbert Agricultural and	Government, International Development Agencies, Civil Society

⁵¹ Government of Antigua and Barbuda. n.d. Proposed Plan of Action 2013-2014 Zero Hunger Challenge in Antigua and Barbuda.

		and young people in the fisheries sector	Rural Development (GARD) Centre	
Ad hoc programme of JICA (written into projects) ³⁰	Programme focus on providing training / equipment, capacity building and knowledge exchange for fisheries and other stakeholders based on needs	<ul style="list-style-type: none"> • Knowledge exchange -available to fisheries staff and fisherfolk within the region to promote exchange of best practices in order to scale up projects • Training also included on: <ul style="list-style-type: none"> ○ Project Management ○ Value Chain Analysis ○ Food Safety ○ Cost Evaluation ○ Equipment Design • Equipment and materials - training manuals, gear technology 	JICA	International Developmental Agency
Project for Improvement of Fishery Equipment and Machinery in Antigua and Barbuda (2013) ^{52 53}	Project aimed at upgrading fisheries facilities and installing new equipment	<p>Equipment and materials, including:</p> <ul style="list-style-type: none"> ○ upgrading refrigeration equipment at four fisheries complexes to improve distribution of fisheries products <p>Installing two submerged FADs to ensure long term stability in offshore pelagic</p>	JICA	International Development Agency

⁵² JICA. n.d. Projects classified as Category C. Accessed 14th May 2020. Available at

https://www.jica.go.jp/english/our_work/social_environmental/id/america/category_c.html

⁵³ JICA.2015. Preparatory Survey Report On the Project for Improvement of Fishery Equipment and Machinery in Antigua and Barbuda

		<p>fishing by creating permanent fishing ground and stabilisation of catch.</p> <ul style="list-style-type: none"> ○ installing surveillance radar system for coastal and offshore surveillance as it relates to IUU fishing, and data collection on fishing vessel operations ○ procuring multipurpose boat for (i) operational and navigational training of fisherfolk (ii) installation of FADs and (iii) conducting surveys of reef fish and lobster using pot fishing 		
Global Environment Facility (GEF) Small Grants Programme (SGP) ⁵⁴	Programme aimed at providing grants directly to local communities including non-governmental groups (e.g. fisherfolk organisations) for projects focused on biodiversity, climate change mitigation and adaptation, land degradation and sustainable forest management, international waters and chemicals	Small grants	GEF SGP	International Development organisation

⁵⁴ GEF Small Grants Programme Antigua & Barbuda. 2016. Country Programme Strategy For Antigua and Barbuda (OP6)

Hurricane Irma Relief Efforts (ongoing since 2017) ^{55 56}	Recovery programmes/initiatives in Barbuda aimed at supporting vulnerable communities affected by Hurricane Irma	Equipment and materials - e.g. <ul style="list-style-type: none"> ○ provided fish pot materials to fisherfolk whose fishing pots would have been damaged or lost due to Hurricane Irma provided replacement boats and other equipment to fisherfolk after Hurricane Irma 	Relief efforts were supported by a number of organisations including: <p>Marine Ecosystems Protected Area Trust Fund (MEPA Trust) in collaboration with Waitt Institute, Salvation Army</p>	Civil Society
Fisher's Livelihood Recovery ⁵⁷	Initiative aimed at supporting hurricane recovery efforts post Hurricane Irma to support livelihoods of Barbuda's fisherfolk through the Barbuda Recovery and Conservation Trust <p><i>(After recovery efforts, the Barbuda Recovery and Conservation Trust became the Barbuda Resilience Fund)</i></p>	<ul style="list-style-type: none"> • Training – workshops conducted on sustainable trap designs and fishing practices • Equipment and materials - distribution of fish traps and material to support sustainable fish trap building 	Barbuda Recovery and Conservation Trust formed by the Waitt Foundation, Waitt Institute and International Community Foundation	Civil Society (national and international)

⁵⁵ CEPA Fair. n.d. Antigua and Barbuda

⁵⁶ OCHA Services. 2018. The Salvation Army Continues Long-term Hurricane Responses in the Caribbean. Accessed on 15th May 2020. Available at <https://reliefweb.int/report/antigua-and-barbuda/salvation-army-continues-long-term-hurricane-response-caribbean>

⁵⁷ Waitt Institute. n.d. Barbuda Recovery and Conservation Trust Donor Report 2018.

<p>Livelihoods Recovery Programme ⁵⁸</p>	<p>Hurricane Irma relief programme which assisted Barbuda fisherfolk in resuming fishing activities in a sustainable manner through financial support, provisions of equipment and capacity building</p>	<ul style="list-style-type: none"> • Financial assistance to repair / replaced boats and engines • Equipment and materials, including: <ul style="list-style-type: none"> ○ fishing kits and diving kits to replace damaged/lost equipment ○ air compressor and marine radio donated to Barbuda Fisherfolk Association to ensure safety at sea • Training - workshops to strengthen livelihoods through acquisition of new skills and knowledge e.g. first aid and cardiopulmonary resuscitation, navigation, and communication equipment training 	<p>Antigua and Barbuda Red Cross Society in collaboration with Fisheries Division and Barbuda Fisherfolk Association</p>	<p>Civil Society, Government</p>
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⁵⁸ IFRC. 2020. Emergency Appeal Final Report – Antigua and Barbuda and Saint Kitts and Nevis: Hurricane Irma.

8 Partnerships and networks for ecosystem stewardship

Partnerships and networks connect institutions and organisations across levels and scales. For fisherfolk organisations seeking to engage in ecosystem stewardship, partnerships and networks are important as these arrangements help facilitate information flows, fill knowledge gaps, and strengthen expertise for ecosystem management, including stewardship.⁵⁹ This section discusses a few current or past partnerships or networks in Antigua and Barbuda that included fisherfolk organisations and how these have impacted ecosystem management.

8.1 Findings for partnerships and networks for ecosystem stewardship

Most partnerships for ecosystem stewardship efforts mainly occur among government agencies or between government agencies and non-governmental organisations.

Generally, fisherfolk and the Fisheries Division, collaborate through consultative processes to discuss amendments to fisheries regulations as it relates to gear restriction, moratoriums and bag limits, for example. For example, by sharing their local knowledge during consultations, conch fishers played a key role in informing the development of regulations for the conch fishery. Conch fishers, mostly from the south coast of Antigua, have also assisted the Fisheries Division with research and data collection that guided management of conch fisheries. Their active participation in assisting with research of has led to greater acceptance and compliance for conservation management decisions. These fishers have exclusive user rights to conch fisheries and play a key role in assisting with the management of illegal fishing^{Error! Bookmark not defined.}.

Based on the results of a conch abundance survey conducted in the south-west coast of Antigua which indicated low densities of adult conch and the need to protect critical habitats, the Cades Bay Marine Reserve was established in 1999⁶⁰. The area includes the Cades Reef and extends landward to include critical nursery areas ranging from mangroves to seagrass beds. The South Coast United Fishermen Alliance was instrumental in designating zones within the Cades Bay Marine Reserve but disengaged due to not experiencing benefits. This was in large part due to the the influx of tourism dive boats in the Reserve. The tour operators were perceived by the fishers to be the only ones benefitting from zoning, as benefits from the tourism are not passed down to the local community.

Traditionally conflicts between the tourism and fisheries sector are based on displacements of fishers from traditional landing sites / fishing grounds and marginalisation of fisherfolk due to perceived lack of capacity and resources. Solutions through inter-sectoral linkages are needed to strengthen the relationships among multiple marine users, especially as it relates to fishers and tourism operators.¹⁸

Efforts to improve the involvement of fisherfolk in management, as with the proposed NEMMA committee, may create opportunities to improve relationships between fisherfolk and the different agencies, organisations and sectors. Meaningfully including fisherfolk in projects can also help to build relationships among fisheries stakeholders. For example, under the CARIFICO project, there was an improvement in the relationship between the FAD fishers and the Fisheries Division with improved willingness from FAD fishers to share information.^{41, 42}

⁵⁹ Building Transformative Capacity for Ecosystem Stewardship in Social–Ecological Systems

https://www.researchgate.net/publication/226922986_Building_Transformative_Capacity_for_Ecosystem_Stewardship_in_Social-Ecological_Systems

⁶⁰ Report of the Regional Workshop on the Management of Queen Conch, *Strombus Gigas*: Kingston, Jamaica 1-5 May 2006

9 Communication of information on sustainable practices for fisheries resources use

Communication is the means to share information on best practices, lessons learnt, available support/resources, training, networking, and opportunities for participatory decision-making that can support effective ecosystem stewardship. The institutional analysis examined the extent to which providers of fisheries information in the project country were using defined communication strategies, tools and channels to communicate with fisherfolk, as well as their capacity to use the tools and channels effectively; including the structures and systems in place for clear communication.

Fisheries related information is mainly communicated to fisherfolk through the Fisheries Division and the various fisherfolk organisations. Fisheries Division ensures that fisherfolk are aware of the various conservation management measures e.g. closed seasons and best practices e.g. biodegradable fish pots through the use of flyers (Figure 4 and 5) and other medium. However, training sessions are where most information is disseminated.

While a communication strategy for the fisheries sector was drafted under the CC4Fish project, there was concern that the end users were not considered. The plan did not have the flexibility to allow fisheries officers to adapt communication strategies for the range of fisheries stakeholders and the varying skill sets / interest of fishers regarding Information and Communication Technology. Currently, the Fisheries Division adapts communication strategies set out in a regional training manual which includes information on how to communicate with fisherfolk, to suit their audience and range of literacies, using suitable analogies to convey messages as simple as possible.

The Fisheries Division has found that the most effect way to communicate with fisherfolk has been through face-to-face meetings (e.g. at landing sites or at fisherfolks' homes) facilitated through extensions services and through the use of WhatsApp^{Error! Bookmark not defined.} Bulletin boards at landing sites are also used to post flyers which provide a variety of information including on closed seasons. When required, provisions are made to hold consultations in Barbuda to engage fisherfolk there⁴⁶. To cater to female fisherfolk, consultations are often held at night so that they are able to attend with their children. Notices for any larger consultations, meeting or training are given well in advance for fisherfolk to adjust their schedules. More recently consultations have been split into smaller consultations so as to accommodate different fisherfolk organisations and allow for greater representation from a range of groups.

The Communication Department in the Ministry of Agriculture also assists with public service announcements on radio / television. The Barbuda Council's communication strategies include utilising a public address system to announce meetings, placing informational posters at key sites, posting via their Facebook page and utilising open house sessions with fisherfolk. These methods are appreciated and effective as most fishers are not tech savvy and in the case of Barbuda, the small island allows for the use of simpler means to communicate^{29, Error! Bookmark not defined., 46} Among fisherfolk, members of the National Fishing Alliance share information through the meetings of the Alliance. This information is then shared more widely to members in the various fisherfolk organisations/groups during their regular meetings⁴³.

The Fisheries Division also has platforms for sharing information to general audiences on their website, mailing list and their Facebook page (see Figure 4 for examples of information flyers shared on the Fisheries Division's Facebook page).

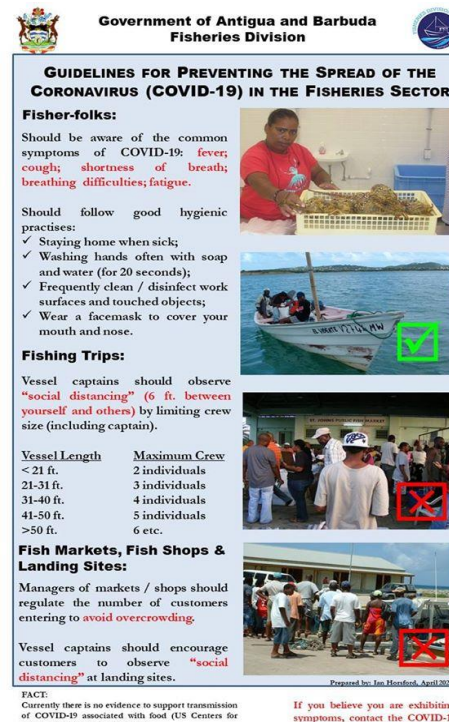
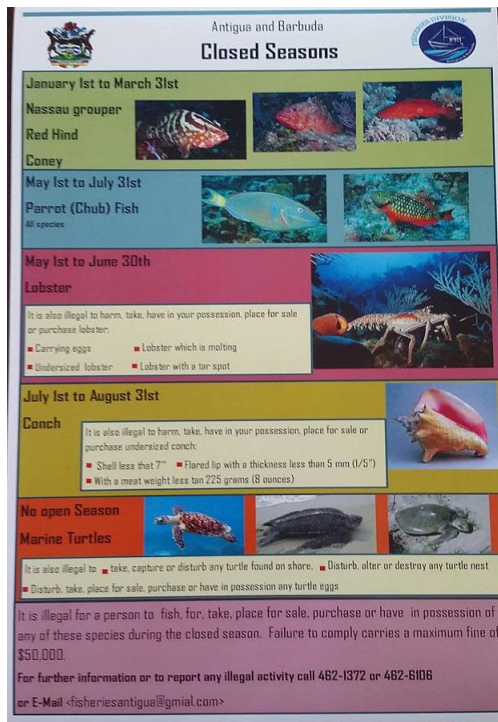


Figure 4 Information flyers displaying fisheries related information. Source: Antigua and Barbuda Fisheries Division Facebook Page

One concern that was highlighted was that government agencies were not always aware of projects targeted at fisherfolk coming through various civil society organisations. It was suggested that a mechanism to improve communication between government and civil society could be explored.

It was also noted during the validation workshop that an opportunity to foster information sharing and regular communication regarding sustainable practices among fishers and the wider public could be through exhibitions and showcases as was done in the past with the Annual Fishermen Day which would showcase traditional fishing activity methods, and raise awareness of new products from fishers. Previous involvement of civil society organisations such as GARD, through its “Farm to Table” project also highlighted local cuisine and linked agriculture/fisheries to tourism potential. While issues of the event being heavily dominated by tourism was raised at the workshop, the principle of an exhibition amongst peers in the fisheries sector may be worth considering.

At the validation workshop, fisherfolk also highlighted the need for more positive communication around their fishing practices as they noted that they often practiced good stewardship in their day-to-day fishing activities. Good practices highlighted at the workshop and during interviews with fisherfolk included releasing pregnant sharks from bycatch, removing nets from reefs, mangrove planting; sustainable lobster fishing and rotating traps well in advance before close season²⁹; and encouraging other fishermen in safety and best practices. It was noted that platforms are available to highlight these actions through the Fisheries Division’s Facebook page and the EAG’s website. It was recommended however that fisherfolk should be champions of their stewardship practices and make efforts showcase their activities as being noteworthy. This type of positive communication would help to foster a positive perception of fishers and encourage good stewardship practices among other fisherfolk.

Another concern noted was the lack of effective education and communication on regional policies (ECROP and CCCFP) guiding the fisheries sector.

10 Organisational assessment of the fisheries authority in Antigua and Barbuda

While fisheries authorities have adopted EAF principles as an approach; evidenced by their inclusion in policies and plans (see Table 5.2), many have not yet adopted these principles within their administrative procedures and/or do not currently possess the capacities to facilitate effective collaborative management procedures.

As part of the institutional analysis, an organisational assessment of the of the state agency with direct responsibility for fisheries management was conducted in Antigua and Barbuda to identify gaps and develop recommendations to better adopt the EAF approach and subsequently support fisherfolk and their organisations in actioning ecosystem stewardship. The assessment was conducted via survey to provide a rapid assessment of the state agency's internal capacity to support ecosystem stewardship by fisherfolk and their organisations. The questions in the survey examined the following four capacity areas to explore the organisational motivation and capacity for supporting ecosystem stewardship by fisherfolk:

1. Vision, mandate and culture
2. Practices
3. Knowledge and skills
4. Resources

The assessment was conducted as an organisational self-assessment – where the selected agency, either through a small focus group (including relevant and knowledgeable staff members) or via an elected representative, completed the survey.

In the case of Antigua and Barbuda, the organisational assessment focused on the Fisheries Division under the Ministry of Agriculture, Fisheries and Barbuda Affairs. The survey instrument including the responses provided can be found at Appendix 13.3.

10.1 Findings from organisational assessment of the fisheries authority in Antigua and Barbuda.

In Antigua and Barbuda, the main fisheries management authority is the Fisheries Division under the Ministry of Agriculture, Fisheries and Barbuda Affairs, which manages marine capture fisheries under the Fisheries Act (2006) and Fisheries Regulations (2013). Ecosystem stewardship is supported through legally mandated consultations, training sessions and workshops, management of protected area, research on status of resources, and enforcement of legislation

The Fisheries Division is a key stakeholder in the fisheries institution in Antigua and Barbuda and plays an important role in supporting ecosystem stewardship by fisherfolk. Improved ecosystem stewardship by fisherfolk and their organisations can benefit the Division by reducing or minimising the burden on the Department's limited financial and human resources for enforcement of fisheries regulations and contributing to the sustainable use, conservation and protection of coastal and marine resources for which the Department has management responsibility.

The Fisheries Division is guided by the vision statement in its Fisheries Act (2006) which promotes "sustainable development and responsible management of fisheries and aquaculture activities in Antigua and Barbuda waters and in the territory of Antigua and Barbuda so as to ensure the optimum utilization of the fisheries resources for the benefit of Antigua and Barbuda and to ensure the conservation of the fish resources and the ecosystems to which they belong".

The core values of the Division reflect the EAF principles and importance of fisherfolk as it relates to ecosystem stewardship, participatory processes and traditional knowledge.

The mandate to support ecosystem stewardship by fisherfolk is given through provisions in the Fisheries Act (2006) for a Fisheries Advisory Committee and the responsibilities mandated to the Chief Fisheries Officer. Although the Fisheries Advisory Committee has not been re-established, mechanisms such as focus groups, symposiums etc., have been used to ensure stakeholder participation. Mandatory training of registered fishers on rules and regulations etc. also incorporates ecosystem stewardship through understanding of the EAF concept.

Table 10.1 provides a synthesis of the organisational assessment survey findings for the Fisheries Division, Antigua and Barbuda and recommendations for addressing gaps related in the four capacity areas evaluated. Each capacity area is also given an overall ranking based on the findings using a traffic light rating system, where:

	Indicates that the agency is effectively supporting ecosystem stewardship by fisherfolk and their organisations in the capacity area, with non-critical gaps to be addressed
	Indicates that the agency is adequately supporting ecosystem stewardship by fisherfolk and their organisations in the capacity area, but there are some critical gaps to be addressed
	Indicates that the agency factor is not adequately supporting ecosystem stewardship by fisherfolk and their organisations in the capacity area and there are critical gaps to be addressed

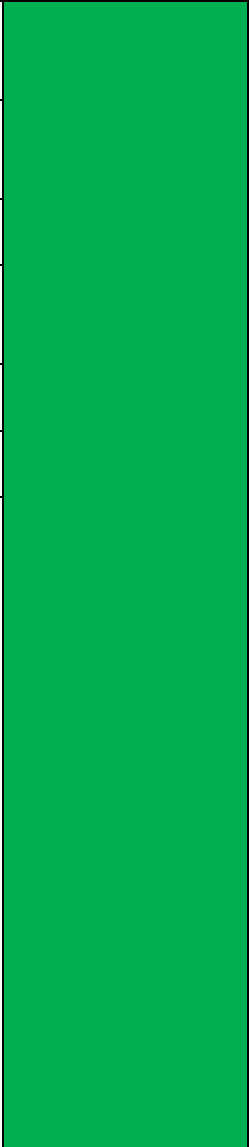
Table 10.1 Organisational assessment of Antigua and Barbuda, Fisheries Division

Capacity area	Evaluation question and explanation	Response provided by agency	Overall ranking for section based on responses	Gaps/Recommended areas for strengthening
Vision, Mandate and Culture	Organisation has a vision statement that is supportive of /promotes ecosystem stewardship by fisherfolk	Yes		<ul style="list-style-type: none"> The organisations formal mandate does not speak to support ecosystem stewardship by fisherfolk, however this principle is upheld in practice.
	Organisation’s mandate supports ecosystem stewardship by fisherfolk Explanatory notes provided by agency: <ul style="list-style-type: none"> Division’s vision statement is referenced from its Fisheries Act and it is <i>“To promote the sustainable development and responsible management of fisheries and aquaculture activities in Antigua and Barbuda waters and in the territory of Antigua and Barbuda so as to ensure the optimum utilization of the fisheries resources for the benefit of Antigua and Barbuda and to ensure the conservation of the fish resources and the ecosystems to which they belong”</i> and reflects principles of ecosystem stewardship Division’s mandate to support ecosystem stewardship by fisherfolk is done through provisions made in the Fisheries Act, as well as through the role of Chief Fisheries Officer. In practice, the mandate is fulfilled through stakeholder participation and mandatory training for registered fishers. The Division also recognises the need for an ecosystem approach to tourism and tourism related sectors, and the need for greater collaboration to reduce degradation of coastal and marine habitats. In so doing, the Division has collaborated with entities interested in sustainable tourism e.g. Green Fin Initiative. The Division also envisions the involvement of fisherfolk organisations in all maritime sectors would promote collaborative management and reduce user conflicts as it relates to marine ecosystems. Core values/beliefs that the Division identifies as its culture are: <ul style="list-style-type: none"> belief that ecosystem stewardship by fisherfolk is important for sustainable use of fisheries and marine resources; belief that fisherfolk can be effective stewards belief that fisherfolk should be included in decision-making on management; values local and/or traditional knowledge; and believes in the EAF. 	Somewhat		
Practices	Organisation has a clear process for including opinions of fisherfolk in decisions made about fisheries and marine resources	Yes		<ul style="list-style-type: none"> Although, there is no national communication strategy for the Fisheries Division, regional
	Organisation regularly and systematically includes fisherfolk’s input in decisions about how fisheries and marine resources are managed	Yes		

	Organisation regularly partners/collaborates with fisherfolk and their organisations for fisheries management initiatives	Yes		strategies are adapted to best communicate information to fisherfolk.
	Organisation regularly facilitates collaboration/partnerships between fisherfolk and other fisheries and marine stakeholders	Yes		
	<p>Explanatory notes provided by agency:</p> <ul style="list-style-type: none"> • In the absence of a Fisheries Advisory Committee, the Division includes the opinion of fisherfolk / fisherfolk organisations through processes such as¹³: <ul style="list-style-type: none"> ○ consultative co-management (previously through the Fisheries Advisory Committee and currently through appraisal and public review by key stakeholders including fisherfolk organisations), ○ collaborative co-management as shown in the partnership with the south coast conch fishers in conserving conch fisheries through active research. ○ delegated co-management where decision making power is devolved to local authority as in the case of the Barbuda Local Council which is empowered to manage fisheries and make by-laws in Barbuda through the Barbuda Local Government Act (1976) ○ Adoption of Fisheries Advisory Committee protocols drafted and adopted by previous ministers • The Division also include fisherfolk input in decision making as it relates to formulating legislation concerning the following (These decisions were made based on status of the resources and negotiations with fisherfolk organisations and other stakeholders): <ul style="list-style-type: none"> ○ the length of closed seasons for queen conch, Caribbean spiny lobster, Nassau grouper, red hind, coney and parrotfish. In the case of the Caribbean Spiny Lobster, the original proposed closed season was shortened based on consultations with fisherfolk and the positive status of the resource⁶¹. ○ restrictions on gill nets and other gears; ○ moratorium on marine turtle fishery ○ bag limits for recreational and sport fishers <p>Incorporation of fisherfolk organisations knowledge is listed as a goal under developing shark research programmes in the National Plan of Action for the Conservation and Management of Sharks. The National Plan of Action to Address Illegal and Unreported and Unregulated Fishing received feedback from fisheries</p>			

⁶¹ Horsford, I., Simon, H., Archibald, M., Webber, J. and Joseph, T., 2014. Biology, status, and current management of the Caribbean spiny lobster (*Panulirus argus*) in Antigua and Barbuda. In Proc Gulf Caribb Fish Inst (Vol. 66, pp. 423-433).

	<p>stakeholders including fisherfolk organisations and also proposes to involve fisherfolk organisations as part of a coastal watch network and devolve governance to local management authorities as in the case of the North East Marine Management Area to improve stakeholder participation.</p> <ul style="list-style-type: none"> • Through the establishment of the FAD Fishers Association under the Friendly Societies Act, the Fisheries Division devolved management of moored FADs. Collaboration also exists with the conch fishers in terms of research and decision making • The Division also facilitates collaborates with the Antigua and Barbuda Defence Force Coast Guard, the Antigua and Barbuda Search and Rescue and the Red Cross to facilitate free training to fishers based on navigation, safety at sea and basic first aid. • The Division highlights both the sustainable and unsustainable practices of fisherfolk with the general view that fisherfolk view the Division as a collaborative partner as tin case of the conch, lobster and moored FAD fisheries. However, there is a top-down relationship with spear gun fishery due to previous unsustainable practices as it related to the Nassau grouper. • The Department uses fisherfolk traditional knowledge to inform management decisions. The Division has adapted a regional communication strategy to provide information and guidance to fisherfolk as it relates to best practices of sustainable use and management of marine resource, sustainable fishing practices and initiatives for stewardship activities through communication strategies mentioned in Section 9 including partnerships with the CNFO on initiatives such as Fishers Teaching Fishers about the FAO Code of Conduct for Responsible Fisheries and the EAF. Although no single approach is used to share information, active participation from fishers allowed for greater understanding of sustainable use practices as fishers serve as ‘champions’ of initiatives. Fishers are more favourable to information received from their peers. 			
Knowledge and Skills	Technical staff have knowledge of EAF	Yes		<ul style="list-style-type: none"> • There is a need for training of staff to develop capacity in train the trainer programmes as is relates to gender mainstreaming, conflict resolution and mediation.
	Technical staff have specialist knowledge on ecosystems, their functions and ecosystem changes	Yes		
	Technical staff understand socio-economic context of fisheries and marine resource use by fisherfolk and other stakeholders	Yes		
	Technical staff have knowledge of aquaculture and other alternative or complementary livelihood options for which fisherfolk may be well suited	Yes		

<p>Technical staff have knowledge of how fisherfolk organisations function including key challenges that they may face and how they can be supported to resolve them</p>	<p>Yes</p>		
<p>Organisation has the capacity to provide training for fisherfolk in different technical areas and organisational strengthening (these may include soft skills such as facilitation, development of training material, etc.)</p>	<p>Somewhat</p>		
<p>Technical staff has the skills to assist fisherfolk with mobilising funding for ecosystem stewardship activities and initiatives</p>	<p>Yes</p>		
<p>Technical staff has skills in participatory approaches (e.g. participatory monitoring and evaluation, participatory planning, participatory management etc.)</p>	<p>Yes</p>		
<p>Technical staff has communication skills needed to effectively communicate with a range of stakeholders including fisherfolk</p>	<p>Yes</p>		
<p>Organisation provides or accesses training and other kinds of capacity building for staff to regularly improve their technical knowledge and skills</p>	<p>Yes</p>		
<p>Explanatory notes provided by agency:</p> <ul style="list-style-type: none"> • Department's technical staff have: <ul style="list-style-type: none"> ○ the relevant knowledge of EAF; capacity of junior staff being developed. ○ Knowledge on ecosystems, their functions and ecosystem changes through their academic background or from actively monitoring ecosystems through various projects / programmes. ○ knowledge of functioning of fisherfolk organisations. Collaboration is also frequently held with the fisherfolk organisations regulatory authority (Department of Cooperative) which is within the same Ministry. ○ Understanding of socioeconomic context of fisheries and marine resource use by fisherfolk and skills to conduct socioeconomic assessments through participation in Global Socioeconomic Monitoring Initiative for Coastal Management and having certification in rural appraisal, poverty assessment, household survey methods and Sustainable Livelihood Approach. ○ Knowledge of aquaculture and alternative/complementary livelihood options through lessons learnt from OECS Protected Areas Livelihood project. ○ Knowledge of functioning of fisherfolk organisations as Division act as a repository of institutional knowledge for the various organisations 			

	<ul style="list-style-type: none"> ○ Skillset to assist fisherfolk in mobilising funding for ecosystem stewardship activities as staff have project writing and management skills. ○ Skills in participatory approaches as staff have been trained in stakeholder participation under various systems ○ Communication skills to effectively communication with stakeholders due to knowledge of mass communication, business networking, marketing skills with some staff having a background in education. ○ Training opportunities provided through different entities such as CRFM, FAO, JICA and South-South Cooperation etc. ○ Prior commercial fishing and/or dive tourism experience which allows for validating and analysing information collected from stakeholders. <ul style="list-style-type: none"> ● Whilst the Division has some capacity to provide training for fisherfolk in technical areas and organisational strengthening due to education background of officers, training is outsourced for areas dealing with gender mainstreaming, conflict resolution and mediation. 			
Resources	Organisation provides funding assistance to fisherfolk to support ecosystem stewardship activities or initiatives	Somewhat		<ul style="list-style-type: none"> ● Though human resources are sufficient to provide technical support to fisherfolk, there are budgetary constraints within the Division, and hence the need to source financing through external funding mechanisms. As most of funding is through donor agency support, greater attention can be given in developing capacity of fisherfolk organisations to seek out / apply for such support ● An expanded mandate and budget are nevertheless required for Fisheries Division to support its role as a potential inter-sectoral coastal management organisation which can also provide proper
Organisation provides materials, equipment or technology to fisherfolk to support ecosystem stewardship activities or initiatives	Yes			
Organisation has access to tools, methods and good practices that can be used to support fisherfolk with ecosystem stewardship activities and initiatives	Yes			
Organisation provides access to or assists fisherfolk organisation with accessing networks or resources outside of itself (such as technical experts, funding, projects, etc.)	Yes			
Organisation has a dedicated website which can be used to share information and resources on ecosystem stewardship practices with fisherfolk	Somewhat			
<p>Explanatory notes provided by agency:</p> <ul style="list-style-type: none"> ● Funding assistance is indirectly proved through various projects such as the JICA Caribbean Fisheries Co-Management Project, and the follow-up JICA SATOUMI project. Through these projects materials, equipment and technology are provided to fisherfolk. 				

	<ul style="list-style-type: none"> • Through these projects, best practices are promoted through fisher exchange programmes as well as access external networks and resources provided to fisherfolk • Government is reviewing its ICT policy and the Division is using Facebook in the interim. 		<p>representation for fisherfolk organisations as it relates to cross-sectoral issues.</p> <ul style="list-style-type: none"> • Even with government's ICT policy being reviewed, it was noted that only 39% of active fishers had an e-mail address in 2019 and most preferred face-to-face interaction.
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11 Enabling and constraining factors and recommendations for strengthening fisheries institution to support ecosystem stewardship by fisherfolk

Table 11.1 set out some of the key enabling and constraining factors based on the findings from the institutional analysis and organisational assessment, it also provides recommendations to improve strengthening of the fisheries institution in Antigua and Barbuda to better support fisheries ecosystem stewardship by fisherfolk and their organisations. Enabling and constraining factors and recommendations are presented below under the categories of:

- Policy, legal and planning context for ecosystem stewardship
- Mechanisms for fisherfolk participation in decision-making
- Support and resources available to fisherfolk and their organisations for ecosystem stewardship
- Partnerships and networks for ecosystem stewardship
- Communication of information on sustainable practices for fisheries resources use

Gaps and areas for strengthening the organisational capacity of Antigua and Barbuda's Fisheries Division to support ecosystem stewardship by fisherfolk are presented in Table 10.1.

Table 11.1 Stewardship enabling and constraining factors, and Recommendations to strengthen fisheries institution

Area	Enabling factors	Constraining factors	Recommendations
Policy, legal and planning context for ecosystem stewardship	<ul style="list-style-type: none"> Both regional policies that guide national management of fisheries, referenced by Division, and national laws, consider an ecosystem-based approach to fisheries covering ecological wellbeing, socio-economic wellbeing and collaborative management. 	<ul style="list-style-type: none"> Although there are plans for illegal, unregulated and unreported fishing and for conservation and management of sharks, Antigua and Barbuda does not currently have an approved overarching formal fisheries plan to guide management of the fisheries sector, despite attempts at previous drafts. 	<ul style="list-style-type: none"> Need to develop formal national fisheries plan.
Mechanisms for fisherfolk participation in decision-making	<ul style="list-style-type: none"> The Barbuda Local Council has a legally mandated sub-committee for the fisheries sector. Collaborative management also extends to local community-based decision making through 'open house sessions' 	<ul style="list-style-type: none"> There is no participatory decision-making mechanism directly related to the fisheries sector that includes fisherfolk. Of note is the absence of a Fisheries Advisory Committee. The only functioning formal decision-making mechanism that includes fisherfolk is the Barbuda Local Council There is a weak legislative mandate for the Fisheries Advisory Committee as its establishment and approval of nominees is based on the Minister's discretion. There is no formal umbrella organisation that represents fisherfolk. 	<ul style="list-style-type: none"> While, there is preference for current method of consultations, there is a need to have a legal mechanism for fisherfolk participation in decision-making. Therefore, through suggestions at validation workshop by all stakeholders, there is a call for mandatory establishment of Fisheries Advisory Committee with legal mandate. It was also recommended that nominees on the Council be persons who can adequately represent fisherfolk and their needs and that members of Fisheries Advisory Committee be trained in participatory processes. Support development of an umbrella fisherfolk organisation. This can be done through the strengthening of the existing, but informal, Antigua and Barbuda Fishing Alliance to a formalised structure that represents fisherfolk organisations across Antigua and Barbuda. If formalised, NOGC can then make provisions for a representative from the Fisherfolk Alliance to sit on the committee while the process to re-establish the Fisheries Advisory Committee is ongoing.

<p>Support and resources available to fisherfolk and their organisations for ecosystem stewardship</p>	<ul style="list-style-type: none"> • Mandatory training of fishers with the Fisheries Division to obtain fishing licenses provides a solid background of knowledge for fisherfolk to be aware of legislation, best practices and safety procedures. The Fisher-Teaching-Fisher programme implemented through the Fisheries Division / Barbuda Fisheries Department and Caribbean Network of Fisherfolk organisations also reinforces EAF principles at the grassroots levels. • There is a wide range of support (e.g. provision of funding and equipment) available to fisherfolk through government, civil society and international development organisations which create opportunities for capacity development of fisherfolk and their organisations. This includes the support provided to fisherfolk through various relief efforts after Hurricane Irma devastated Barbuda. 	<ul style="list-style-type: none"> • There appears to be some uncertainty about the long-term sustainability of certain initiatives. • Consideration needs to be given to how provision of support is approached. Support provided have not always engaged fisherfolk in meaningful collaboration. • Need to regularise training for Barbuda fisherfolk • Need for more support for fisherfolk to engage in stewardship activities 	<ul style="list-style-type: none"> • Provisions can be made for establishing a participatory monitoring and evaluation system to ensure long term sustainability of support and resources received. • Support provided should be based on the needs of fisherfolk and relevant stakeholders. Baseline assessments are necessary to gain stakeholder approval prior to providing support via long term projects. • Develop technical expertise in Barbuda Local Council regarding conducting of and organising training. • Fisheries Division can share information on grant funding specific to these initiatives and prioritise the sourcing of funding / resources for such projects when proposed by fisherfolk.
<p>Partnerships and networks for ecosystem stewardship</p>	<ul style="list-style-type: none"> • There are models of empowered fisherfolk organisations/groups such as the FAD Fishing Association, South Coast Fishing Cooperative, and Conch fishers whose practices and approaches can be modelled by other 	<ul style="list-style-type: none"> • Capacity of fisherfolk organisations to engage in long-term and mutually beneficial partnerships with other stakeholders with common interests needs to be strengthened. • Traditionally, conflicts between the tourism and fisheries sector are based on 	<ul style="list-style-type: none"> • Through strengthened organisational representation and developed 'lobbying' capability, fisherfolk organisations would be empowered and better equipped to engage in partnerships. • Solutions through inter-sectoral linkages are needed to strengthen the relationships among

	<p>fisherfolk organisations. Recently during the COVID-19 pandemic, the South Coast Fishing Cooperative, in collaboration with the Antigua and Barbuda Fishing Alliance, took a proactive stance in suggesting ways forward for the fisheries sector such as reduction of lobster and conch prices. FAD Fishers have also educated conch and lobster fishers on fishing responsibly around FADs as part of fisher-teaching-fisher programmes as peer learning has been effective in developing an understanding for EAF.</p>	<p>displacements of fishers from traditional landing sites / fishing grounds and marginalisation of fisherfolk due to perceived lack of capacity and resources.</p> <ul style="list-style-type: none"> • Despite strong partnerships existing between some fisherfolk organisations and Fisheries Division, this is not reflected with all existing fisherfolk organisations. 	<p>multiple marine users, especially as it relates to fishers and tourism operators.</p> <ul style="list-style-type: none"> • ‘Champions’ in the fisheries sector, can lead through example, to change perception of fisherfolk and encourage participation by peers. • Formalised network of fisherfolk organisations would allow for regular meetings and also the sharing of knowledge and experiences. This network building can be supported by specific programmes focused on developing team building and leadership capacities of fisherfolk organisations.
<p>Communication of information on sustainable practices for fisheries resources use</p>	<ul style="list-style-type: none"> • Extension services offered by the Fisheries Division allows for flexibility in communicating with fisherfolk either one-on-one or through larger gatherings. 	<ul style="list-style-type: none"> • Due to socio-economic factors, most fisherfolk are not well versed in ICT and the dissemination and sharing of information may not be as efficient. This lack of ICT knowledge would also limit capacity for communication and advocacy amongst fisherfolk and their organisation. • Need to develop relationships among fisherfolk organisations to strengthen peer learning and information sharing. • Government agencies are not always aware of projects being pursued by civil society and fisherfolk organisations. • There is a lack of awareness by fisherfolk organisations and other stakeholders on the regional policies (ECROP and CCCFP) guiding the fisheries sector. 	<ul style="list-style-type: none"> • Develop fisherfolk organisations ability to represent / highlight their causes and be engaged in decision making through regular training on communication strategies / marketing strategies / social media management. This can also enable fisherfolk organisations to highlight ‘good stewards’ practices. Inter-agency connection with other civil society organisations e.g. EAG, can support this initiative along with having ‘champions’ within fisherfolk organisations either through groups or individuals who can promote the image of fishers being good stewards. It was recommended that simple steps be taken at first including improving public image by maintaining landing sites. • As fisherfolk may more likely learn from their peers, there is a need to strengthen relationships between fisherfolk organisations to enable greater

			<p>communication of information on sustainable practices. This can be done through peer sharing exhibitions and strengthening fisher training fisher programmes.</p> <ul style="list-style-type: none"> • An interagency communication policy may be needed as it relates to transfer of information from top management to grassroots level, to inform on various projects at regional and national level and also to facilitate coordination among project agencies. • Education on regional policies can be incorporated through the license training programme or communicated through outreach sessions.
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13 Appendices

13.1 Definitions of conceptual components for the institutional analysis framework

Conceptual component	Worksheet
<p>A. Policies. Laws and plans</p>	<p>This component focuses on the existing legal framework within the target country to address and guide fisheries management and planning. It involves the formal governance of a nation’s fisheries management which can either empower or constrain the ability to integrate <i>ecosystem stewardship</i>⁶² practises within small-scale fisheries. The assessment of this component also involves regulations, rules and management plans that resulted from the policies and legislation identified. This can be used as an indicator of fisheries-related state agencies capacity to support fishing industry stewardship. For example, to determine whether legislation is adequate as Stewardship is an evolving concept for management of natural resources such as fisheries. Policy and legislation need to be assessed in order to identify the barriers at the institutional level that may hinder the promotion of ecosystem stewardship. This component is divided into:</p> <p>A.1 Fisheries Policy A.2 Fisheries Management Plan A.3 Fisheries Legislation</p>
<p>B. Advisory and/or decision-making mechanisms</p>	<p>Institutional arrangements - examine the institutional frameworks and mechanisms established for governing fisheries management and fostering ecosystem stewardship. This includes the establishment of multi-stakeholder committees or similar structures, which play an advisory or decision-making role in resource management. The relationship between these mechanisms and the agencies/stakeholders involved will also be analysed.</p>
<p>C. Fisheries-related Organisations</p>	<p>This conceptual component will map the fisheries-related state agencies as well as other fisheries-related organisations which play a key role in the fishery-related institutional arrangements of each country. This includes the core fisheries management organisations such as Fisheries Divisions/Departments/Authorities/Agencies and other associated departments, such as Environment, Coastal Management, Agriculture, Cooperatives, Markets and others. It will also include non-state organisations such as fisherfolk organisations (FFOs), civil society organisation (CSOs), private sector and academia, where relevant. Given that the level of involvement in the fisheries sector will differ within and among project countries. This section will investigate agencies roles and particularly their mandated role in fisheries management. Furthermore, an organisational capacity assessment will be carried out to examine the core fisheries state agencies’ current ability to support stewardship activity.</p> <p>Organisational Capacity Assessment:</p>

⁶² *Ecosystem Stewardship* is understood as “a strategy to respond to and shape social-ecological systems under conditions of uncertainty and change to sustain the supply and opportunities for use of ecosystem services to support human well-being”.

	<p>Under this key conceptual component, core capacitiesⁱ of fisheries-related state agencies capacity to support and enable ecosystem stewardship will be assessed. The capacities to be examined are:</p> <ol style="list-style-type: none"> I. Vision, mandate, culture- this section looks at the organisation’s visions and goals, its operational culture and its internal governance mechanisms and how they promote ecosystem stewardship. It is reflected in the everyday organisational culture, how they communicate with fisherfolk and their organisations and the relationships they build. II. Knowledge and skills- this focuses on assessing the fisheries-related state agency’s capacity to provide fisherfolk and fisherfolk organisations (FFOs) with the relevant knowledge and skills support required for improved stewardship actions. This section assesses the capacity in technical knowledge, skills and ability related to ecosystem stewardship. III. Resources- assesses the capacity, availability, and efficient access to resources related to organisations– in particular the resource support made available to fisherfolk organisations from the state agency, as well as resources provided for execution of any ecosystem stewardship actions and practices. IV. Partnerships - is an assessment of the organisations capacity to foster partnerships and link activities, plans, projects and initiatives which involves ecosystem stewardship. It will look at their ability to build networks, and assist in building the networks of fisherfolk organisations, as resource users and ecosystem stewards.
<p>D. Processes and practices</p>	<p>For this conceptual component, the operational procedures for fisheries-related state agencies will be examined more closely. The processes and practices will be assessed in three sub-components. These are:</p> <p>C.1 Promotion of good governance- This is determined by probing the inclusivity of the decision-making process in fisheries governance. The system of institution (i.e. the decision-making process applied) determines the relative success of the structural processes to a certain degree in institutional capacity for improved fisheries management that integrates ecosystem stewardship (i.e. levels of exclusion, discrimination). This also assesses organisations internal structures and systems ability to create an environment that encourages and facilitates stewardship. It includes the channels of communication for sharing or receiving information from fisherfolk, and transparent and accountable systems. This will also assess the structures and systems in places for clear communication, involvement and integration within and among fisheries-related state agencies.</p> <p>C.2 Collaborative management- This sub-component focuses on the extent of cooperative management that exists in practice between fisheries-related state agencies and small-scale fisheries groups such as fisherfolk organisations, as well as fisherfolk</p>

	<p>individuals and the local communities. It also identifies the degree of stakeholder collaboration in management practises (government, private sector and civil society/local communities).</p> <p>C.3 Adaptive management This assesses the ability of the fisheries-related state agencies to budget, manage and implement activities, using internal structures and mechanisms which are flexible and adaptive to internal or external changes, changes in the resources, or changes in the resource users. This looks at the organisations ability to learn actively, develop practices and policies for promoting stewardship; and implement, monitor and evaluate plans, projects, programmes of work for actions or systems enabling stewardship.</p> <p>C.4 Communication This sub-component assesses the extent to which fisheries information providers in StewardFish project countries are using communication tools/channels to communicate with fisherfolk, as well as their capacity to use the tools/channels effectively. It includes the channels of communication for sharing or receiving information from fisherfolk, and transparent and accountable systems. This will also assess the structures and systems in places to for clear communication, involvement and integration within and among fisheries-related state agencies.</p>
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13.2 In-country contacts/participants

13.2.1 National validation workshop – March 10-11, 2020 – List of participants

Name	Organisation	Position/Title	Telephone	Email Address
Bobby Dawoux	Antigua and Barbuda Fisherman Alliance	Fisherman	(268) 785-9648	-
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Dwight Matthew	Antigua Defence Force Coast Guard	Leading Seaman	(268) 462-3206	cgopsmail@gmail.com aushaunbrowne@gmail.com abdscgtrgbett@gmail.com
Katecia Thompson	Antigua Environment Division	Biodiversity Project Coordinator	(268) 462-4625	antiguaenvironmentdivision@gmail.com doe@ab.gov.ag
Ashton Williams	Environmental Awareness Group	Acting President	(268) 462-6236	eagantigua@gmail.com
Ian Horsford	Fisheries Division	Chief Fisheries Officer	(268) 462-6106	Ian.Horsford@ab.gov.ag
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Mark Archibald	Fisheries Division	Fisheries Officer	(268) 462-6106	archibaldm@gmail.com
Trevor Joseph	Fisheries Division	Fisheries Officer		trevorjoseph07@gmail.com
Judy Dease-Richards	GARD Centre		(268) 463-4121 Cell: (268) 783-1435	Judyrichards1217@gmail.com
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Ted Lewis	Net and FAD Fishers Association	Fisherman		Tedasharew@gmail.com
Clinton Telemaque	Net Fishers Association	Fisherman		Clinton32@hotmail.com
Melvin Samuel	Spear Fishers Association	President	(268) 770-0424	Bird6625@yahoo.co.uk
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Melanie Andrews	CANARI	Technical Officer	(868)626-6062	melanie@canari.org

Name	Organisation	Position/Title	Telephone	Email Address
June Masters	Caribbean Regional Fisheries Mechanism (CRFM) Secretariat)	Statistics and Information Analyst	-	june.masters@crfm.net
Terrence Phillips	Food and Agriculture Organisation of the United Nations (FAO)	Regional Project Coordinator – Stewardfish Project	-	Terrence.Phillips@fao.org

13.2.2 List of key informant organisations

Representatives from the following organisations were interviewed as key informants

1. Antigua and Barbuda Fisherman Alliance
2. Barbuda Fisherfolk Association / Barbuda Local Council
3. Environmental Awareness Group
4. Fisheries Division
5. Lobster Fisherman
6. Department of Environment of the Codrington Lagoon National Park in Barbuda
7. Spear Fishers Association

13.3 Organisational Capacity Assessment Survey

Respondent information

Country:	Antigua and Barbuda
Name of national fisheries authority:	Fisheries Division
Name of lead respondent:	Ian Horsford
Position of lead respondent:	Acting Chief Fisheries Officer
Email address of lead respondent:	ian.horsford@ab.gov.ag
Contact number of lead respondent:	(268) 770-6061

Name and contact information of other persons who contributed to completing this survey

Name	Position in organisation	Email address
Jamie Herbert	Fisheries Officer	jamie.herbert86@gmail.com
Hilroy Simon	Fisheries Officer	Hilroy.Simon@ab.gov.ag

Section 1: Vision, Mandate and Culture

This section looks at the organisation's *motivation* to support ecosystem stewardship by fisherfolk and fisherfolk organisations. It is reflected in the organisation's vision, mandate and culture.

1. Does the organisation have a vision statement that is supportive of /promotes ecosystem stewardship by fisherfolk? Briefly explain your answer.

To promote the sustainable development and responsible management of fisheries and aquaculture activities in Antigua and Barbuda waters and in the territory of Antigua and

Barbuda so as to ensure the optimum utilization of the fisheries resources for the benefit of Antigua and Barbuda and to ensure the conservation of the fish resources and the ecosystems to which they belong (*Section 4 (1) of Fisheries Act No. 22 of 2006*).

2. Does the organisation's mandate support ecosystem stewardship by fisherfolk? Briefly explain your answer.

Yes. There are provisions in the *Fisheries Act 2006* for a Fisheries Advisory Committee (*Section 7*) to advise on the responsible management and sustainable development of fisheries and aquaculture activities; provisions for designating an area as a local fisheries management area; and provisions for designating a local authority, fishers' cooperative or fishers' association, or other appropriate body representing fishers in the area as the local fisheries management authority in that area (*Section 9*). The Chief Fisheries Officer shall, wherever, practicable provide to a local fisheries management authority such assistance as may be reasonably necessary for the performance of its functions (*Section 9 (3)*). Note the FAC has not been re-established by the current Minister hence other mechanisms are used to ensure stakeholders participation (focus groups, symposiums, etc.). Also there are mandatory training for all registered fishers with respect to fisheries rules and regulations (including the EAF concept).

3. Which of the following core values/beliefs reflect the culture of the organisation? Check/highlight all that apply.

- ✓ **The organisation believes that ecosystem stewardship by fisherfolk is important for sustainable use of fisheries and marine resources.**
- The organisation believes that ecosystem stewardship by fisherfolk is not important for sustainable use of fisheries and marine resources.
- ✓ **The organisation believes that fisherfolk can be effective ecosystem stewards.**
- The organisation believes that fisherfolk are not effective ecosystem stewards.
- ✓ **The organisation believes that fisherfolk should be included in decisions made about how fisheries and marine resources are managed.**
- The organisation believes that fisherfolk input into decisions about how fisheries and marine resources are managed is not important.
- ✓ **The organisation values local and/or traditional knowledge held by fisherfolk.**
- ✓ **The organisation believes in the ecosystem approach to fisheries (EAF).**

4. Do you have any additional information to share about your organisation's vision, mandate and culture as it relates to supporting ecosystem stewardship by fisherfolk and their organisations? You can also use this section to clarify any of the responses provided for question S1.3.

Note while we believe in the EAF we recognise that an ecosystem approach to tourism tourism-related sectors is paramount in the Eastern Caribbean. Just as the sugar industry has drastically altered the terrestrial ecology of Antigua and Barbuda in the pre-emancipation era, the tourism and tourism-related sectors (e.g., port's cruise facilities) have caused significant loss or degradation of critical coastal and marine habitats dating back to the late 1970s. Hence we have foster collaboration with individuals/entities interested in sustainable tourism (e.g., Green Fins Initiative). Having the involvement of fisherfolks and stakeholders in all the related maritime sectors could reduce conflicts and create an atmosphere for collaborative management of the marine ecosystem.

Section 2: Practices

This section looks at the how the organisation's core values and beliefs are translated into actions (practices). It focuses in particular on the actions that support ecosystem stewardship by fisherfolk and fisherfolk organisations in the following areas: decision-making; collaboration and partnerships; and information collection and sharing.

Decision-making - Please provide answers to the following questions about your organisation's decision-making practices.

1. Does the organisation **have a clear process** for including the opinions of fisherfolk in decisions made about fisheries and marine resources? Briefly explain your answer.

Yes. In the absence of a FAC, the Fisheries Division follows the process (Figure 2) outlined in the following report when it comes to legislation or management plans:
[https://www.academia.edu/10301608/Case Study A Comparative Analysis of Different Approaches to Fisheries Co-management in Antigua and Barbuda](https://www.academia.edu/10301608/Case_Study_A_Comparative_Analysis_of_Different_Approaches_to_Fisheries_Co-management_in_Antigua_and_Barbuda)

In addition, protocols governing the operations of the FAC have been drafted and adopted by previous ministers.

2. Does the organisation regularly and systematically include fisherfolk input in decisions about how fisheries and marine resources are managed? Briefly explain your answer.

Yes. In terms of legislation concerning: the length of closed seasons for queen conch, Caribbean spiny lobster, Nassau grouper, red hind, coney and parrotfish; restrictions on gill nets and other gears; moratorium on marine turtle fishery; bag limits for recreational and sport fishers. Based on the status of the resources, all of the aforementioned provisions were negotiated with fisherfolks and other stakeholders (Environmental Awareness Group, Barbuda Council, etc.). See the discussion and conclusion section of the following papers for details:

[https://www.academia.edu/10301352/Biology Status and Current Management of the Caribbean Spiny Lobster Panulirus argus in Antigua and Barbuda](https://www.academia.edu/10301352/Biology_Status_and_Current_Management_of_the_Caribbean_Spiny_Lobster_Panulirus_argus_in_Antigua_and_Barbuda)

[https://www.academia.edu/15979643/Biological and Economic Aspects of Management of the Red Hind Epinephelus guttatus Fishery of Antigua and Barbuda](https://www.academia.edu/15979643/Biological_and_Economic_Aspects_of_Management_of_the_Red_Hind_Epinephelus_guttatus_Fishery_of_Antigua_and_Barbuda)

Yes. In terms of management plans such as NPOA-sharks and NPOA-IUU:

<http://www.fao.org/3/a-bt660e.pdf>

[http://www.fao.org/fishery/docs/DOCUMENT/IPOAS/national/AntiguaAndBarbuda/NPOA IUU.pdf](http://www.fao.org/fishery/docs/DOCUMENT/IPOAS/national/AntiguaAndBarbuda/NPOA_IUU.pdf)

Collaboration and partnerships - Please provide answers to the following questions about your organisation's collaboration and partnership practices

3. Select which of the following statements are true for the organisation. *Check/highlight all that apply.*
 - ✓ **Fisherfolk generally view the organisation as a partner with whom they can collaborate on fisheries management (*participatory relationship*).**
 - Fisherfolk generally view the organisation as an enforcer of fisheries management guidelines and regulations with whom they must comply (*top-down relationship*).
 - ✓ **The organisation regularly highlights sustainable use practices undertaken by fisherfolk.**

- ✓ **The organisation regularly highlights unsustainable use practices undertaken by fisherfolk.**

Regarding bullets 1 and 2 different fisheries view the Division in a different light; collaborative in the case of the conch, lobster and moored FAD fishery whilst top-down in the case of spear gun fishery. Note a top-down approach was revisited with respect to the spear gun fishery in 2000 when a group of spear fishers almost decimated one of the few remaining large spawning aggregations for the Nassau grouper.

4. Does the organisation regularly partner/collaborate with fisherfolk and their organisations for fisheries management initiatives? If yes, please provide a recent of example.

Yes. In 2017, the Fisheries Division devolve management of certain aspects of moored fish aggregation devices (FADs) to the Antigua and Barbuda FAD Fishers Association which was constituted under the *Friendly Societies Act*. With the approval of the Fisheries Division, the Association started to collect FAD membership fees and FAD licences in April 2017. The FAD Constitution has provisions for: admission of new members, penalties to be imposed on members, mode and quorum for conducting meetings, procedures for meetings and voting, duties and responsibilities of elected and appointed officers, manner of keeping accounts, audits and inspection of books, by-laws for FADs, etc. It should be noted that collaboration with the conch fishers in terms of research and decision making stands out to-date, since it has been lauded as a successful co-management story around the region.

5. Does the organisation regularly facilitate collaboration/partnerships between fisherfolk and other fisheries and marine stakeholders? If, yes please provide a recent example.

Yes. On an annual basis, the Fisheries Division collaborates with Antigua & Barbuda Defence Force Coast Guard and Antigua & Barbuda Search and Rescue (a voluntary organization dedicated to saving lives in Antigua and Barbuda and the surrounding waters) in terms of free training to fishers in *Basic Navigation and Safety at Sea* and with the Red Cross with respect to *Basic First Aid/Cardiopulmonary Resuscitation*.

Information collection and sharing – Please provide answers to the following question about your organisation’s information collection and sharing practices.

6. Select which of the following statements are true for the organisation. *Check/highlight all that apply.*

- ✓ **The organisation collects local/traditional knowledge held by fisherfolk about fisheries and marine resources.**
- The organisation does not collect local/traditional knowledge held by fisherfolk about fisheries and marine resources.
- ✓ **The organisation uses local/traditional knowledge held by fisherfolk to inform management decisions about fisheries and marine resources.**
- The organisation does not use local/traditional knowledge held by fisherfolk to inform management decisions about fisheries and marine resources.
- ✓ **The organisation records best practices related to sustainable use and management of marine resources and shares this information regularly.**
- ✓ **The organisation provides information on sustainable fishing practices to fisherfolk in a manner that they can understand.**

- The organisation does not provide information on sustainable fishing practices in a manner they can understand to fisherfolk.
 - ✓ **The organisation has a communication strategy to share the information with different stakeholders including fisherfolk.**
 - The organisation does not have a communication strategy to share the information with different stakeholders including fisherfolk.
 - ✓ **The organisation provides advice/guidance to fisherfolk for stewardship activities and initiatives.**
 - The organisation does not provide advice/guidance to fisherfolk for stewardship activities and initiatives.
7. How does the organisation share information with fisherfolk about sustainable use practices for fisheries and marine resources?

Via posters, flyers, brochures, news media, formal training sessions, role play exercises, Facebook, WhatsApp, e-mailing list, community outreach/meetings, research collaboration, partnerships with the CNFO on initiatives such as *Fishers Teaching Fishers* about the FAO Code of Conduct for Responsible Fisheries and the EAF.

8. What has the organisation found to be the most effective way to share information with fisherfolk?

There is no single approach due to the fact that fisherfolks come from diverse socio-economic backgrounds with varying skill sets or interest with respect to ICTs. Note however we found that the active participation of fishers in fisheries research allowed for greater “buy in” and understanding of sustainable use practices for fisheries and marine resources. These fishers then serve as “champions” of our initiatives to the wider fishing community since most fishers tend to respond more favourable to information coming from their peers than from any other entity.

9. Do you have any additional information to share about your organisation’s decision-making; collaboration and partnerships; and information collection and sharing practices as it relates to supporting ecosystem stewardship by fisherfolk and their organisations? You can also use this section to clarify any of the responses provided for questions S2.3 and S2.6.

Section 3: Knowledge and Skills

This section looks at the organisation’s capacity to support ecosystem stewardship by fisherfolk and fisherfolk organisations. It focuses in particular on the knowledge and skills held by technical staff (e.g. managers, researchers, policy development officers, field officers etc.).

1. Do technical staff have knowledge of the Ecosystem Approach to Fisheries (EAF)? Briefly explain your answer.

Yes the senior staff would have a vast amount of knowledge: of the various principles, agreements, codes that shaped the development of the EAF (*United Nations Conference on the Law of the Sea, FAO Code of Conduct for Responsible Fisheries, UN Fish Stocks Agreement, 2002 World Summit on Sustainable Development, etc.*); in national and regional policies/legislation (*Caribbean Community Common Fisheries Policy, Fisheries Act 2006, etc.*); and in practice in the works of the Fisheries Division (*Ridge to Reef Initiative, eco-friendly fishing gears, regionally harmonised closed seasons, etc.*). The junior staff would

have been introduced to the EAF in theory and in practice as we continue to develop the capacity of the Fisheries Division.

2. Do technical staff have specialist knowledge on ecosystems, their functions and ecosystem changes? Briefly explain your answer.

Yes; some staff members come from an academic background whilst others gain knowledge from actively monitoring beaches, wetlands and coral reefs under various projects/programmes (Coast and Beach Stability in Lesser Antilles of the Caribbean, SeagrassNet, Atlantic and Gulf Rapid Reef Assessment, Association of Caribbean States Sandy Shores project, etc.).

3. Do technical staff understand the socio-economic context of fisheries and marine resource use by fisherfolk and other stakeholders? Briefly explain your answer.

Yes; most have participated in the Global Socioeconomic Monitoring Initiative for Coastal Management (SocMon) and others have postgraduate certificates in areas such as rural appraisal, poverty assessment, household survey methods and DFID Sustainable Livelihood Approach.

4. Do technical staff have the skills to conduct socio-economic assessments? Briefly explain your answer.

Yes (see above).

5. Do technical staff have knowledge of aquaculture and other alternative or complementary livelihood options for which fisherfolk may be well suited? Briefly explain your answer.

Yes; to the point that we have realised that aquaculture is more suited for fisherfolks that have a farming background in the case of Antigua and Barbuda. This was one of the lessons coming out of the OECS Protected Areas Livelihoods project.

6. Do technical staff have knowledge of how fisherfolk organisations function including key challenges that they may face and how they can be supported to resolve them? Briefly explain your answer.

Yes. The Fisheries Division have been actively supporting and promoting fisherfolk organisations; the department acts as a repository of institutional knowledge for the various organisations over the years.

7. Does the organisation have the capacity to provide training for fisherfolk in different technical areas and organisational strengthening (these may include soft skills such as facilitation, development of training material, etc.)? Briefly explain your answer.

Yes, we do have some capacity in some of the above areas but we are weak in areas such as gender mainstreaming, conflict resolution and mediation. However, where internal capacity is limited or lacking we normally maintain a list of resource persons/organisations to fill these gaps.

8. Do technical staff have the skills to assist fisherfolk with mobilising funding for ecosystem stewardship activities and initiatives? Briefly explain your answer.

Yes; staff have project writing and management skills under various systems (JICA, World Bank, CIDA, DFID, GEF Small Grant, IICA, USAID, etc.).

9. Do technical staff have skills in participatory approaches (e.g. participatory monitoring and evaluation, participatory planning, participatory management etc.)? Briefly explain your answer.

Yes; staff have training in stakeholder participation under various systems (JICA, USNOAA, Capturing Coral Reef and Related Ecosystem Services Project FishCollab, World Bank SARAR methodology, etc.).

10. Do technical staff have communication skills needed to effectively communicate with a range of stakeholders including fisherfolk? Briefly explain your answer.

Yes; some staff have mass communication, business networking and marketing skills whilst others come from a background in education.

11. Does the organisation provide or access training and other kinds of capacity building for staff to regularly improve their technical knowledge and skills? Briefly explain your answer.

Yes; via a number of different entities (CRFM, FAO, JICA, South-South Cooperation, etc.).

12. Do you have any additional information to share about the knowledge and skills of your organisation's technical staff as it relates to supporting ecosystem stewardship by fisherfolk and their organisations?

There are members of staff with prior commercial fishing and/or dive-tourism experience which serves as a great repository for validating and analysing information collected from stakeholders in these industries.

Section 4: Resources

This section looks at the organisation's capacity to support ecosystem stewardship by fisherfolk and fisherfolk organisations. It focuses in particular on the finance, equipment, materials, tools and methods that the organisation has access to for supporting fisherfolk with ecosystem stewardship activities and initiatives.

1. Does the organisation provide funding assistance to fisherfolk to support ecosystem stewardship activities or initiatives? Briefly explain your answer.

Yes; indirectly through various projects (JICA Caribbean Fisheries Co-Management Project, and the follow-up JICA SATOUMI project, etc.).

2. Does the organisation provide materials, equipment or technology to fisherfolk to support ecosystem stewardship activities or initiatives? Briefly explain your answer.

Yes; indirectly under the aforementioned projects.

3. Does the organisation have access to tools, methods and good practices that can be used to support fisherfolk with ecosystem stewardship activities and initiatives? Briefly explain your answer.

Yes; best practices are promoted through fisher exchange programmes under the aforementioned projects.

4. Does the organisation provide access to or assist fisherfolk organisation with accessing networks or resources outside of itself (such as technical experts, funding, projects, etc.)? Briefly explain your answer.

Yes; under the aforementioned projects.

5. Does the organisation have a dedicated website which can be used to share information and resources on ecosystem stewardship practices with fisherfolk? Briefly explain your answer.

Tentatively yes with regards to our original website; government is in the process of reviewing their ICTs policy and in the interim we are using Facebook. Note a dedicated website cannot be the only medium for dissemination of information in light of the fact that only 39% of active fishers had an e-mail address in 2019 and most preferred face-to-face interaction.

6. Do you have any additional information to share about your organisation's resources as it relates to supporting ecosystem stewardship by fisherfolk and their organisations?

The Fisheries Division endeavours to ensure that capacity development for staff is continuous in all aspects of the fishery. Therefore, human resource to provide technical support to fisherfolks is abundant. However, the Fisheries Division has for some time being operating on an austerity budget. Therefore, where resources are not available internally we can assist fisherfolks through other funding mechanisms (UNDP Blue Lab, Japan International Cooperation System, etc.).





Caribbean Natural Resources Institute

INSTITUTIONAL ANALYSIS AND ORGANISATIONAL ASSESSMENT OF FISHERIES-RELATED STATE AGENCIES FOR ENABLING ECOSYSTEM STEWARDSHIP IN THE FISHERIES SECTOR OF BARBADOS

July, 2020



Cover photograph: Left to Right: Fishing boat at sea in Barbados waters, Barbados north coast landscape, recreational sailing in Barbados waters. 2020. ©CANARI

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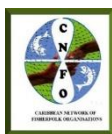
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Disclaimer:

This publication has been produced by CANARI as an output of the StewardFish project. However, the views expressed herein are those of the authors, and can therefore in no way be taken to reflect the official opinions of Fisheries Division of the Ministry of Maritime Affairs and the Blue Economy (MMABE), Barbados, Global Environmental Facility, Food and Agriculture Organization of the United Nations or other co-executing partners of the StewardFish project.

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List of acronyms and abbreviations

ARIA	WRI's Adaptation: Rapid Institutional Analysis
BARNUFO	Barbados National Union of Fisherfolk Organisations
BHTA	Barbados Hotel and Tourism Association
CANARI	Caribbean Natural Resources Institute
CARICOM	Caribbean Community
CLME+ SAP	Strategic Action Programme for the Sustainable Management of the Shared Living Marine Resources of the Caribbean and North Brazil Shelf Large Marine Ecosystems
CNFO	Caribbean Network of Fisherfolk Organisations
CORALL	Coral Reef Restoration Alliance
CRFM	Caribbean Regional Fisheries Mechanism
CSO	Civil Society Organisations
EAF	Ecosystem Approach to Fisheries
EEZ	Exclusive Economic Zone
FAO	Food and Agriculture Organization of the United Nations
FAC	Fisheries Advisory Committee
FAD	Fish Aggregating Devices
GCF	Green Climate Fund
GEF	Global Environmental Facility
GDP	Gross Domestic Product
HACCP	Hazard Analysis and Critical Control Points
ICCAT	International Commission for the Conservation of Atlantic Tunas
ICT	Information and Communications Technology
MMABE	Ministry of Maritime Affairs and the Blue Economy
NCC	National Conservation Commission
NIC	National Intersectoral Coordinating Mechanism
SBA	Small Business Association
SIDS	Small Island Developing States
SSF	Small-Scale Fisheries
TCDPO	Town and Country Development Planning Office
UWI-CERMES	Centre for Resource Management and Environmental Studies of the University of the West Indies
UWI CIRP	Caribbean ICT Research Programme of the University of the West Indies
WECAFC	FAO Western Central Atlantic Fisheries Commission

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Executive Summary

Barbados' fisheries sector contributes to livelihoods and food security of the nation. It is also challenged by multiple stressors including climate change impacts such as increasingly frequent and intense hurricanes and other extreme weather events, fish habitat degradation, uncertainty in the status of marine fisheries resources, sargassum beaching events and suspected overfishing and exploitation of resources. Despite the socio-economic importance of the fisheries industry in Barbados, there are several challenges that hinder the engagement of fisherfolk and their organisations in the sustainable use and management of fisheries resources including fisheries-related state agencies not having adequate capacity to support fisherfolk and their organisations with ecosystem stewardship initiatives. State agencies, including fisheries authorities, vary widely in their support of fisherfolk organisations for different reasons, some within their control and others beyond.

The *Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in the Caribbean Small-Scale Fisheries (StewardFish)* project is aimed at empowering small-scale fisherfolk throughout fisheries value-chains to engage in resource management, decision-making processes and sustainable livelihoods with strengthened institutional support at all levels¹ within seven Caribbean countries (Antigua and Barbuda, Barbados, Belize, Guyana, Jamaica, Saint Lucia, St. Vincent and the Grenadines). Under the StewardFish project, there is focus on developing organisational capacity for fisheries governance, which included the conduct of an Institutional Analysis and Organisational Assessment to explore situation-specific aspects related to Barbados' fisheries-related state agencies' capacities to support fishing industry stewardship; and an assessment of state agency implementation gaps regarding support for fisherfolk organisations and their role in stewardship. The assessment aimed to analyse current strengths, as well as opportunities for improvement in Barbados' fisheries-related state agencies, in order to improve their capacity to support ecosystem stewardship by fisherfolk and their organisations. The institutional analysis and organisational assessment for Barbados found that:

- The policy and legal context of fisheries resources management indicates strong consideration towards ecological well-being of fisheries resources, while improvements could be made to strengthen inclusion and consideration towards socio-economic well-being of resource users including fisherfolk, and collaborative management and inclusion of stakeholders in decision-making. Recommended actions to improve support for ecosystem stewardship by fisherfolk include formalisation of current draft policies (e.g. Fisheries Policy 2020-2030, draft, not dated) and draft management plans which include stronger emphasis on EAF and good governance principles.
- The FAC, while legally mandated – is an advisory body and as such; the decision on whether to action any advice brought forth by the group remains at the discretion of the responsible Minister. Fisherfolk have varying perspectives with respect to the FAC's effectiveness including their interests in decision-making. In terms of other NICs, fisherfolk are not explicitly included in the identified National Biodiversity Strategy and Action Plan Committee or Climate Change Committee, nor are they otherwise represented by any civil society organisations. Inclusion of fisherfolk and other civil society groups in the composition of NICs concerning issues such as biodiversity and climate change may ensure an avenue for representation and consideration of local/traditional knowledge related to these issues that impact their livelihoods directly.

¹ CANARI. 2019. StewardFish – Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-Scale Fisheries (StewardFish) project. [March 2020]

- Finance was considered the most critical element of support/resources for fisherfolk and their organisations – being that it could support and strengthen the provision and upkeep of other necessary resources such as technology, equipment and materials, as well as building capacity in skills, knowledge, abilities and the sustainability of formal fisherfolk organisations. Barbados fisherfolk may benefit from improved organisational strengthening which would in turn improve their ability to access small grants funding mechanisms, given that governmental fisheries-related state agencies have limited financial capacities. Collaborative approaches in provision of support and resources towards organisational strengthening may be beneficial, as this collaborative approach has worked well in the provision of training services otherwise to fisherfolk.
- UWI-CERMES is strongly positioned in terms of support rendered to both the Division, as well as fisherfolk organisations on fisheries management. BARNUFO, the Fisheries Division and UWI-CERMES regularly collaborate on programmes or projects related to fisheries management. International and regional intergovernmental organisations were also perceived as having strong relationships with the Fisheries Division – working closely in terms of financial and technical support to action fisheries-resources management. Further strengthening of partnerships for improved collaboration among stakeholders in the institution is recommended, particularly between government agencies that focus on the marine and coastal environments e.g. Barbados Fisheries Division and Integrated Coastal Zone Management Unit; alongside civil society and private sector organisations with an interest in coastal and marine management to support for ecosystem stewardship by fisherfolk.
- Conventional media is used by the Fisheries Division (e.g. print media, radio/television, personal communication) to communicate with fisherfolk and their organisations, which may be considered less effective in accessing their target audience (fisherfolk) directly; given fisherfolk regularly use technology-based communication media to communicate among themselves and with national fisherfolk organisation BARNUFO. Consideration towards application of modern communication media between the Division and fisherfolk may prove beneficial in filling a present communication gap as the Division’s website is presently non-functional. Communication media improvements could be used to improve stakeholder information sharing and inclusion through use of multiple avenues (e.g. in-person, virtual) to gather comments and perspectives.

1 Introduction

In 2013, countries bordering and/or located within the Caribbean and North Brazil Shelf Large Marine Ecosystems (CLME+ region) adopted a 10-year 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)². The 10-year CLME+ SAP aims to contribute to the achievement of the regionally adopted long-term vision of “a healthy marine environment in the CLME+ that provides benefits and livelihoods for the well-being of the people of the region.” The CLME+ SAP consists of 6 Strategies and 4 Sub-strategies. SAP strategies 1-3, with a focus on governance, are cross-cutting, while strategies 4-6 tackle the three main marine ecosystems (reef, pelagic and continental shelf) in the CLME+ region. One of the key strategies of the CLME+ SAP is to achieve sustainable fisheries, including of small-scale fisheries which are important economic drivers for the sustainability of coastal communities and rural livelihoods and a vital source of employment, food and income for Caribbean people.

The *Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in the Caribbean Small-Scale Fisheries (StewardFish)* project is therefore aimed at implementing the CLME+ SAP within seven Caribbean Regional Fisheries Mechanism (CRFM) member states (Antigua and Barbuda, Barbados, Belize, Guyana, Jamaica, Saint Lucia, St. Vincent and the Grenadines) that have politically endorsed the CLME+ SAP by empowering small-scale fisherfolk throughout fisheries value-chains to engage in resource management, decision-making processes and sustainable livelihoods with strengthened institutional support at all levels.³ The project aims to deliver enhanced stewardship of fisheries resources and livelihood benefits through implementation of the four core project components (See Figure 1).

StewardFish recognises that there are several challenges that hinder the engagement of fisherfolk and their organisations in the sustainable use and management of fisheries in the region including fisheries-related state agencies not having adequate capacity to support fisherfolk and their organisations with ecosystem stewardship initiatives. Because state agencies, including fisheries authorities, vary widely in their support of fisherfolk organisations for different reasons, some within their control and others beyond, a situation specific analysis is required.

In support of this, CANARI conducted an Institutional Analysis and Organisational Assessment in each of the project countries to contribute to Outcome 1.2 “*Fisheries-related state agencies have capacity to support fishing industry stewardship*” and Output 1.2.1 “*state agency implementation gaps are assessed regarding support for fisherfolk organisations and their role in stewardship*” of the project.

The aim of the analysis was to identify current strengths, as well as opportunities for improvement in each project country’s fisheries-related state agencies, in order to improve their capacity to support ecosystem stewardship by fisherfolk and their organisations.

The analysis included:

- Designing an institutional analysis tool adapted from the Adaptation: Rapid Institutional Assessment (ARIA) methodology, including an organisational assessment survey targeted at the fisheries authorities
- Conducting desk studies, surveys, virtual and in-country interviews and focus groups with fisherfolk, fisheries authorities and other key state agencies in the project countries

² CLME+ Strategic Action Programme <https://www.clmeproject.org/sap-overview/>

³ CANARI. 2019. StewardFish – Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-Scale Fisheries (StewardFish) project. [March 2020]

- Facilitating national workshops⁴ to present, validate, refine and receive input on the preliminary findings and identify priorities for improvement, in each project country
- Producing country reports of findings, including recommended priorities for improvement

This report provides the findings of the institutional analysis and organisational assessment conducted for Barbados, between December 2019 to June 2020.

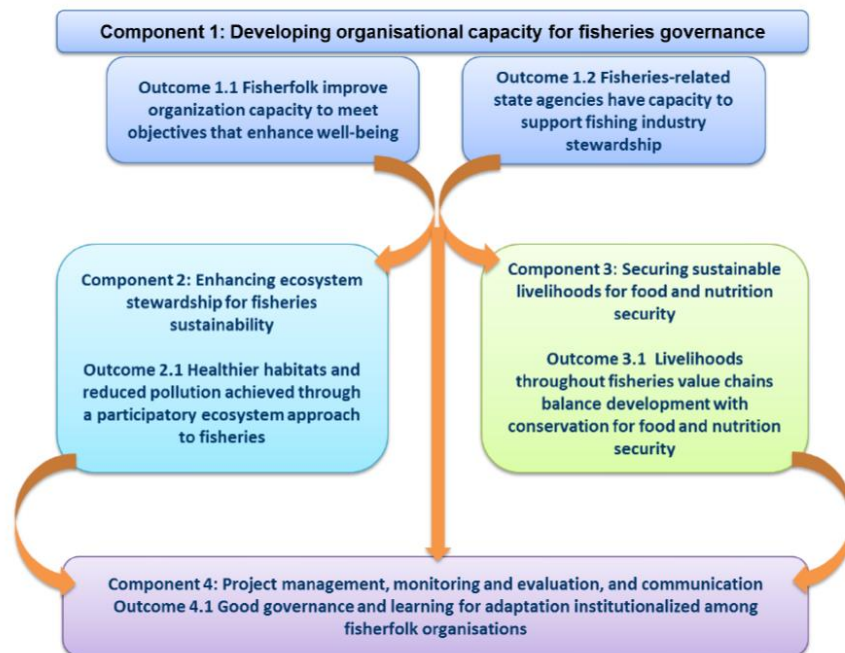


Figure 1.1: StewardFish Project Framework. Credit: FAO

1.1 How strong institutions can support ecosystem stewardship by fisherfolk

Stewardship is a terminology related to rights and responsibilities in governance processes. Application in natural resource management has expanded the understanding of stewardship to relay that “stewards” are stakeholders with responsibility for proper resource use, who will “take care” of a resource under communal or public property rights⁵. The term also importantly encompasses responsibility not only for proper use of resources but also right to life of other species and for future generations.⁶ The concept of ecosystem stewardship,



Figure 1.2: Members of the Caribbean Network of Fisherfolk Organisations (CNFO), a regional fisherfolk organisation, at the Stewardfish project Regional Mentors Training Workshop Oct 28-Nov 1, 2019. Credit: CANARI 2019

⁴ National workshops were initially carded to be conducted in-country for all project countries, however, due to the Covid19 pandemic as declared by the World Health Organisation on March 11, 2020, and subsequent restrictions on air travel, all workshops following the declaration date were conducted virtually through webinars.

⁵ Medeiros, R. P., Serafini, T. Z., McConney, P. 2014. Enhancing Ecosystem Stewardship in Small-Scale Fisheries: Prospects for Latin America and the Caribbean. *Desenvolv. Meio Ambiente*, n. 32, 181-191.

⁶ Medeiros, R. P., Serafini, T. Z., McConney, P. 2014. Enhancing Ecosystem Stewardship in Small-Scale Fisheries: Prospects for Latin America and the Caribbean. *Desenvolv. Meio Ambiente*, n. 32, 181-191.

particularly in the fisheries sector; includes reducing the vulnerability of the sector, promoting resilience and making use of opportunities to transform undesirable paths.

A fundamental concern of stewardship is capacity – i.e. whether individuals or groups are able to steward their resources. Capacity, which is in part determined by broader governance, includes systems of institutions – i.e. laws and policies, formal and informal organisations, and decision-making processes and structural processes related to power and politics (such as economic inequality,

“Local environmental stewardship is the actions taken by individuals, groups or networks of actors, with various motivations and levels of capacity, to protect, care for or responsibly use the environment in pursuit of environmental and/or social outcomes in diverse social-ecological contexts.” - (Bennet et al. 2018)

discrimination and exclusion from decision-making). These can either empower or constrain the sense of agency, available options and capacity of would-be stewards⁷. From the paper “Environmental Stewardship: A Conceptual Review and Analytical Framework” Bennet *et. al* note for the small-scale fisheries sector that stewardship efforts can be supported by national laws or policy frameworks that protect local fisher’s rights and tenure, formalise local fishers’ stewardship responsibilities, or that provide resources to support local community efforts to steward their own resources. Conversely, the paper notes that even when local small-scale fishers want to take action, the broader policy landscape may undermine their efforts by creating bureaucratic challenges.

Ensuring that the fisheries institution adequately enables ecosystem stewardship by fisherfolk, and their organisations will not only contribute to sustainable fisheries but will also help to ease the burden of already under-resourced fisheries state agencies to monitor and enforce fisheries regulations.

2 Institutional Analysis Framework

An institution is the set of arrangements for making decisions about the development, management, and use of a natural resource, including the stakeholders, as well as, the laws, formal and informal policies, plans and structures that guide how these stakeholders interact with each other and with the resources.

To conduct the rapid analysis CANARI developed and piloted an institutional analysis tool which was adapted from the World Resources Institute’s (WRI) Adaptation: Rapid Institutional Assessment (ARIA)⁸ methodology, including an organisational assessment survey targeted at national fisheries authorities. The tool analyses the institutional and organisational capacity of fisheries-related state agencies to support stewardship in the small-scale fisheries sector. The tool was used to conduct a baseline assessment and can subsequently be used for monitoring and evaluation as part of an institutional strengthening process.

The tool examines four conceptual components- fisheries-related policies, laws and plans, advisory and/or decision-making mechanisms, fisheries-related organisations and processes and practises to determine the capacity of the fisheries institution- to support the role of fisherfolk and their organisations in ecosystem stewardship. Refer to Table 2.1 for a description of each conceptual component. Appendix 13.1 includes more detailed definitions of conceptual components.

⁷ Nathan J. Bennett, Tara S. Whitty, Elena Finkbeiner, *et. al.* 2018. *Environmental Stewardship: A Conceptual Review and Analytical Framework*

⁸ WRI’s Rapid Institutional Analysis for Adaptation Tool. <https://accessinitiative.org/resources/adaptation-rapid-institutional-analysis-phase-1-workbook>

Table 2.1 The four conceptual components assessed in the rapid institutional analysis

Conceptual component	Description of component
Policies, laws and plans	Examined fisheries and fisheries-related policies, plans and legislation (including rules and regulations) to determine how they may be empowering or constraining the ability to integrate ecosystem stewardship practices within the country's small-scale fisheries sector.
Advisory and/or decision-making mechanisms	Examined the presence, composition and functioning of existing multi-stakeholder mechanisms (e.g. Fisheries Advisory Committee) established for advising or making decisions for fisheries management.
Fisheries-related organisations	Examined the roles and responsibilities of fisheries-related state agencies, as well as other fisheries-related organisations [e.g. fisherfolk organisations, civil society organisation (CSOs), private sector organisations and academia] which play a key role in the fisheries-related institutional arrangements of the project country. Additionally, an organisational capacity assessment was carried out to examine the national fisheries authority's current ability to support ecosystem stewardship by small-scale fisherfolk and included an examination of the authority's: <ul style="list-style-type: none"> ○ Vision, mandate, culture ○ Knowledge and skills ○ Resources ○ Partnerships
Processes and practices	Examined the various processes and practices in the country's fisheries institution related to: <ul style="list-style-type: none"> ○ Good governance- assessed the application of good governance practices, particularly fisherfolk inclusion, in decision-making processes in the fisheries sector. ○ Collaborative management- assessed the extent to which cooperative management exists in practice between fisheries-related state agencies and small-scale fisherfolk and their organisations. The degree of stakeholder collaboration in management practices was also assessed. ○ Effective communication- assessed the extent to which providers of fisheries information in the project country were using defined communication strategies, tools and channels to communicate with fisherfolk, as well as their capacity to use the tools and channels effectively; including the structures and systems in place for clear communication.

The tool was implemented using a variety of data collection methods (See Section 3 on Methodology) in order to capture a broad range of stakeholder perceptions and input; as well as to gather perspectives on the realised benefit of existing laws, rules, regulations, processes, practices and procedures of the fisheries institutions.

Based on the information collected the institutional analysis and organisational assessment report will discuss the following key aspects in regard to the capacity of the fisheries institution to support the role of fisherfolk and their organisations in ecosystem stewardship:

- Policy, legal and planning context for ecosystem stewardship
- Mechanisms for fisherfolk participation in decision-making
- Support and resources available to fisherfolk and their organisations for ecosystem stewardship
- Partnerships and networks for ecosystem stewardship
- Communication of information on sustainable practices for fisheries resources use
- Organisational capacity of the fisheries authority to support fisherfolk and their organisations with ecosystem stewardship.

3 Methodology

A rapid analysis of the institutional and organisational capacity of fisheries-related state agencies to enable stewardship in the fisheries sector was conducted for Barbados during the period November 2019 – May 2020. The analysis piloted an institutional and organisational capacity assessment tool developed by CANARI (Refer to Section 2). The rapid analysis included the following key research methods:

- **Desk study:** CANARI conducted a collation and review of information readily available on the project country's fisheries sector with a focus on the small-scale fisheries industry and its institutional and organisational environment; particularly as it relates to roles and capacities to support ecosystem stewardship by small-scale fisheries. This was carried out at an early stage of the assessment, to inform and guide the subsequent methodologies.
- **Validation workshop:** Following initial desk study; a validation workshop was held in-country on February 11-12, 2020 at Fisheries Department, Barbados which included participants from government (e.g. Barbados Fisheries Division), Coastal Zone Management Unit), civil society (e.g. Barbados National Union of Fisherfolk Organisations (BARNUFO), Coral Reef Restoration Alliance (CORALL)) and academia (e.g. UWI-CERMES). The full participant list can be viewed in Appendix 13.2.1. This validation workshop provided an outlet to corroborate information collated in desk study phase or supplement with updated information from in-country information sources. The focus of the workshop can be viewed in the workshop agenda under Appendix 13.3
- **Focus group session:** this methodology involved a focus on stakeholders from fisherfolk organisations to discuss their priorities to effectively engage and action ecosystem stewardship. This was held on February 13, 2020 at Barbados Fisheries Division and included fisherfolk stakeholders including a fish vendor who previously served on the Fisheries



Figure 3.1 Validation workshop exploring the policy and legal context for ecosystem stewardship in Barbados, Credit: CANARI 2020

Advisory Committee (FAC)⁹. Full list of focus group participants can be viewed in Appendix 13.2.3.

- **Interviews:** virtual key informant interviews were conducted from May – June 2020 and included key stakeholders in organisations involved in the fisheries institution of Barbados. Full list of key informant interviewees’ associated organisations may be found in Appendix 13.2.2.
- **Survey:** an organisational capacity assessment was carried out to examine the core fisheries state agencies’ current ability to support ecosystem stewardship by small-scale fisherfolk and was done via a survey format sent to the project country’s core fisheries state agency.

4 Background

4.1 Geography

Barbados is a small independent island nation with a total land area of 432 square kilometres and a coastline of 95 kilometres. The country is the most easterly lying of the Eastern Caribbean nations and is entirely surrounded by the Atlantic Ocean. The island has a small continental shelf of 320 square kilometres. The eastern side of Barbados’ EEZ extends the fully allotted 200 nautical miles for EEZ territory into the Atlantic Ocean; covering 177,346 square kilometres.¹⁰ The North, West and South of the island’s waters are shared with neighbouring Caribbean islands and as such extend less than 200 nautical miles.

The island has two distinct geological regions. Approximately 85% of the island is coralline in nature, with the remaining 15% being shale and sand – in a portion of the island known as Scotland District (Figure 3). The island is relatively flat with the highest point being Mount Hillaby at 340 metres high. The island has a tropical oceanic climate with cooling influence as a result of the northeast trade winds. There is a wet season (hurricane season) from June to December and dry season from January to May¹¹. The country is located within the hurricane belt.

4.2 Governance

The country is administratively divided into 11 parishes and 1 city – Bridgetown, which is the capital of the country. Barbados is a member of the Commonwealth and of the Caribbean Community (CARICOM). There exists a two-party democratic parliamentary government with a 21-member Senate and 28 member House of Assembly. There is no local government system.¹² The estimated population of Barbados as of 2014 was 286,100 people¹³. In 2013, around 55 % of the population was rural and population density was at 663 inhabitants/km², among one of the highest in the world. Population is mainly concentrated in the urban corridor along the west coast and south coast of the island, and in Bridgetown – the capital of the island located in the southwest.

4.3 Economy

Barbados’ economy was formerly a sugar monoculture which diversified into three main sectors: services, light industry and sugar. The economy’s largest source of foreign exchange is tourism, followed by an offshore financial services sector. It is a small and open economy and lacks scope for

⁹ Fisherfolk focus group session to discuss priorities to effectively engage and action ecosystem stewardship, held at Fisheries Department, Barbados – February 13, 2020

¹⁰ FAO. 2016-2020. Barbados. Fishery and Aquaculture Country Profile. [online]. Rome. [April 2020].

¹¹ FAO. 2015. AQUASTAT Country Profile – Barbados. Food and Agriculture Organization of the United Nations (FAO). Rome, Italy. [December 2019]

¹² FAO. 2005. The Barbados Food Consumption and Anthropometric Surveys 2000. Prepared in collaboration with the FIVIMS Secretariat by a team from the National Nutrition Centre, Ministry of Health, Government of Barbados [online]. Rome, Italy. [December 2019].

¹³ Government of Barbados. 2018-2019. Ministry of Innovation, Science and Smart Technology. Barbados Integrated Government. Demographics [online]. St. Michael, Barbados. [December 2019].

further diversification; remaining vulnerable to economic downturn in its trade partners. Gross Domestic Product (GDP) by sector as of 2011 puts the services sector as the main contributor at 83.1%, followed by industry at 15.5% and agriculture at 1.5%.¹⁴

4.4 Overview of fisheries sector

The Barbados Fisheries Division and Markets Division under the Ministry of Maritime Affairs and the Blue Economy (MMABE)¹⁵ of Barbados has chief responsibility for fisheries with a mandate to ensure optimum use of fisheries resources. Legislation governing the execution of this mandate is the Fisheries Act (1993, amended 2000) and associated Fisheries Management Regulations (1998). The country is a net importer of fish for domestic consumption. In 2015, imported fish and fish products valued USD 25.8 million. Aquaculture geared towards farmed fish production in Barbados has seen slow development, mainly due to high costs associated with land and initial investment set up, and the fact that traditional fisheries have developed in the last few decades towards a focus on offshore fisheries.¹⁶

The local fisheries industry in Barbados is open access, constitutes finite resources and is characterised by a multi-species and multi-gear system, use of multi-purpose vessels, varied trip lengths, seasonal fisheries and various fishing industry activities (e.g. fishing, vending, boat building)¹⁷. Marine fisheries entail most of the fish production in the island and is the most economically important of the sector. The local fishery is important for food and nutrition security as Barbadians consume between 5,000-6,000 tonnes of fish yearly; of which 3,000 tonnes are landed by Barbadian vessels and the remaining amount is imported. The industry also provides employment for 6,000 persons either as fishers, vendors, fish retailers and/or fish processors¹⁸. The industry contribution to gross domestic product (GDP) is currently undervalued; usually cited in the approximate range of \$12-\$16 million per annum¹⁹.

Statistics as of 2015 indicate there are approximately 3,000 active fishers in Barbados, landing fish at approximately 30 landing sites - 13 of which are major sites, all around the island. The local marine fisheries industry comprises six main fisheries: 1) shallow shelf reef, 2) deep slope, 3) coastal pelagic, 4) large pelagic, 5) flying fish, and 6) sea urchins. The fishing fleet comprises small, open boats propelled by oars and outboard engines that target reef and coastal fish species; decked vessels which target tunas and swordfish on long trips lasting up to two weeks, and traditional vessels powered by inboard engines that target flying fish and large pelagic species and land their catch daily. The majority of catch is landed at primary sites (markets) and sold direct to consumer. Vendors at markets are predominantly women²⁰.

Environmental challenges include the negative impacts of climate change and degradation of fish habitats²¹, the unknown status of marine fisheries resources and suspected overfishing and exploitation of resources, and hurricanes and tropical storms which continue to be a major threat to the sector. Additionally; in recent years sargassum seaweed invasion has substantially impacted the flying fish catch in the nation. However; the species remains the major contributor to the island's fish catch. This fishery has socio-economic importance, with over 2,000 fishermen and 500 vendors

¹⁴ Commonwealth Secretariat 2019. Barbados Economy [online]. [December 2019].

¹⁵ Barbados Institutional Analysis and Organisational Assessment Workshop. February 11-12, 2020.

¹⁶ FAO. 2016-2020. Barbados. Fishery and Aquaculture Country Profile. [online]. Rome. [April 2020].

¹⁷ Barbados' Fisheries Sector Management and Development Policy.

¹⁸ FAO. 2016-2020. Barbados. Fishery and Aquaculture Country Profile. [online]. Rome. [April 2020].

¹⁹ Barbados' Fisheries Sector Management and Development Policy.

²⁰ FAO. 2016-2020. Barbados. Fishery and Aquaculture Country Profile. [online]. Rome. [April 2020].

²¹ Barbados Fisheries Sector Management and Development Policy

seasonally employed in the fishery, along with employment further along the value chain including 200 persons employed as scalers or boners at fish markets and approximately 125 employed at fish processing plants. Overall, it is estimated around 6,000 people are involved, either directly or indirectly in the flying fish industry.²²

Barbados is signatory to a number of conventions covering biodiversity, climate change, desertification, endangered species, environmental modification, hazardous wastes, marine dumping, ozone layer protection, ship pollution and wetlands. The nation is member to regional fisheries bodies, namely:

- Caribbean Regional Fisheries Mechanism (CRFM)
- International Commission for the Conservation of Atlantic Tunas (ICCAT)
- Western Central Atlantic Fishery Commission (WECAFC)²³

Fisherfolk in Barbados have been involved in ecosystem stewardship formally via the FAC. The FAC is provided for under the Fisheries Act (Cap. 391) and advises the responsible Minister on all aspects of fisheries development and management. The FAC first met in December 1995 and included 7 voting members; four of whom were persons engaged in the fishing industry. In the Fisheries Management Plan 2004-2006, these four persons were reportedly a fish processor, a boat owner, a fish vendor and a fisherman; selected as individual experts rather than representatives of their occupations. In 2000, the Fisheries Act was amended to include representatives of the Markets Division and the national fisherfolk organisation (Barbados National Union of Fisherfolk Organisations, BARNUFO) as voting members for a total of nine voting members of the FAC. Aside from involvement in the FAC, the fisherfolk also play a vital role in catch and effort statistics, as the collaboration and cooperation of fisherfolk in supplying the best available data is essential for informing management and development.²⁴

4.5 *Stakeholder involvement in the fisheries institution of Barbados*

Barbados' fisheries institution includes a range of government, civil society, academia and private sector stakeholders with a variety of roles, mandates and responsibilities that influence the development and management of the fisheries sector. As part of the institutional analysis, key stakeholders were briefly identified and analysed to get an understanding of the range of stakeholders involved in the sector (Refer to Table 4.1). The stakeholder identification and analysis was informed by the desk study and stakeholders who participated in the validation workshop. During the validation workshop, a stakeholder analysis exercise, using a decision-making pyramid, was conducted to understand stakeholders' perceptions of decision-making power and relationships among the various stakeholders in the fisheries institution.

²² FAO. 2016-2020. Barbados. Fishery and Aquaculture Country Profile. [online]. Rome. [April 2020].

²³ FAO. 2016-2020. Barbados. Fishery and Aquaculture Country Profile. [online]. Rome. [April 2020].

²⁴ Government of Barbados. Fisheries Division. Ministry of Agriculture and Rural Development. Barbados Fisheries Management Plan 2004-2006.

be factored into the decisions of these respective agencies in management of fisheries resources and the users associated with them as a collaborative and inclusive committee.

In terms of relationships, there is a strong perception that the academia stakeholders, namely Centre for Resource Management and Environmental Studies of the University of the West Indies (UWI-CERMES) has a strong relationship with the Barbados Fisheries Division and demonstrated a strong level of collaboration as it relates to a number of fisheries management decisions e.g. in the drafting of a new Fisheries Policy, or in providing assistance in the drafting of industry-specific fisheries management plans for individual fisheries such as the sea-egg fisheries, or flying fish fisheries. International organisation the United Nations Food and Agricultural Organisation (FAO), as well as the regional organisation the Caribbean Regional Fisheries Mechanism (CRFM) were also perceived as having strong relationships with the Fisheries Division – working closely with the Division in terms of financial support (with respect to FAO) and technical support from both organisations to action management of the sector.

Primary or key stakeholders of the Barbados fisheries institution were recognised using the pyramid of decision-making power and analysed further in Table 4.1. The analysis was done in the context of their roles, interests and how they may be affected by improved ecosystem stewardship by fisherfolk and/or their organisations. The analysis is not exhaustive; but meant to give insight into the various types of stakeholders that will be impacted by improved ecosystems stewardship.

Table 4.1 Analysis of key stakeholders in the Barbados fisheries institution

Type of/Stakeholder		Role/Interests	How will they be affected by improved ecosystem stewardship by fisherfolk/fisherfolk organisations?
Government	Barbados Fisheries Division, MMABE	<ul style="list-style-type: none"> Responsible by law for fisheries management including conservation of resources and development of fisheries. Undertakes the administration of and services to the industry. Responsible for management of secondary and tertiary landing sites. 	<ul style="list-style-type: none"> Collaborative management improves partnership between Fisheries Division and resource users (i.e. fisherfolk), creating a sustainable environment for resource conservation alongside development of the fisheries industry as stakeholders will share aligned goals (makes use of opportunities to transform undesirable paths i.e. unsustainable exploitation of resources). Efficient utilisation of Division resources by 'sharing the burden' of management alongside ecosystem stewards.
Government	Markets Division, MMABE	<ul style="list-style-type: none"> Management of public markets including all fish markets (Oistins, Bridgetown, Speightstown, Weston, Conset Bay, Paynes Bay, Skeete's Bay and Tent Bay). Responsible for licensing of vendors, collection of fish tolls (landings tax), provision of ice and fish storage facilities, rent lockers, monitoring of fish quality and maintenance of some boat repair areas and the Bridgetown fishing harbour^{26, 27} 	<ul style="list-style-type: none"> Ecosystem stewardship in the context of fisherfolk that engage Markets Division (such as fishers/vendors/processors) may include avenues that expand the value chain and thereby increase financial sustainability of the sector (promotes resilience, supports self-reliance and self-organisation of fisherfolk) Improved value chain may also provide sustainable use of catch and prevent overexploitation of fishery resources to engage in direct to consumer sales which would place a continuous burden on the provision of services by Markets Division such as provision of ice and fish storage facilities.
Government	Fisheries Advisory Committee (FAC)	<ul style="list-style-type: none"> Advises the responsible minister on all aspects of fisheries development and management. It is politically endorsed and legally mandated²⁸ 	<ul style="list-style-type: none"> Improved fisherfolk ecosystem stewardship may affect the FAC through improving their stakeholder input towards advisory information for the Minister on all aspects of fisheries development and management. (strengthens their voice in the governance process)

²⁶ The Fisheries Division shares jurisdiction over several areas with Markets Division

²⁷ Government of Barbados. Fisheries Division. Ministry of Agriculture and Rural Development. Barbados Fisheries Management Plan 2004-2006.

²⁸ Barbados Institutional Analysis and Organisational Assessment Workshop. February 11-12, 2020

Type of/Stakeholder		Role/Interests	How will they be affected by improved ecosystem stewardship by fisherfolk/fisherfolk organisations?
Government	Coastal Zone Management Unit, MMABE	<ul style="list-style-type: none"> • Provides for effective management, conservation and enhancement of coastal resources • Functions include (<i>inter alia</i>) coral reef monitoring, updating coastal resources inventory, consulting with Town and Country Development Planning Office (TCDPO) on all coastal development, beach erosion and accretion monitoring and control, updating coastal structures inventory, regulation of marine research. 	<ul style="list-style-type: none"> • Potential for collaborative management related to coastal management functions e.g. coral reef monitoring, updating coastal resources inventory. • Improved efficiency in distribution of limited unit resources through ‘sharing the burden’ alongside co-management with ecosystem stewards e.g. a fisherfolk organisation approved to execute a coral reef monitoring project engaged by the Unit to feed information into their coral reef monitoring function. (reduces vulnerability of sector through collation of information to inform decision-making).
Government	Environmental Protection Department, Ministry of Environment and National Beautification	<ul style="list-style-type: none"> • Protect and improve Barbados’ quality of life and its natural and built environment, through the promotion of sustainable practices, education, partnerships and the enforcement of legislation. • Responsible for environmental monitoring and pollution control; responsible for the monitoring and control of conditions likely to affect the quality of land, air, and water and the general health and environmental well-being. • Functions include the management and control of the use of chemicals which have the potential to affect human health and well-being and the environment. 	<ul style="list-style-type: none"> • Through improved sustainable practises by fisherfolk and fisherfolk organisations, the Environmental Protection Department would benefit as their role/interest falls in line with general health and environmental well-being e.g. fishing gear that has been abandoned, lost or discarded in the ocean can drift and entangle ocean life, smother coral reefs, or continue trapping marine creatures long after they have been abandoned²⁹. Improved fisherfolk ecosystem stewardship may include actions geared towards the prevention of ghost fishing through adequate disposal alternatives for fishing gear, improved education and awareness of the negative environmental and socio-economic impacts and use of information and communications technology (ICT) to prevent ghost gear e.g. GPS technology to track Fish Aggregating Devices (FADs), fishing pots, etc. to minimize their loss after serious weather events such as hurricanes).

²⁹ Marine Stewardship Council. Preventing lost and abandoned fishing gear (ghost fishing). [online]. [May 2020].

Type of/Stakeholder		Role/Interests	How will they be affected by improved ecosystem stewardship by fisherfolk/fisherfolk organisations?
Government	Port Authority	<ul style="list-style-type: none"> • Handling of all marine terminals for all major cargo categories including containers, liquid bulk, dry bulk, break bulk and automobiles. • Barbados Port Inc. indicated <i>“Environmental stewardship is integral to our future development activities and ongoing Port operations. We therefore intend to grow responsibly, to ensure the continued preservation of our heritage landmarks, blue and green spaces”</i>.³⁰ 	<ul style="list-style-type: none"> • An ecosystem approach to management considers that activities in the marine environment are interconnected. Therefore, improved fisherfolk ecosystem stewardship may in turn allow for sustainable use and development of the natural ecosystem that will benefit all users of the marine environment – including the Port Authority. An example of this may be activities undertaken by a fisherfolk organisation to rehabilitate a mangrove ecosystem in order to provide fisheries nurseries. This may directly benefit the fisherfolk however in replanting and rehabilitating mangrove the fisherfolk organisation will also contribute to storm protection that benefits port users.
Government	National Conservation Commission, Ministry of the Environment and National Beautification	<ul style="list-style-type: none"> • To maintain, develop, conserve, preserve and enhance our natural and man-made environment, through the provision of quality service to our stakeholders. • Responsible for the development and maintenance of public beach accesses around the island.³¹ 	<ul style="list-style-type: none"> • Improved fisherfolk ecosystem stewardship of the marine environment in Barbados will benefit the beaches of the island (which are a public space directly under the responsibility of the NCC) e.g. an fisherfolk organisation involved in and executing ecosystem restoration activities such as mangrove replanting would in turn contribute to coastline protection conserving beach real estate. (reduces vulnerability of sector as many small-scale fishers live and work in the coastal communities that are highly vulnerable to the impacts of intense weather such as hurricanes).
Government	Meteorological Services Department, Ministry of Agriculture and Food Security	<ul style="list-style-type: none"> • Provides forecasts of sea state including any inclement weather (e.g. storms, hurricanes). • There is also the possibility of oceanographic information such as sea surface temperatures becoming available in the future to help better understand the marine ecosystem³². 	<ul style="list-style-type: none"> • Improved fisherfolk ecosystem stewardship may facilitate collaborative opportunities in the possibility of : (1) real-time reporting of inclement weather/conditions at sea with proper ICT capacities supported by adequate training, and (2) oceanographic information such as sea surface temperatures to be provided for future analysis and in improving our understanding of the marine ecosystem in Barbados.

³⁰ Barbados Port Inc. 2020. Government of Barbados. <https://www.barbadosport.com/about-us>

³¹ National Conservation Commission. 2019-2021. Government of Barbados. Department of the Ministry of the Environment & National Beautification. <http://www.nccbarbados.com/>

³² Government of Barbados. Fisheries Division. Ministry of Agriculture and Rural Development. Barbados Fisheries Management Plan 2004-2006.

Type of/Stakeholder		Role/Interests	How will they be affected by improved ecosystem stewardship by fisherfolk/fisherfolk organisations?
Government	Environmental Health Department, Ministry of Health and Wellness	<ul style="list-style-type: none"> Under the Ministry of Health, responsible for managing health and ensuring environmental concerns are considered in national development. 	<ul style="list-style-type: none"> Improved ecosystem stewardship by fisherfolk may facilitate the availability of more local/traditional knowledge on the importance of any specific habitat types/defined ecological areas in Barbados that are considered important for public health. Improved availability of local/traditional knowledge may be factored into the management and decision-making system with respect to development decisions.
Government	Town and Country Development Planning Office (TCDPO)	<ul style="list-style-type: none"> Responsible for ensuring the orderly and progressive development of land. Primary functions include controlling development of land having regard for proper planning standards and environmental management practises³³. Seeks to lower impact of disasters on development via development planning control such as approval requirements and zoning³⁴. 	<ul style="list-style-type: none"> Responsible and sustainable management practices and land development will contribute to lowered impact of disasters on development and lowered impact of land-based pollution on the marine environment. Improved fisherfolk ecosystem stewardship in this context may include approved development in the setup of infrastructure associated with SSF industries (e.g. processing plants, boat storage, etc.). Fisherfolk ecosystem stewardship may also benefit TCDPO through improved ecosystem information to inform development planning and zoning.

³³ Government of Barbados. 2020. About the Town & Country Development Planning Office (TCDPO) [online]. [April 2020]. <http://www.townplanning.gov.bb/content.php?c=1>

³⁴ Carter, S.S. and Singh, A. 2010. National Environmental Summary. Barbados. [online] [April 2020].

Type of/Stakeholder		Role/Interests	How will they be affected by improved ecosystem stewardship by fisherfolk/fisherfolk organisations?
Civil Society	Barbados National Union of Fisherfolk Organizations (BARNUFO), National Fisherfolk Organisation	<ul style="list-style-type: none"> To improve the socio-economic conditions of fisherfolk through the sustainable development of fisheries. National level body originally comprising only primary (local) level site-based fisherfolk groups in Barbados, but now open to any individuals. Member of the regional Caribbean Network of Fisherfolk Organisations (CNFO). 	<ul style="list-style-type: none"> The capacity of the national fisherfolk organisation would be built through improved fisherfolk ecosystem stewardship as they would have improved knowledge of the resources, awareness on implications of unsustainable practices and understand the benefit of promoting resilience. It may also benefit the national fisherfolk organisation to enhance participation of member base by capitalising on any interest from fisherfolk members towards improved ecosystem stewardship. Participatory processes empower fishers, increase compliance and support integration of local and scientific knowledge³⁵. Attention to livelihoods and resilience has been considered an essential element in fisherfolk organisations increasing probability of maintaining and growing membership, as well as participating in multi-level fisheries governance³⁶.
Civil Society	Primary Fisherfolk Organisations	<ul style="list-style-type: none"> Represent fisherfolk from local communities. 	<ul style="list-style-type: none"> Improving ecosystem stewardship will benefit primary fisherfolk organisations through increasing the potential access to funding such as small grants funding available in executing projects that not only benefit the environment, but support and benefit the community and fisherfolk themselves. Attention to livelihoods and resilience has been considered an essential element in fisherfolk organisations increasing probability of maintaining and growing membership, as well as participating in multi-level fisheries governance³⁷.

³⁵ Karr, A. K. et al. 2017. Integrating Science-Based Co-Management, Partnerships, Participatory Processes and Stewardship Incentives to Improve the Performance of Small-Scale Fisheries. *Frontiers Marine Science*. Vol. 4, 345pp

³⁶ McConney, P., Simmons, B., Nicholls, V. and Medeiros, R. P. 2017. Building the Barbados National Union of Fisherfolk Organisations. *Maritime Studies*.

³⁷ McConney, P., Simmons, B., Nicholls, V. and Medeiros, R. P. 2017. Building the Barbados National Union of Fisherfolk Organisations. *Maritime Studies*.

Type of/Stakeholder		Role/Interests	How will they be affected by improved ecosystem stewardship by fisherfolk/fisherfolk organisations?
Civil Society	Barbados Hotel and Tourism Association	<ul style="list-style-type: none"> • Primary goal is to facilitate sustainable growth and development of local tourism sector, to the benefit of the members, country and people of Barbados.³⁸ • Membership base consists of accommodation & non-accommodation entities (e.g. activities and attractions, airlines, restaurants, real estate agents, tour representatives, retailers, suppliers of goods and services, cruise service providers, etc.) 	<ul style="list-style-type: none"> • Tourism is the main economic driver of Barbados as the largest source of foreign exchange and main contributor of the GDP by 2011 statistics at 83.1%.³⁹ Improved stewardship by fisherfolk and their organisations will promote resilience of the marine environment that supports tourism services (e.g. beaches, tour guiding services, recreational fishing and marine activities such as scuba diving).
Academia	University of the West Indies, Cave Hill Campus	<ul style="list-style-type: none"> • Assist in the management and monitoring of biodiversity in Barbados. Mainly from the Department of Biological and Chemical Sciences and from the Centre for Resource Management and Environmental Studies (UWI CERMES) which advise the Government and the private sector on biodiversity issues⁴⁰. • Programme of action research and information sharing outreach by UWI-CERMES in collaboration with the Barbados Fisheries Division and BARNUFO on fisheries resources management issues e.g. sea egg fisheries⁴¹. 	<ul style="list-style-type: none"> • Improved ecosystem stewardship by fisherfolk and fisherfolk organisations in Barbados may include aspects that build their capacities to be involved in the management and monitoring of biodiversity in Barbados e.g. involvement of local fisherfolk from coastal communities in a coral reef monitoring project, or fish species diversity analysis via employment in field activities to gather data once adequately trained in relevant techniques. • Inclusion of traditional and local ecological knowledge may be improved; as collaborative networks may be possible between academia, government and the local groups.

³⁸ The Barbados Hotel & Tourism Association. 2016. About the BHTA. [online]. [May 2020]. <http://www.bhta.org/index/about-bhta/welcome.html>

³⁹ Commonwealth Secretariat 2019. Barbados Economy [online]. [December 2019].

⁴⁰ Government of Barbados. 2002. Barbados National Biodiversity Strategy and Action Plan.

⁴¹ Pena, M. et al. 2015. 2015. Sea Eggs Again: An Account and Evaluation of the 2015 Barbados Sea Egg Fishing Season (1-31 October 2015). CERMES Technical Report No. 79.

Type of/Stakeholder		Role/Interests	How will they be affected by improved ecosystem stewardship by fisherfolk/fisherfolk organisations?
Private Sector	Barbados Tourism Investment Inc.	<ul style="list-style-type: none"> Mandate to develop a portfolio of tourism-related properties solely, or in joint venture with private and public partners; manage implementation of the Urban Rehabilitation Programme for Bridgetown, Speightstown, St. Lawrence Gap, Oistins as Executing Agency for the Government of Barbados; and facilitate private and public sector owned investment in tourism and hospitality sector in Barbados 	<ul style="list-style-type: none"> Improved stewardship by fisherfolk and their organisations will promote resilience of the marine environment that supports tourism services (e.g. beaches, tour guiding services, recreational fishing and marine activities such as scuba diving).

5 Policy and legal context for ecosystem stewardship

National policies, laws or plans can either encourage ecosystem stewardship by fisherfolk or undermine it.⁴² To determine whether existing fisheries and coastal and marine related policies, laws and plans in Barbados were supporting or constraining ecosystem stewardship selected priority policies, laws and plans were assessed to determine whether they were adequately in line with the principles of the ecosystem-approach to fisheries (EAF), namely whether they considered:

- human well-being: a condition in which all members of society are able to determine and meet their needs and have a large range of choices to meet their potential; and
- ecosystem well-being: a condition in which the ecosystem maintains its diversity and quality — and thus its capacity to support people and the rest of life — and its potential to adapt to change and provide a viable range of choices and opportunities for the future.
- good governance: governance arrangements that enable broad stakeholder participation are similarly expected to confer support for management and foster stewardship among fisherfolk and other resource users.⁴³

EAF recognises the need to maintain the productivity of ecosystems for present and future generations, conserving critical habitats, reducing pollution and degradation, minimising waste and protecting endangered species. It also recognises that this will not be achieved without the cooperation of people, i.e. unless the ecosystem contributes to human well-being, providing sustainable goods and services and sources of livelihood.⁴⁴ Consideration of the latter is likely to encourage fisherfolk and other resource users to sustainably use, protect and conserve the resources they depend on for livelihoods. A holistic governance framework which considers importance of not only the ecological well-being of fisheries resources – but equally considers socio-economic well-being of fishery resource users and collaborative management mechanisms in the approach to fishery resources management – will increase the likelihood of ecosystem stewardship from fisherfolk in the small-scale fisheries industry.

5.1 Findings for policy, legal and planning context for ecosystem stewardship in Barbados
Table 5.1 identifies some of the national fisheries and coastal and marine related policies, laws and plans within the fisheries institution in Barbados. Policies, plans and laws identified are either directly related to the fisheries sector, for example the Fisheries Act which guides the utilisation of the fisheries resources in Barbados or indirectly related to the fisheries sector, for example the Coastal Zone Management Act which provides for management of coastal resources, for the conservation and enhancement of those resources and standards for environmental impact assessments for development which may affect conservation and management of coastal resources.

⁴² Bennett, N.J. et al. 2018. Environmental stewardship: a conceptual review and analytical framework. *Environmental Management*, 61(4), pp.597-614.

⁴³ Turner, R. et al. 2019. Viability and Sustainability of Small-Scale Fisheries in Latin America and The Caribbean. *MARE Publication Series* 19. p475

⁴⁴ FAO. 2002. The ecosystem approach to fisheries. <http://www.fao.org/3/a-y4773e.pdf>

Table 5.1 Identified policies, laws and plans relevant to the fisheries institution in Barbados

<p>Policies</p>	<ul style="list-style-type: none"> • Barbados Fisheries Policy (draft, 2020-2030) • Barbados Fisheries Sector Management and Development Policy (not dated)⁴⁵ • Barbados Sustainable Development Policy (2004) • Volume 1 – Integrated Coastal Management – The Barbados Policy Framework (1998)
<p>Laws</p>	<ul style="list-style-type: none"> • The Fisheries Act, 1993 (Cap. 391, amended 2000) <ul style="list-style-type: none"> ○ The Fisheries (Management) Regulations (1998) • Fisheries Management Act & Regulations (2016, draft) • Planning and Development Act (2019) • Coastal Zone Management Act (1998) • Marine Pollution Control Act (1998) • Shipping Act (1994) • Shipping (Oil Pollution) Act (1994) • National Conservation Commission Act (1982) <ul style="list-style-type: none"> ○ Marine Areas (Preservation and Enhancement) (Restricted Areas) Regulations (1981) • Marine Boundaries and Jurisdiction Act (1978) • Barbados Territorial Waters Act (1977) • Port Authority Act (1975)
<p>Plans</p>	<ul style="list-style-type: none"> • Barbados Sea Egg Fishery Management Plan (draft) • Barbados Fisheries Management Plan (2004-2006) • National Strategic Plan (2005-2025) • National Biodiversity Strategic Action Plan (2002)⁴⁶ • Volume 2 – Integrated Coastal Management Plan for the Caribbean coasts of Barbados (1999) • Volume 3 – Integrated Coastal Management Plan for the Atlantic coasts of Barbados (1998)

Selected key national policies, laws and/or plans were prioritised for deeper analysis. Instruments were selected based on their direct relevance to the fisheries sector (i.e. Fisheries policy, law or plan) as well as through a prioritisation process facilitated during the national validation workshop where participants were asked to select the national policies, laws and/or plans that they felt were most relevant to the sustainable development of the fisheries sector in Barbados. Participants were informed that the policies, laws and/or plans identified and selected did not have to be directly related to the fisheries sector but could be broad and cross cutting such as a national climate change policy or biodiversity management plan. The following instruments were identified and analysed against the principles of EAF in Table 5.2.

- Fisheries Policy (draft, 2020-2030)
- Barbados Fisheries Sector Management and Development Policy (not dated)
- Fisheries Act Cap. 391, (1993), amended 2000
- Fisheries (Management) Regulations (1998)
- Integrated Coastal Zone Management Act Cap. 394, (1998)

⁴⁵ Christopher Parker (Fisheries Biologist) via personal communication during the validation workshop in Barbados on February 11-12, 2020 indicated the policy was from 2012. However, there is no dated indication on the document provided to indicate date, nor whether the document was cabinet approved.

⁴⁶ Government of Barbados. 2002. A National Biodiversity Strategy & Action Plan for Barbados.

- Volume 1 – Integrated Coastal Management – the Barbados Policy Framework (1998)
- Volume 2 – Integrated Coastal Management Plan for the Caribbean coasts of Barbados (1999)
- Volume 3 – Integrated Coastal Management Plan for the Atlantic coasts of Barbados (1998)
- Sea Egg Fishery Management Plan, (draft, not dated)

Overall in Table 5.2, analysis against EAF principles reveal definitive and strong inclusion of consideration towards ecological well-being of fisheries resources as all selected policies, legislation and plans consider aspects such as conservation measures for habitats and species, sustainability of species via protection regulations for specific species or attention to bycatch or capture of juveniles, and establishment of restricted and protected areas for example. There is considerable inclusion towards socio-economic well-being of resource users including fisherfolk and communities, evidenced through support for infrastructure to benefit the industry, social protection options, and inclusion of the vulnerabilities faced by resource users and potential resilience possibilities. Consideration towards collaborative management and inclusion of stakeholders in decision-making is represented in the selected documents ; however could be strengthened through more explicit reference to inclusion of resource users such as fisherfolk in the management process – including from its inception (i.e. design or planning phases, versus inclusion following creation of a draft management plan for example).

Table 5.2 Analysis of key fisheries related policies, laws and plans in Barbados

Name of Policy, Law, Plan	Description	The policy/law/plan considers the ecological well-being of fisheries resources	The policy/law/plan considers socio-economic well-being of resource users including fisherfolk	The policy/law/plan considers collaborative management and inclusion of stakeholders in decision-making
<p>Fisheries Policy (draft, 2020-2030)</p>	<p>Provides a set of principles and guidelines to serve as an overall framework to guide action and investments in the fisheries sector, and in the development of a new Fisheries and Aquaculture Act⁴⁷.</p> <p>The Policy was prepared collaboratively between the Barbados Fisheries Division and the Food and Agricultural Organization of the United Nations (FAO).</p>	<ul style="list-style-type: none"> • Policy statement 9 – increase the sectors’ efforts to protect and conserve coastal and marine ecosystems including actions that prevent ecosystem degradation, catch of undersized species, education and awareness campaigns, strict enforcement of fisheries and environmental regulations, preventing endangered and protected species mortality and contributing to protection of marine environments via involvement in Marine Protected Area (MPA) management and other blue economy initiatives. 	<ul style="list-style-type: none"> • Policy statement 10 – modernize fish landing and marketing infrastructure and services via promotion of public-private partnerships. Immediate terms include actions such as improving basic infrastructure for sanitary facilities, security at jetties and markets, improved safety and sanitary conditions. • Policy statement 15 – enhance social protection for fishers and fish workers, including the provision of a social security net, protection of cultural heritage and traditional knowledge of fishers and promotion of gender equity and equality in fisheries development and management initiatives. • Policy statement 17 – increase resilience and reduce vulnerability of fishing communities to climate change and disaster risk, with specific mention to, for example – implementation of the Caribbean 	<ul style="list-style-type: none"> • Policy statement 7 – encourage increased fishery stakeholder participation in development and management including such actions as strengthening of the Fisheries Advisory Committee (FAC) and capacity building of associations (organisational development, training on fisheries management, lobbying capacities, etc.)

⁴⁷ Barbados Fisheries Policy, 2020-2030 (draft, not dated)

Name of Policy, Law, Plan	Description	The policy/law/plan considers the ecological well-being of fisheries resources	The policy/law/plan considers socio-economic well-being of resource users including fisherfolk	The policy/law/plan considers collaborative management and inclusion of stakeholders in decision-making
			Community Common Fisheries Policy (CCCFP) protocols on securing small scale fisheries.	
Barbados Fisheries Sector Management and Development Policy (not dated)	<p>Guides preparation of individual fishery management plans which will detail activities for the management and development of each fishery.</p> <p>The Policy sets standards and guidelines for acceptable conduct related to exploitation, management and handling of fisheries resources and develop the fisheries sector to generate sustainability in nutritional and food security, economic benefits for fisheries both now and in future. The policy considers regional and international conventions and agreements relevant to fisheries management in its development that promote ecosystem approaches and stewardship e.g. The United Nations Convention on the Law of the Sea (UNCLOS), 1982; The UN Fish Stocks Agreement, 1995; FAO Code of Conduct for Responsible Fishing, 1995; Ecosystem Approach to Management; and the draft</p>	<ul style="list-style-type: none"> The interdependence between human well-being and ecosystem well-being is referenced within the Policy Statement (Section 3.5 <i>"...optimize the social and economic benefits from the exploitation of its fisheries resources for present and future generations, without...affecting the capacity of the resources to replenish...and be sustainable..."</i>, through the inclusion of Ecosystem Approach to Management (Section 3.6.9), Resource Sustainability (Section 3.7), and Livelihood Sustainability (Section 3.8). 	<ul style="list-style-type: none"> Supports user rights/local rights fishers (e.g. Section 3.6 Guiding Principles; 3.6.3. <i>Make effective management decisions...taking into consideration...traditional fishing practices and local knowledge</i>, considers economic well-being (e.g. Section 3.8 on Livelihood sustainability) including strategies and technologies that are economically viable and do not negatively impact the environment or prevent provision of food, employment and social well-being for users now and in the future. The policy considers impacts of the livelihoods of fisherfolk; specifically, under: (Section 3.6.1) <i>"guarantee human rights of stakeholders and; practice non-discriminatory enforcement of laws"</i>, (Section 3.6.3) under making effective management decisions to involve stakeholders and consider <i>"views and needs of stakeholders; traditional fishing practices and local knowledge;</i> 	<ul style="list-style-type: none"> Promotes and enables stewardship via a good governance guiding principle that emphasises stakeholders' participation in decision making; and that institutions, structures and processes set up for management and development of the fisheries sector be equitable and responsive to stakeholders' needs. Collaborative management referenced as a guiding principle to <i>"share responsibility for the management and development of fisheries through...collaboration, cooperation, networking, strengthening existing linkages and establishing new linkages with other linkages, groups, ..."</i>.

Name of Policy, Law, Plan	Description	The policy/law/plan considers the ecological well-being of fisheries resources	The policy/law/plan considers socio-economic well-being of resource users including fisherfolk	The policy/law/plan considers collaborative management and inclusion of stakeholders in decision-making
	Caribbean Community Common Fisheries Policy.		<i>impact of management measures on the resource, stakeholders and ecosystem.</i>	
Fisheries Act Cap. 391, (1993), amended 2000	Provides for the management and development of fisheries in Barbados. The Act covers the following: The establishment of the FAC, fisheries management and development schemes, access agreements, local and foreign vessel licensing, sport fishing, fishing vessel registration, construction and alteration of vessels, research, inspection and safety at sea, enforcement, obligation to supply information and prohibiting the use of explosives, poisons or other noxious substances. Regulations under the Act cover closed seasons, fishing operations and gear restrictions among other matters and are the duty of the responsible Minister in charge of Fisheries Division to create. ⁴⁸	<ul style="list-style-type: none"> Act references management and development of fisheries shall include within its schemes, among other aspects – <i>an identification of fishery concerned and the assessment of present state of exploitation</i> (Part I, 4.2 (a)), and <i>any other matters necessary to provide for proper management and development</i> (Part I, 4.2 (f)). 	<ul style="list-style-type: none"> Act refers to '<i>optimum utilization, benefit of people</i>' (Part 1, 3.3). 	<ul style="list-style-type: none"> Considers involvement of fisherfolk under Part No. 4 (3) where the CFO may consult with fisherfolk affected by the fishery scheme and with the FAC when preparing fisheries schemes; and in establishment of a FAC under Part 5 (1)⁴⁹. The FAC demonstrates inclusion of stakeholders such as fisherfolk and fisherfolk organisations in decision-making mechanisms, with 5 out of 9 members of the FAC being fisherfolk representatives.

⁴⁸ McConney, P., Mahon, R. and Oxenford, H. 2003. Barbados Case Study: The Fisheries Advisory Committee. Caribbean Coastal Co-Management Guidelines Project. Caribbean Conservation Association, Barbados. 77pp.

⁴⁹ Barbados Institutional Analysis and Organisational Assessment Workshop. February 11-12, 2020, Fisheries Act (cap. 391)

Name of Policy, Law, Plan	Description	The policy/law/plan considers the ecological well-being of fisheries resources	The policy/law/plan considers socio-economic well-being of resource users including fisherfolk	The policy/law/plan considers collaborative management and inclusion of stakeholders in decision-making
Fisheries (Management) Regulations (1998)	Provides for regulation of fishing methods and gear, conservation and protection of specific species including endangered species, harvesting of marine species carrying eggs and establishes offences for the provisions and penalties concerning the regulations therein.	<ul style="list-style-type: none"> • Protection of certain species e.g. white sea urchin <i>Tripneustes ventricosus</i>, marine turtles, species of fish which may not be harvested during closed season or in closed areas. • Specifications to not remove lobster with eggs attached, no harvesting of turtles or disturbing/jeopardizing any turtle, or remove turtle eggs from a nest and landing of species such as yellowfin tuna or bigeye tuna less than 3.2 kilogrammes live weight • Establishment of prohibited fishing methods and species of fish which may not be harvested during closed season and in closed areas. 	<ul style="list-style-type: none"> • No specific mention of consideration to socio-economic well-being of resource users including fisherfolk. • The establishment of closed areas and closed seasons, as well as prohibited fishing methods and gear types (e.g. trammel or entangling net) may be perceived as considering socio-economic well-being through ensuring sustainability of the resource that fisherfolk livelihoods are dependent on. 	<ul style="list-style-type: none"> • No specific mention of collaborative management and inclusion of stakeholders in decision making.
Integrated Coastal Zone Management Act Cap. 394, (1998)	Provides for the more effective management of the coastal resources of Barbados, for the conservation and enhancement of those resources and for matters related thereto. The Act covers the following: <ul style="list-style-type: none"> ○ The Coastal Zone Management Plan and 	<ul style="list-style-type: none"> • Provides for effective management of coastal resources, for the conservation and enhancement of those resources. • Standards for environmental impact assessments for development which may affect conservation and 	<ul style="list-style-type: none"> • No explicit mention to socio-economic aspects such as the use and development of coastal resources. • Sections 8(2) and 39(2) of the Act acknowledges the Fisheries Act as the prevailing legislation in areas where both laws may apply outside of restricted areas to living resources in the marine 	<ul style="list-style-type: none"> • Section 5 (Public enquiry, present draft management plan and management area presented to public) Section 6 (Revision of the above in light of any discussions or representations resulting from enquiry)

Name of Policy, Law, Plan	Description	The policy/law/plan considers the ecological well-being of fisheries resources	The policy/law/plan considers socio-economic well-being of resource users including fisherfolk	The policy/law/plan considers collaborative management and inclusion of stakeholders in decision-making
	<p>Management Area and Appeals</p> <ul style="list-style-type: none"> ○ Preservation and Enhancement of Marine Areas ○ Coral Reef Protection ○ Beach Protection ○ Powers and Functions of Director, Coastal Zone Inspectors ○ Offences and Penalties 	<p>management of coastal resources.</p> <ul style="list-style-type: none"> ● Part III, No. 15 of the Act includes designation of marine restricted areas where deemed necessary for protection or rehabilitation of flora and fauna found in the area. ● Part III, No. 17 of the Act includes regulations for restricted areas to prohibit or regulate diving, fishing, navigation and anchoring of vessels ● Part III, No. 22 of the Act prohibits harvesting of coral towards protection of the coral reef & requires permits for scientific study and research. ● Part III, No. 28 of the Act prohibits removal of vegetation, sand, stones, etc. from foreshore or prohibited area. 	<p>environment.⁵⁰ This may relate to the right to fish in areas other than restricted areas; and in the development and maintenance of structures in the coastal zone management area (subject to other statutory permissions such as Town and Country Development Planning Office approvals)</p>	

⁵⁰ Currently, the only restricted area in Barbados is the Folkstone Marine Reserve. [Workshop participants, Barbados Institutional Analysis and Organisational Assessment Workshop. February 11-12, 2020]

Name of Policy, Law, Plan	Description	The policy/law/plan considers the ecological well-being of fisheries resources	The policy/law/plan considers socio-economic well-being of resource users including fisherfolk	The policy/law/plan considers collaborative management and inclusion of stakeholders in decision-making
<p>Volume 1 – Integrated Coastal Management – The Barbados Policy Framework (1998)</p>	<p>The policy framework to guide management of the coastal environment. Includes two strategic objectives for (1) the sustainable use of the coastal zone management area by implementing policies which maintain and where possible, enhance environmental quality while enabling economic development; and (2) effective legal, institutional and administrative structure to implement integrated coastal management.</p> <p>Framework includes the definition of sustainability as “Meeting the needs of the present without compromising the ability of future generations to meet their own needs”</p> <p>Under the sustainability strategic objective there are policies for: standards and procedures, compatibility between economic and environmental interests, conservation and management of heritage, culture and ecology and working and living with dynamic coasts.</p>	<ul style="list-style-type: none"> • Under the Policy for Conservation and Management of Heritage, Culture and Ecology; the policy framework focuses on conservation of wildlife and natural resources including biodiversity conservation, trade in endangered species, coral protection, sea turtle conservation, mangrove management, seagrass beds, etc. • Under the Policy for working and living with dynamic coasts the policy framework focuses on allowing the coast to function as naturally as possible, to ensure the dynamic nature of the coastal environment is recognized in management decisions and includes natural beach change, artificial beaches and use of vegetation. 	<ul style="list-style-type: none"> • Under the Policy for Compatibility between economic and environmental interests, framework has a fishing section which states the need to integrate fisheries into coastal management and advocates for co-management arrangements where possible to involve stakeholders directly in management of the fishery and ensure self-regulation; as well as at government level to have collaboration between Fisheries Division and the Coastal Zone Management Unit. 	<ul style="list-style-type: none"> • Policy for public participation within the policy framework to “raise awareness and actively encourage public participation in all stages of the coastal management process”. • References that a technically sound integrated coastal management plan would not succeed unless it reflects community values and aspirations and references all people who use the coast (individuals, community groups government and industry).

Name of Policy, Law, Plan	Description	The policy/law/plan considers the ecological well-being of fisheries resources	The policy/law/plan considers socio-economic well-being of resource users including fisherfolk	The policy/law/plan considers collaborative management and inclusion of stakeholders in decision-making
	Under the effective implementation strategic objective there are policies for focus, integration and coordination, public participation, knowledge and understanding and financial sustainability.			
Volume 2 – Integrated Coastal Management Plan for the Caribbean coasts of Barbados (1999)	<p>Vision and strategic objectives mirror policy framework [detailed above under Volume 1 Integrated Coastal Management – The Barbados Policy Framework (1998)]</p> <p>Provides for detailed management of coastal uses, development and regulation along the west and south coasts of Barbados.</p>	<ul style="list-style-type: none"> Objective of a Biodiversity Reference Area with strict protection to coastal and marine habitats typical and/or unusual for Barbados (Section 5.2.3 of Plan) Section 5.4.1 considers damages done by anchoring which could be controlled by designating anchoring areas in less sensitive locations and establishing permanent mooring areas in areas more at risk. (The CZMU would work with Fisheries Division and the Professional Association of Dive Operators to set up permanent mooring bouys at popular dive sites). Section 5.5 on Fisheries includes consideration to preservation of rare or fragile ecosystems and ecologically sensitive areas, promotion of the development and use of 	<ul style="list-style-type: none"> Section 2.2.4 of the plan focuses on socio-economic considerations speaking to the make-up of the parishes along the extent of the Caribbean coast where the plan focuses, development, population and general population of Barbados having the financial capacity to participate in the coastal land market. Sub-Area 8 (Needham’s Point to South Point) under Part B of the Plan includes support to fishing centers through maintenance and where necessary enhancement of facilities, in a manner which considers local environmental considerations Section 5.3 on construction and maintenance of coastal structures including jetties, piers, harbor breakwaters, berthing facilities, seawalls, etc. Where new structures are required, they 	<ul style="list-style-type: none"> Section 5.5. on Fisheries makes recommendations and proposals which reinforce improving opportunities for participation in planning and management stating “public education about management measures and community participation are important in fisheries management as well as other aspects of integrated coastal management” States Barbados Fisheries Division and other sectors of government should support management initiatives which promote sustainability of artisanal fishing or fishery related industry (e.g. boat building) in an environmentally friendly manner in known

Name of Policy, Law, Plan	Description	The policy/law/plan considers the ecological well-being of fisheries resources	The policy/law/plan considers socio-economic well-being of resource users including fisherfolk	The policy/law/plan considers collaborative management and inclusion of stakeholders in decision-making
		<p>selective fishing gear and ensuring effective monitoring, control and surveillance of fishing activities. (acknowledges the responsibility of the Barbados Fisheries Division for management of fisheries and states the Plan can make recommendations and advise on aspects of fisheries management including standards for management of underwater parks and restricted areas.</p> <ul style="list-style-type: none"> Section 5.6 – Coastal habitat restoration which includes current status, and methods of restoration for wetland habitats, vegetated dunes, beach vegetation, seagrass and reefs. 	<p>must carefully be designed to limit adverse environmental impact and monitored to maintain function and integrity.</p> <ul style="list-style-type: none"> Section 5.5. on Fisheries: to ensure fishing industry is integrated into policy and decision-making process concerning fisheries and coastal zone management; taking into account traditional knowledge and interests of local communities in development and management programmes Section 5.7 – Community tourism including prior to development (planning, design and execution of a project) that community impact must be considered. 	<p>traditional coastal settlement enclaves.</p> <ul style="list-style-type: none"> Under implementation (Part E) includes community participation and includes establishment of stakeholder liaison who lives in the community and using the focus of co-management as a resource for a valuable starting point to build and establish community led fora.
<p>Volume 3 – Integrated Coastal Management Plan for the Atlantic coasts of Barbados (1998)</p>	<p>Vision and strategic objectives mirror policy framework [detailed above under Volume 1 Integrated Coastal Management – The Barbados Policy Framework (1998)]</p> <p>Provides for detailed management of coastal uses, development and regulation along the south-east,</p>	<ul style="list-style-type: none"> Section 5.2 – Conservation management: details status of area including zones and guidance for each, status of biodiversity, and management guidance. Section 5.5 on Fisheries includes consideration to preservation of rare or fragile ecosystems and ecologically 	<ul style="list-style-type: none"> Section 2.3 – Socio-economic considerations; considers the population, parishes along the extent area, economic conditions in the area and speaks to fishing industry “<i>although its (fishing industry) importance on the east coast has declined, much of the labor of some boats transferring their operations to Bridgetown</i> 	<ul style="list-style-type: none"> Part E – Community participation which includes opportunities such as stakeholder liaison and development, community led fora and community led schemes. Section 5.5. on Fisheries makes recommendations and proposals which

Name of Policy, Law, Plan	Description	The policy/law/plan considers the ecological well-being of fisheries resources	The policy/law/plan considers socio-economic well-being of resource users including fisherfolk	The policy/law/plan considers collaborative management and inclusion of stakeholders in decision-making
	east and north-west coasts of Barbados.	<p>sensitive areas, promotion of the development and use of selective fishing gear and ensuring effective monitoring, control and surveillance of fishing activities. (acknowledges the responsibility of the Barbados Fisheries Division for management of fisheries and states the Plan can make recommendations and advise on aspects of fisheries management including standards for management of underwater parks and restricted areas.</p> <ul style="list-style-type: none"> Section 5.6 – Coastal habitat restoration which includes current status, and methods of restoration for wetland habitats, vegetated dunes, beach vegetation, seagrass and reefs. 	<p><i>and Oistins. Around 10% of landings for the island occurs on the east coast, with most of this at Conset Bay”</i></p> <ul style="list-style-type: none"> Under Part B, Sub-Area 2 (Kitridge Point to Conset Point) to encourage local coastal economy through support of fisheries. Section 5.3 on construction and maintenance of coastal structures including jetties, piers, harbor breakwaters, berthing facilities, seawalls, etc. Where new structures are required, they must carefully be designed to limit adverse environmental impact and monitored to maintain function and integrity. Section 5.5. on Fisheries: to ensure fishing industry is integrated into policy and decision-making process concerning fisheries and coastal zone management; taking into account traditional knowledge and interests of local communities in development and management programmes Section 5.7 – Community tourism including prior to development (planning, design and execution 	<p>reinforce improving opportunities for participation in planning and management stating “public education about management measures and community participation are important in fisheries management as well as other aspects of integrated coastal management”</p>

Name of Policy, Law, Plan	Description	The policy/law/plan considers the ecological well-being of fisheries resources	The policy/law/plan considers socio-economic well-being of resource users including fisherfolk	The policy/law/plan considers collaborative management and inclusion of stakeholders in decision-making
			of a project) that community impact must be considered.	
Sea Egg (White Sea urchin, <i>Tripneustes ventricosus</i>) Fishery Management Plan, (draft, not dated)	Promotes sustainable sea egg stock and an optimal fishery, and maximise sustained revenues for sea egg fishery stakeholders.	<ul style="list-style-type: none"> Stock rehabilitation and stabilisation actions including no-take reserves at three key spawning and recruitment sites, translocating sea eggs from at risk areas to areas with greater potential for survival, reproduction and recruitment success and expanding stock abundance survey monitoring program. 	<ul style="list-style-type: none"> Section 1.9 of the plan focuses on the socio-economic and demographic profile of the fishery – includes value of fishery, profile on fishery users and consideration towards stakeholder engagement on management. 	<ul style="list-style-type: none"> Stakeholder engagement mechanisms in the form of co-management council comprised of government agencies, scientific community and fishing community representatives. Main tasks of community representatives would be to collect and incorporate information from fishers into work activities of the council making decisions on management.

6 Mechanisms for fisherfolk participation in decision-making

Taking action is a fundamental part of ecosystem stewardship. Stewardship actions include the range of approaches, activities, behaviours, and technologies that are applied to protect, restore or sustainably use the environment. In the case of small-scale fisheries, stewardship actions by fisherfolk and/or their organisations are influenced by formal or informal decision-making processes about the use of fisheries resources that may or may not involve fisherfolk. Participation and involvement of stakeholders in the fisheries management decision-making process is advantageous as it facilitates common understanding, establishes trust, manages conflict, increases stakeholder responsibility and accountability and enhances the legitimacy and acceptance of management policies and decisions thereby contributing to more effective enforcement of rules and regulations and increasing likelihood of compliance⁵¹. To determine the extent to which fisherfolk were being included in decision-making processes related to the management of fisheries and other coastal and marine resources the institutional analysis examined the existence, composition and functioning of current National Intersectoral Coordinating Mechanisms (NICs).

The CLME+ SAP identified interactive governance arrangements such as NICs essential to successfully implementing and achieving ecosystem-based management and EAF. In the CLME+ region NICs can be broad or narrow based on the scope and ecosystem approach being used. Examples of NICs include: Fisheries Advisory Committees or Councils, Ocean Governance Committees, sustainable development commissions, integrated coastal management institutions and climate change bodies.

NICs operate within the policy cycle and involves interactions across multiple scales, stakeholders, sectors and levels of governance (local, national, regional and international). A NIC can be considered as the operational arm of good and effective governance or policy processes.⁵²

Inclusion of fisherfolk and fisherfolk organisations within NICs will encourage and support ecosystem stewardship by increasing the stakeholder inclusion of these resource users in the governance aspect of fisheries management, contribute to building and establishing trust and provide an avenue for including their perspectives among other advantages.

6.1 Findings for mechanisms for fisherfolk participation in decision-making in Barbados

During the national validation workshop, participants were asked to validate current NICs identified during the desk study as well as identify any missing current NICs related to the coastal and marine sector in Barbados. Participants were also asked to share information on the composition of the NIC, especially whether it included fisherfolk or not, or if this information was unknown to share where additional information could be sourced for further analysis.

Table 6.1 shows the NICs that were identified during the desk study and by participants during the national validation workshop. Additional focus is given to the Fisheries Advisory Committee as it was the only NIC that included fisherfolk.

⁵² Compton, S., McConney, P., Monnereau, I., Simmons, B. and Mahon, R. 2016. Good practice guidelines for successful National Intersectoral Coordinating Mechanisms (NICs). CLME+ COMMUNICATION – CERMES Technical Report no. 88.

Table 6.1 Relevant national intersectoral coordinating mechanisms (NICs) relevant to the fisheries sector of Barbados

NIC	Purpose	Composition	Are fisherfolk members of the NIC?	(Active/Inactive)
National Biodiversity Strategy and Action Plan Committee	Contributions towards the preparation of the final reporting document of the National Biodiversity Strategy and Action Plan (NBSAP) for Barbados	Stakeholders identified as part of the committee include Fisheries, ICZM, Ministry of Environment, UWI CERMES, Plant Services Vet Services, Soils Conservation. ⁵³ CBD report cites members of the NBSAP Committee from government, academia and international organisations. No civil society organisations were identified ⁵⁴ .	No; No CSOs were identified as a member of the committee.	Active
Climate Change Committee	To monitor the draft National Climate Change Policy ⁵⁵	Representatives from government ministries, non-governmental organisations and private sector agencies from: <ul style="list-style-type: none"> ○ Ministry of Environment and Drainage, ○ Ministry of Agriculture, Food, Fisheries and Water Resources Management, ○ Ministry of Finance and Economic Affairs, ○ Ministry of Health, ○ Ministry of Home Affairs, ○ Ministry of Social Care, Constituency, Empowerment and Community Development, ○ Ministry of Works and Transport, ○ Ministry of Tourism and International Transport, ○ Office of the Prime Minister, ○ Representative from a Youth Group, ○ Representative from a Community Based / Non-Governmental Organisation (Global Environment Facility Small Grants Programme – Barbados), ○ UWI CERMES and ○ Representatives from Business Sector.⁵⁶ 	No; Whilst the composition cited includes a representative from a community-based organisation or non-governmental organisation, the last committee meeting comprised only government agency stakeholders ⁵⁷ . Therefore, it is not clear whether the committee participation for other stakeholder types is representative or consistent.	Active

⁵³ Barbados Institutional Analysis and Organisational Assessment Workshop. February 11-12, 2020

⁵⁴ Government of Barbados. 2002. A National Biodiversity Strategy & Action Plan for Barbados.

⁵⁵ Government of Barbados. 2018. Barbados' Second National Communication Under the United Nations Framework Convention on Climate Change (UNFCC).

⁵⁶ Government of Barbados. 2018. Barbados' Second National Communication Under the United Nations Framework Convention on Climate Change (UNFCC).

⁵⁷ Barbados Institutional Analysis and Organisational Assessment Workshop. February 11-12, 2020

Fisheries Advisory Committee	To advise the Minister responsible for fisheries on fisheries management, conservation and development.	<p>Nine voting members:</p> <ul style="list-style-type: none"> ○ The Chief Fisheries Officer, ○ a fisheries biologist, ○ a representative of the Ministry of the Environment, ○ members of the Markets Division⁵⁸. ○ a national fisherfolk organisation⁵⁹, ○ four persons engaged within the fishing sector such as: <ul style="list-style-type: none"> ○ a fish processor, ○ boat owner, ○ fish vendor and ○ fisherman, <p>selected as individual experts vs. representatives of their occupations.</p>	<p>Yes</p> <p>four persons engaged within the fisheries sector directly such as a fish processor, boat owner, fish vendor and fisherman, and a representative of the national fisherfolk organisation.</p> <p>A focus group participant, a retired vendor, indicated they had previously sat on the Fisheries Advisory Committee.⁶⁰</p>	Active
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⁵⁸ Government of Barbados. Fisheries Division. Ministry of Agriculture and Rural Development. Barbados Fisheries Management Plan 2004-2006.

⁵⁹ Barbados Institutional Analysis and Organisational Assessment Workshop. February 11-12, 2020.

⁶⁰ Fisherfolk focus group session to discuss priorities to effectively engage and action ecosystem stewardship, held at Fisheries Department, Barbados – February 13, 2020

Of the three NICs identified during the validation workshop, only the Fisheries Advisory Committee included fisherfolk (or any civil society representative) in its composition. While climate change and biodiversity are cross cutting issues that will affect fisherfolk and their livelihoods, fisherfolk inclusion in the Fisheries Advisory Committee is priority with respect to fisheries management and supporting their ecosystem stewardship. Analysis thus focused on fisherfolk inclusion and participation in the main NIC identified.

The Fisheries Advisory Committee has been legally mandated under the Fisheries Act (Cap. 391) and includes nine voting members, five of which are fisherfolk. The Fisheries Advisory Committee is currently active, with fisherfolk organisation representation including a small fish vendor group and a fishing boat owner; alongside the Chief Fisheries Officer, Fisheries Biologist, Ministry of Environment, the Markets Division, and a national fisherfolk organisation representative (BARNUFO representative). It is politically endorsed and legally mandated⁶¹.

The perceived decision-making power of the Fisheries Advisory Committee was ranked high on the pyramid of decision-making power by stakeholders (Figure 4.3) during the validation workshop – positioned under the Fisheries and Markets Division which were directly under the Minister. Plenary discussion during the validation workshop revealed that the Fisheries Advisory Committee functions in its advisory role and makes recommendations to the Minister which may or may not be actioned by the relevant Minister in power. Acceptance of this advisory information from the Fisheries Advisory Committee is therefore dependent on the individual who sits in this ministerial role and the various factors (including FAC advisory recommendations) that need to be considered in decision-making including the Ministry’s allocated resources, capacities, intersectoral arrangements, etc. A focus group session held with fisherfolk to discuss priorities to effectively engage and action ecosystem stewardship revealed a perception that the Fisheries Advisory Committee’s decision-making power was lower due to its advisory position (i.e. it is not required that the recommendations presented by fisherfolk on the Fisheries Advisory Committee; or the Fisheries Advisory Committee at large, be actioned)⁶².

7 Support and resources for ecosystem stewardship by fisherfolk and their organisations

To undertake ecosystem stewardship, would-be stewards must have the support and resources to do so. In this case “support and resources” refer to the finances, technology and equipment and education, skills and knowledge needed to effectively undertake ecosystem stewardship actions. In addition to directly supporting ecosystem stewardship actions, access to these resources may also ensure that aspects of fisherfolk’s human well-being (e.g. access to training to ensure safety at sea) are considered by support agencies and may provide motivation for stewardship actions.

To determine whether fisherfolk have adequate support and resources to undertake ecosystem stewardship actions the institutional analysis examined some of the programmes and initiatives in Barbados that have provided or are providing finances, technology and equipment and capacity building (e.g. education, skills and knowledge) to fisherfolk and their organisations.

During the in-country validation workshop, Barbados stakeholders identified various programmes and initiatives providing support and resources to fisherfolk and fisherfolk organisations, these are

⁶¹ Barbados Institutional Analysis and Organisational Assessment Workshop. February 11-12, 2020

⁶² Fisherfolk focus group session to discuss priorities to effectively engage and action ecosystem stewardship, held at Fisheries Department, Barbados – February 13, 2020

highlighted in Table 7.1.

Table 7.1 Programmes and initiatives providing support and resources to fisherfolk and fisherfolk organisations in Barbados

Type of support /resources provided	Name of programme/ initiative	Description of programme/ initiative	Organisation delivering programme/ initiative	Organisation type
Technology, equipment & materials	Fisherman’s Week	Donations from banks of drinks, groceries for food e.g. cooking oil. Fishers also reach out to private sponsors for First Aid Kits for example for the event.	Private sponsors	Private Sector
Technology, equipment & materials	One-off donation of computer	Equipment provided for BARNUFO to utilize.	Small Business Association (SBA)	Civil Society
Finance	Annual subvention	Financial source to BARNUFO, this is used for training, utilities, stationery and office space; located in Fisheries Division.	Government of Barbados	Government
Finance	Global Environmental Facility (GEF) Small Grants Programme (SGP)	Grants programme that facilitates funding for training (e.g. safety at sea, bookkeeping, first aid) and projects (e.g. infrastructure, sea moss project, FADs).	GEF SGP	Intergovernmental organisation
Finance	Global Environmental Facility (GEF)	Fisheries value chains of key seafood species assessed and incorporated into national blue economy strategies, Value chain and added-value opportunities for seafood identified and market and economic feasibility assessed ⁶³	GEF	Inter-governmental organisation
Finance	Cooperative funding	Potential funding available if a fisherfolk co-op is formed. A co-op can apply for funding from the Cooperative Investment Fund which can be used for a variety of actions e.g. purchase of vessels, infrastructural development, establishing a processing plant.	Co-Op Investment Fund	Government
Skills, knowledge & abilities	On-going work programme of the	Hazard Analysis Critical Control Points (HACCP) – Internationally recognized method to identify	Ministry of Health provides the training; Fisheries Division and	Government/Civil Society

⁶³ “BE-CLME+”: Promoting National Blue Economy Priorities Through Marine Spatial Planning in the Caribbean Large Marine Ecosystem Plus. [July 2020] https://clmeplus.org/app/uploads/2020/03/GEF7-CAF-FAO_Carib-BE-PIF_04October2019_Final-draft.pdf

	Ministry of Health, Barbados.	and manage food safety related risk	BARNUFO collaborate and make the logistical arrangements for fisherfolk to be trained.	
Skills, knowledge & abilities	On-going work programme of the Ministry of Health, Barbados	Training Courses: Safety at Sea Boat Maintenance Navigation First Aid	Ministry of Health provides the training; Fisheries Division and BARNUFO collaborate and make the logistical arrangements for fisherfolk to be trained.	Government/Civil Society
Skills, knowledge & abilities	On-going work programme of the Markets Division	Food Handling	Markets Division provides the training; Fisheries Division and BARNUFO collaborate and make the logistical arrangements for fisherfolk to be trained.	Government/Civil Society
Skills, knowledge & abilities	On-going work programme of the Fisheries Division	Fish Handling	Fisheries Division provides the training; BARNUFO collaborate and make the logistical arrangements for fisherfolk to be trained.	Government/Civil Society
Skills, knowledge & abilities	Development Assistance/ Information	Development Assistance: - Strengthening of organisation co-finance management - Gender Affairs	UWI CERMES	Academia
Skills, knowledge & abilities	Public Speaking Training Class available from organisation upon request	Public Speaking (requested by BARNUFO) to improve advocacy skills	Toast Masters	Civil Society
Skills, knowledge & abilities	Record Keeping Class available from organisation upon request	Accounts; improve record keeping	SBA	Private Sector
Skills, knowledge & abilities	First Aid Class available from organisation upon request	First Aid	St. John's Ambulance Bridgade	Private Sector

Under the categorised types of support/resources provided, information fell into either: (1) technology, equipment and materials, (2) finance, or (3) skills, knowledge and abilities. Finance was

considered the most critical element of support/resources provided⁶⁴ – being that it could support and strengthen the provision and upkeep of both technology, equipment and materials, as well as skills, knowledge and abilities. It also supports the sustainability of formal fisherfolk organisations. Analysis of each support/resource category is summarised:

- **Technology, equipment and materials:** the support afforded to BARNUFO is prevalent in the provision of both office space and equipment. This supports the fisherfolk community by ensuring a national level body responsible for actioning their interests. In terms of provision of this support to primary fisherfolk organisations or fisherfolk individuals, reference was made by fisherfolk to the need for more consistently maintained infrastructure e.g. reliable freezer storage, secure storage facilities, maintained infrastructure of jetties, fish landing sites, etc.)⁶⁵.
- **Finance:** a subvention is provided annually to BARNUFO by the Government of Barbados to support its operations. Additionally, small grants may be accessed by fisherfolk organisations under the GEF SGP. Finally, the consideration of cooperative funding was suggested as a potential avenue for financial sustainability. However, historically Barbados fisherfolk have favoured the fisherfolk association model versus the fishing cooperative due to its flexibility in structure and function and freedom to adapt to circumstances⁶⁶.
- **Skills, knowledge and abilities:** the government of Barbados, BARNUFO and primary fisherfolk organisations as well as fisherfolk generally work collaboratively with respect to basic, annual training required by fisherfolk such as fish handling, food handling or Hazard Analysis Critical Control Points (HACCP). Organisational strengthening resources are provided by UWI-CERMES. It was not explicit whether fisherfolk organisations participate in any projects, programmes or initiatives that build more technical ecosystem stewardship actions e.g. coral restoration, seagrass replanting or training for use of sustainable fishing gear. However, this could be built as the fisherfolk have the capacity to individually execute these types of actions – illustrated through their individual stewardship action of sea egg management where individual fisherfolk would relocate sea eggs from populated areas to areas which have depleted stocks of sea eggs⁶⁷.

In terms of support/resources, the Barbados fisherfolk may benefit from improved organisational strengthening which would in turn improve their ability to seek financing. This would lead to a more sustainable business model for the associations and in turn; provide a foundation where they may be able to seek support/resources in other categories of technology, equipment and materials; and skills, knowledge and abilities. While UWI-CERMES provides this resource, it may benefit fisherfolk organisations and fisherfolk to have a collaborative approach in provision of organisational strengthening support/resources as this collaborative approach has worked well in the provision of training services.

8 Partnerships and networks for ecosystem stewardship

Partnerships and networks connect institutions and organisations across levels and scales. For fisherfolk organisations seeking to engage in ecosystem stewardship, partnerships and networks are important as these arrangements help facilitate information flows, fill knowledge gaps, and

⁶⁴ Barbados Institutional Analysis and Organisational Assessment Workshop. February 11-12, 2020

⁶⁵ Fisherfolk focus group session to discuss priorities to effectively engage and action ecosystem stewardship, held at Fisheries Department, Barbados – February 13, 2020

⁶⁶ McConney, P. Simmons, B. Nicholls, V. and Medeiros, R. P. 2017. Building the Barbados National Union of Fisherfolk Organisations. *Maritime Studies*. 16:19.

⁶⁷ Interview with UWI-CERMES employee by CANARI, June 2020.

strengthen expertise for ecosystem management, including stewardship.⁶⁸ This section discusses a few current or past partnerships or networks in Barbados that included fisherfolk organisations and how these have impacted ecosystem management.

8.1 Findings for partnerships and networks for ecosystem stewardship

As a national umbrella organisation, BARNUFO is an important network for local level fisherfolk organisations in Barbados. Through this network, fisherfolk are able to receive training and engage in fisheries management. For example, when local level fisherfolk organisations communicate their training needs to BARNUFO; BARNUFO will communicate with the Fisheries Division, which is responsible for training of the industry, on which fishers/groups require training and which type e.g. fish handling, HACCP, safety at sea. This level of communication is facilitated through the relatively strong relationship between BARNUFO and the Fisheries Division, fostered through the physical presence of the national umbrella organisation at the Fisheries Division office and support provided by the Division through the annual subvention.

In terms of decision-making and implementation, fisherfolk organisations are involved in the preparation of fisheries management planning, with national fisherfolk organisation BARNUFO involved and reporting on community and national consultations held with fishing industry stakeholders in preparation of the 2001-2003 Fisheries Management Plan for fisheries in the waters of Barbados⁶⁹.

Historically, fisherfolk have built a partnership with Fisheries Division in a collaborative capacity related to the sea egg (white sea urchin) fishery. Stock assessments to determine sea egg abundance were conducted by the Fisheries Division and fishers during the 10-year closure of the sea egg fishery to inform management. Annual abundance surveys and measurements of sea eggs were done in a joint effort between the Division and fishers from 2004-2015.⁷⁰

BARNUFO also partners with UWI-CERMES frequently for projects e.g. a joint study conducted by UWI-CERMES and BARNUFO on factors that favour the success and failures of fisherfolk organisations to implement SSF Guidelines in ways that support them globally; under a FAO global project linked to implement the international Voluntary Guidelines for Securing Sustainable Small-scale Fisheries (SSF)⁷¹. UWI-CERMES is also a key partner in building the capacity of BARNUFO, having partnered on studies related to building the organisational capacity and sustainability of the organisation, and in matters related to management of the fisheries industry and related resources.

9 Communication of information on sustainable practices for fisheries resources use

Communication is the means to share information on best practices, lessons learnt, available support/resources, training, networking, and opportunities for participatory decision-making that can support effective ecosystem stewardship. The institutional analysis examined the extent to which providers of fisheries information in the project country were using defined communication strategies, tools and channels to communicate with fisherfolk, as well as their capacity to use the

⁶⁸ Olsson, P., Bodin, Ö and Folke, C. 2010. Building Transformative Capacity for Ecosystem Stewardship in Social–Ecological Systems. In: Armitage, D. and Plummer, R. (editors). Adaptive Capacity and Environmental Governance. Chapter 13. Forthcoming on Springer, UK.

⁶⁹ BARNUFO. 2001. Fisheries Management Planning: A co-management approach. Report on community and national consultations held with fishing industry stakeholders in preparation of the 2001-2003 Fisheries Management Plan for fisheries in the waters of Barbados.

⁷⁰ Pena, M., McConney, P. Forde, R., Sealy, S. and Wood, J. Sea Eggs Again: An Account and Evaluation of the 2015 Barbados Sea Egg Fishing Season (1-31 October 2015). CERMES Technical Report No. 79.

⁷¹ Government Information Service (GIS). 2013. Discussion on Fisheries Governance and Livelihoods.

tools and channels effectively; including the structures and systems in place for clear communication.

Current communication of information to fisherfolk and fisherfolk organisations in Barbados on sustainable practises for fisheries resources use is largely done via informal digital (?) communication networks in the form of WhatsApp⁷² groups. BARNUFO has focused WhatsApp group chats for longliners, fishers and vendors, management (of BARNUFO) and fisherfolk associations. These WhatsApp groups are used to communicate with fisherfolk on what their capacity needs are such as relevant training (e.g. safety at sea, HACCP, first aid) which is then communicated in person; via BARNUFO, to Fisheries Division to make adequate arrangements with training agencies (e.g. Ministry of Health which is responsible for HACCP training), as BARNUFO has an office space at the Division's building.

Conventional media is also utilised to communicate with fisherfolk in the form of advertising and via the Government Information Services of Barbados. Previously, the Fisheries Division resided under the Ministry of Agriculture which hosted a weekly television show called Farmer's Corner. Previous to the Division's move to the Ministry of Maritime Affairs and the Blue Economy; the Fisheries Division would have had a segment on this show for information purposes. Print media is also employed in the form of brochures and flyers which are distributed and posted at markets. Plenary discussion at the validation workshop revealed the communication was present, albeit informal – as the communication chain from fisherfolk to BARNUFO to Fisheries Division appears effective in the case of training information particularly. The use of technology illustrated by the fisherfolk with their organisation representatives is seen as an advancement that could be built upon by the Fisheries Division in their direct communication with the wider fishing industry. BARNUFO has implemented use of technology and digital media internally and with its members, which the Fisheries Division could consider to supplementing present communication methods such as print media or television and radio programmes.

10 Organisational assessment of the fisheries authority in Barbados

While fisheries authorities have adopted EAF principles as an approach; evidenced by their inclusion in policies and plans (see Table 5.2), many have not yet adopted these principles within their administrative procedures and/or do not currently possess the capacities to facilitate effective collaborative management procedures.

As part of the institutional analysis, an organisational assessment of the of the state agency with direct responsibility for fisheries management was conducted in each country to identify gaps and develop recommendations to better adopt the EAF approach and subsequently support fisherfolk and their organisations in actioning ecosystem stewardship. The assessment was conducted via survey to provide a rapid assessment of the state agency's internal capacity to support ecosystem stewardship by fisherfolk and their organisations. The questions in the survey examined the following four capacity areas to explore the organisational motivation and capacity for supporting ecosystem stewardship by fisherfolk:

1. Vision, mandate and culture – the organisation's visions and goals, its operational culture and its internal governance mechanisms and how they promote ecosystem stewardship.

⁷² WhatsApp Messenger is a cross-platform instant messaging application allowing smartphone users with different categories of phone brands (e.g. iPhone, Android, Windows, Nokia, etc.) to exchange text, image, video and audio messages for free.

2. Practices – the translation of the organisation core beliefs into actions that support ecosystem stewardship by fisherfolk organisations as it relates to decision making, collaboration and information sharing.
3. Knowledge and skills – the fisheries-related state agency’s capacity to provide fisherfolk and fisherfolk organisations with the relevant knowledge and skills support required for improved stewardship actions.
4. Resources – the capacity, availability, and efficient access to resources related to organisations– focuses on the finance, equipment, materials, tools and methods that the organisation has access to for supporting fisherfolk with ecosystem stewardship activities and initiatives.

The assessment was conducted as an organisational self-assessment – where the selected agency, either through a small focus group (including relevant and knowledgeable staff members) or via an elected representative, completed the survey.

In the case of Barbados, the organisational assessment focused on the Fisheries Division.

10.1 Findings from organisational assessment of the fisheries authority in Barbados

The Fisheries Division, in its responsibilities related to fisheries management; is a key stakeholder in the fisheries institution in Barbados and plays an important role in supporting ecosystem stewardship by fisherfolk. Improved ecosystem stewardship by fisherfolk and their organisations can benefit the Division by reducing or minimising the burden on the Division’s limited financial and human resources for enforcement of fisheries regulations and contributing to the sustainable use, conservation and protection of costal and marine resources for which the Division has management responsibility.

The Barbados Fisheries Division functions under a mission to ensure optimum use of fisheries resources in Barbados’ waters for the benefit of people via management and development. Core values and beliefs include the identification of ecosystem stewardship by fisherfolk as important for sustainable use of fisheries and marine resources, the support and belief that fisherfolk can be effective stewards and should be included in decision-making related to management, valuing local and traditional knowledge and subscribes to the EAF principles and approach.

Table 10.1 provides a synthesis of the organisational assessment survey findings for the Barbados Fisheries Division found in Appendix 13.4 and recommendations for addressing gaps related in the four capacity areas evaluated. Each capacity area is also given an overall ranking based on the findings using a traffic light rating system, where:

	Indicates that the agency is effectively supporting ecosystem stewardship by fisherfolk and their organisations in the capacity area, with non-critical gaps to be addressed
	Indicates that the agency is adequately supporting ecosystem stewardship by fisherfolk and their organisations in the capacity area, but there are some critical gaps to be addressed
	Indicates that the agency factor is not adequately supporting ecosystem stewardship by fisherfolk and their organisations in the capacity area and there are critical gaps to be addressed

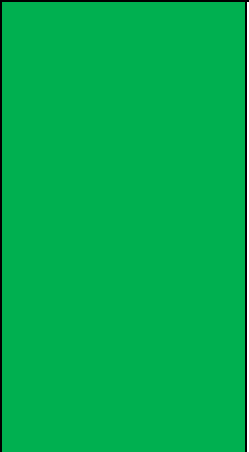
Table 10.1 Organisational assessment of Barbados Fisheries Division

Capacity area	Evaluation question and explanation	Response provided by agency	Overall ranking for section based on responses	Gaps/Recommended areas for strengthening
Vision, Mandate and Culture	Organisation has a vision statement that is supportive of /promotes ecosystem stewardship by fisherfolk	Yes		<ul style="list-style-type: none"> • Mission may be improved through more explicit mention of sustainable use or sustainable development; as well as inclusion of for the benefit of people and the environment, now and in the future. • Core values may be strengthened related to inclusion of fisherfolk in decision-making on management
	Organisation's mandate supports ecosystem stewardship by fisherfolk	Yes		
	Explanatory notes provided by agency: <ul style="list-style-type: none"> • Division's mission, which is "To ensure optimum utilisation of fisheries resources in waters of Barbados for the benefit of people through management and development" reflects supporting/promotion of ecosystem stewardship • Division's mandate supports ecosystem stewardship via the Chief Fisheries Officer's duties which references' his/her ability to consult local fishermen, any fishing cooperative or association or any other persons affected by the fishery schemes for management and development of fisheries in Barbados • Core values/beliefs that the Division identifies as its culture are: <ul style="list-style-type: none"> ○ belief that ecosystem stewardship by fisherfolk is important for sustainable use of fisheries and marine resources; ○ belief that fisherfolk can be effective ecosystem stewards and should be included in decision-making on management; ○ values local and/or traditional knowledge; and ○ believes in the EAF. 			
Practices	Organisation has a clear process for including opinions of fisherfolk in decisions made about fisheries and marine resources	Yes		<ul style="list-style-type: none"> • Inclusion of fisherfolk and their organisations in management initiatives focused on action-based management e.g. implementation and enforcement of management plans. • Strengthening of the Fisheries Advisory Committee as a council to support and guide on fisheries management, including strengthening of fisherfolk and civil society active participation and feedback.
	Organisation regularly and systematically includes fisherfolk's input in decisions about how fisheries and marine resources are managed	Yes		
	Organisation regularly partners/collaborates with fisherfolk and their organisations for fisheries management initiatives	Yes		
	Organisation regularly facilitates collaboration/partnerships between fisherfolk and other fisheries and marine stakeholders	Yes		
	Explanatory notes provided by agency: <ul style="list-style-type: none"> • Division has a clear process for inclusion of fisherfolk opinions in decision-making about fisheries and marine resources management via representation on the Fisheries Advisory Committee. 			

	<ul style="list-style-type: none"> • Division perceives that fisherfolk view them (Fisheries Division) as a partner with whom they can collaborate on fisheries management; and the organisation identifies that it regularly highlights sustainable use practices by fisherfolk. • Division notes a recent example of collaboration with fisherfolk as the development of the Fisheries Management Plan which, it noted is a result of a consultative and collaborative process. • A recent example of collaboration facilitated by the Division between fisherfolk and other stakeholders is referenced as the value chain initiative⁷³. • Division collects and uses local/traditional knowledge held by fisherfolk about fisheries and marine resources. It also records best practices related to sustainable use and management of marine resources and shares this information regularly, provides information on sustainable fishing practices to fisherfolk in a manner they can understand, has a communication strategy to share information with different stakeholders including fisherfolk and provides advice/guidance to fisherfolk for stewardship activities and initiatives. The organisation shares information via meetings, workshops and has found public meetings, collaborative efforts and dissemination through the Government Information Service platform the most effective forms of sharing information. 		<ul style="list-style-type: none"> • Strengthening of information collection and sharing through improvements to the communication strategy that involves use of technology-based platforms used by fisherfolk.
Knowledge and Skills	Technical staff have knowledge of EAF	Yes	<ul style="list-style-type: none"> • Strengthening of communication methods through the introduction and use technology-based platforms used by fisherfolk into the Fisheries Division activities related to communication with fisherfolk.
	Technical staff have specialist knowledge on ecosystems, their functions and ecosystem changes	Yes	
	Technical staff understand socio-economic context of fisheries and marine resource use by fisherfolk and other stakeholders	Yes	
	Technical staff have knowledge of aquaculture and other alternative or complementary livelihood options for which fisherfolk may be well suited	Yes	
	Technical staff have knowledge of how fisherfolk organisations function including key challenges that they may face and how they can be supported to resolve them	Yes	
	Organisation has the capacity to provide training for fisherfolk in different technical areas and organisational strengthening (these may include soft skills such as facilitation, development of training material, etc.)	Yes	

⁷³ “BE-CLME+”: Promoting National Blue Economy Priorities Through Marine Spatial Planning in the Caribbean Large Marine Ecosystem Plus. [July 2020]
https://clmeplus.org/app/uploads/2020/03/GEF7-CAF-FAO_Carib-BE-PIF_04October2019_Final-draft.pdf

	Technical staff has the skills to assist fisherfolk with mobilising funding for ecosystem stewardship activities and initiatives	Yes		
	Technical staff has skills in participatory approaches (e.g. participatory monitoring and evaluation, participatory planning, participatory management etc.)	Yes		
	Technical staff has communication skills needed to effectively communicate with a range of stakeholders including fisherfolk	Yes		
	Organisation provides or accesses training and other kinds of capacity building for staff to regularly improve their technical knowledge and skills	Yes		
	<p>Explanatory notes provided by agency:</p> <ul style="list-style-type: none"> • Division's staff have the relevant knowledge of EAF, knowledge on ecosystems, their functioning and changes, socio-economic context of fisheries and marine resource use by fisherfolk, socio-economic assessments and aquaculture as well as other complementary livelihood options for which fisherfolk may be well suited via academic discipline exposure • Division's staff are assigned to fisherfolk organisations, to gain knowledge on how they function including key challenges and how they can be supported to resolve challenges • Division possesses the relevant capacity to provide training to fisherfolk and does so regularly • Division's technical staff possess needed skills to: <ul style="list-style-type: none"> ○ Assist fisherfolk with mobilising funding for ecosystem stewardship activities and initiatives. ○ Use participatory approaches (e.g. participatory monitoring and evaluation, participatory planning, participatory management etc.) ○ Communicate effectively with a range of stakeholder including fisherfolk 			
Resources	Organisation provides funding assistance to fisherfolk to support ecosystem stewardship activities or initiatives	Yes		<ul style="list-style-type: none"> • Use of technology-based methods of communication to strengthen access to resources available to fisherfolk and their organisations. This could be done through a new website as the previous website is down as a result of ministerial changes. In tandem with this, possibilities of sharing resources digitally aside from the website
	Organisation provides materials, equipment or technology to fisherfolk to support ecosystem stewardship activities or initiatives	Yes		
	Organisation has access to tools, methods and good practices that can be used to support fisherfolk with ecosystem stewardship activities and initiatives	Yes		
	Organisation provides access to or assists fisherfolk organisation with accessing networks or resources outside of itself (such as technical experts, funding, projects, etc.)	Yes		

	<p>Organisation has a dedicated website which can be used to share information and resources on ecosystem stewardship practices with fisherfolk</p>	<p>No</p>		<p>may be considered – in the event that a reoccurrence of ministerial change occurs; to prevent loss of institutional information shared on the website platform and familiarity of that resource by users such as fisherfolk organisations. This could be achieved in a financially feasible way through access to many free web-based platforms of sharing information such as a Facebook⁷⁴ page, or a blog⁷⁵ managed by the Fisheries Division.</p>
	<p>Explanatory notes provided by agency:</p> <ul style="list-style-type: none"> • Division provides funding assistance to BARNUFO annually through a subvention • Division provides office space to BARNUFO in addition to annual subvention • Division has access to tools, methods, good practises that can be used to support fisherfolk with ecosystem stewardship activities and initiatives • Division assists fisherfolk organisations with accessing networks or resources outside of itself (e.g. funding, technical expertise) e.g. the Division has facilitated international funding for several activities • Division’s dedicated website for sharing information and resources is currently inactive – due to changes in ministerial assignments. 			

⁷⁴ A Facebook page is a public profile specifically created for business, brands, celebrities, causes and other organisations.

⁷⁵ A blog is a regularly updated website or webpage typically run by an individual or small group, that is written in an informal or conversational style.

11 Enabling and constraining factors and recommendations for strengthening fisheries institution to support ecosystem stewardship by fisherfolk

Table 11.1 set out some of the key enabling and constraining factors based on the findings from the institutional analysis and organisational assessment, it also provides recommendations to improve strengthening of the fisheries institution in Barbados to better support fisheries ecosystem stewardship by fisherfolk and their organisations. Enabling and constraining factors and recommendations are presented below under the categories of:

- Policy, legal and planning context for ecosystem stewardship
- Mechanisms for fisherfolk participation in decision-making
- Support and resources available to fisherfolk and their organisations for ecosystem stewardship
- Partnerships and networks for ecosystem stewardship
- Communication of information on sustainable practices for fisheries resources use

Gaps and areas for strengthening the organisational capacity of Barbados' Fisheries Division to support ecosystem stewardship by fisherfolk are presented in Table 10.1.

Table 11.1 Stewardship current enabling and constraining factors and recommendations

Area	Enabling factors	Constraining factors	Recommendations
<p>Fisheries-related organisations in Barbados</p>	<ul style="list-style-type: none"> • Fisheries Division perceives its mission and core values as reflective of supporting/promotion of ecosystem stewardship (Table 10.1). • Chief Fisheries Officer’s duties reference the ability to consult fisherfolk & persons affected by the fishery schemes for management and development of fisheries in Barbados. • Fisheries Division has a clear process for inclusion of fisherfolk opinions in decision-making about fisheries and marine resources management via representation on the Fisheries Advisory Committee. • BARNUFO has positioned itself in the fisheries institution as a strong organisation to represent fisherfolk and collaborate with other organisations within the institution e.g. BARNUFO collaborates with Fisheries Division on logistic support towards fisherfolk training and information sharing between the Division and fisherfolk (Table 7.1), and BARNUFO also collaborates alongside Fisheries Division with UWI-CERMES – on UWI-CERMES’ programme of action research and information sharing outreach on several management related issues. • Inclusion of fisherfolk and their organisations in consultative processes via invitations to stakeholder engagement/consultation sessions on 	<ul style="list-style-type: none"> • The organisations that encompass the Barbados’ fisheries institution include government, civil society, academia and private sector. Decision-making power of organisations appears to rely heavily in part on economic factors; evidenced by the perceived decision-making power of the main economic driver of the country – the tourism industry; and the availability of accessible funding for fishing industry management and support from international funding agencies to supplement a limited budget in executing fisheries management goals by Government bodies such as Fisheries Division. 	<ul style="list-style-type: none"> • Barbados Fisheries Division mission/vision and core values may be improved through more explicit mention of sustainable use or sustainable development vs. optimum utilisation; as well as explicit mention of ‘for the benefit of people’ being for present and future generations to drive sustainability as a pillar of fisheries resources use and management. • Inclusion of fisherfolk and their organisations in management initiatives focused on action-based management e.g. implementation and enforcement of management plans; moving beyond first-level consultation aspects surrounding stakeholder inclusion via workshops, meetings, etc. in sharing information on management and into active inclusion in management. • Strengthening of the Fisheries Advisory Committee as a council to support and guide on fisheries management, including strengthening of fisherfolk and civil society active participation and feedback.

Area	Enabling factors	Constraining factors	Recommendations
	<p>aspects of management on fisheries resources and use e.g. in the drafting of management plans for specific fisheries such as the flying fish industry or sea-egg industry</p>		
<p>Policy, legal and planning context for ecosystem stewardship</p>	<ul style="list-style-type: none"> • Overall, the policy and legal context analysed in Table 5.2 indicates strong consideration towards ecological well-being of fisheries resources. Policies, legislation and plans consider aspects such as conservation measures for habitats and species, sustainability of species via protection regulations for specific species or attention to bycatch or capture of juveniles, and establishment of restricted and protected areas for example. • There is considerable inclusion towards socio-economic well-being of resource users including fisherfolk and communities, evidenced through support for infrastructure to benefit the industry, social protection options, and inclusion of the vulnerabilities faced by resource users and potential resilience possibilities. • Stronger consideration to socio-economic well-being and collaborative management has been seen in more recently dated policies and plans in this analysis – including consideration towards livelihoods, social protection and collaborative efforts in co- 	<ul style="list-style-type: none"> • The Fisheries Act 1993 (Cap. 391) has aspects which may relate to ecological and socio-economic well-being, however; there is no specific mention of ecological and socio-economic well-being as definitive terms in order to solidify these aspects as part of the overall management of the industry and its interactions with fisheries resources. • The Barbados Fisheries Sector Management and Development Policy is the present Fisheries Policy referenced by the Barbados Fisheries Division during the validation workshop and is not dated. It is unclear whether the Policy is enacted as a formal Policy, or whether it is applied by the Barbados Fisheries Division as a best practise referencing standard for their management duties.⁷⁶ 	<ul style="list-style-type: none"> • Strengthen the inclusion and consideration towards socio-economic well-being of resource users including fisherfolk, and collaborative management and inclusion of stakeholders in decision-making. • The draft Fisheries Policy (draft, 2020-2030) makes considerable and detailed mention of the principles and considerations that have evolved since the enactment of the present Fisheries Act (enacted in 1993 and amended in 2000) including stronger emphasis on EAF principles, as well as strengthening of collaborative management (i.e. good governance principles). The finalisation of this Policy would support the Government of Barbados in drafting and creation of an updated Fisheries and Aquaculture Act to enhance support for EAF approaches. This should importantly involve a participatory process, where stakeholder interests and perspectives are considered and included in the legal context that will guide fisheries resources management. • Fisheries-specific draft plans also make considerable mention to EAF and good governance principles presently e.g. Sea Egg (White Sea urchin, <i>Tripneustes ventricosus</i>) Fishery Management Plan, which could be

⁷⁶ Barbados Institutional Analysis and Organisational Assessment Workshop. February 11-12, 2020, Workshop, Interview with UWI-CERMES worker by CANARI, June 2020.

Area	Enabling factors	Constraining factors	Recommendations
	<p>management arrangements e.g. Sea Egg (White Sea urchin, <i>Tripneustes ventricosus</i>) Fishery Management Plan, (draft, not dated), and Fisheries Policy 2020-2030 (draft, not dated).</p>		<p>reviewed, updated as needed to reflect applicable best practises and submitted to be approved and dated; which would strengthen support and resources towards fisheries resources management.</p> <ul style="list-style-type: none"> • Ensure equitable representation of fisherfolk in development of the policy and legal context related to fisheries management in Barbados, using an inclusive and participatory approach that spans not only a consultative phase but planning and design phases through to enactment, enforcement and implementation. This participatory approach should include involvement of national intersectoral coordinating mechanisms (NICs) where fisherfolk are represented currently e.g. the Fisheries Advisory Committee. • Consideration towards collaborative management and inclusion of stakeholders in decision-making is represented in the selected documents; however could be strengthened through more explicit reference to inclusion of resource users such as fisherfolk in the management process – including from its inception (i.e. design or planning phases, versus inclusion following creation of a draft management plan for example).
<p>Mechanisms for fisherfolk participation in decision-making</p>	<ul style="list-style-type: none"> • The explicit inclusion of fisherfolk in the Fisheries Advisory Committee is an enabling factor which legally mandates and includes these fisheries resource users in the advisory body for the Minister in matters related to fisheries management. 	<ul style="list-style-type: none"> • Whilst this is enacted in law and in practice, the perspective varies as stakeholders perceive the mechanism – whilst inclusive – not truly collaborative; in that fisherfolk have varying perspectives with some perceiving the Fisheries Advisory Committee functions well to including 	<ul style="list-style-type: none"> • Inclusion of fisherfolk and other civil society groups in the composition of other NICs relevant to their livelihoods e.g. National Biodiversity Strategy and Action Plan Committee or Climate Change Committee. The topics of focus for these NICs directly impact the fisheries industry and insight into their perceptions about issues related to biodiversity and climate change may prove

Area	Enabling factors	Constraining factors	Recommendations
		<p>their interests; while others indicate it requires more decision-making power/influence.⁷⁷.</p> <ul style="list-style-type: none"> • The Fisheries Advisory Committee is an advisory group and as such, the decision on whether to action any advice brought forth by the group remains at the discretion of the responsible Minister. • In terms of other NICs, fisherfolk are not explicitly included in the identified National Biodiversity Strategy and Action Plan Committee or Climate Change Committee, nor are they otherwise represented by any civil society organisations. 	<p>beneficial in the overall governance and management of these issues in Barbados, as it provides an avenue for representation and consideration of local/traditional knowledge related to issues that impact their livelihoods directly.</p>
<p>Support and resources available to fisherfolk and their organisations for ecosystem stewardship</p>	<ul style="list-style-type: none"> • Generally, fisherfolk and their organisations are supported through provision of technology, equipment and materials, financing and skills, knowledge and abilities. Finance was considered the most critical element of support/resources provided⁷⁸ – being that it could support and strengthen the provision and upkeep of both technology, equipment and materials, as well as skills, knowledge and abilities, and the sustainability of formal fisherfolk organisations. • The Barbados Fisheries Division supports the national fisherfolk organisation annually through a subvention programme. 	<ul style="list-style-type: none"> • Given limited resources of the main fisheries-related organisation in execution of its mandate, the main financing accessible to primary fisherfolk organisations under their the fisherfolk organisation format (i.e. as organisations and not cooperatives) is through intergovernmental organisations and their programmes (e.g. GEF SGP) – which requires organisations to have strong organisational structures. 	<ul style="list-style-type: none"> • Strengthen support and resources focused on organisational strengthening of fisherfolk organisations, both primary and national level – in order to improve their ability to seek financing. Financing was identified as a major capacity challenge which could be addressed through improved capacity to access financing facilities currently available under small grants programmes such as GEF SGP. This aspect of organisational strengthening should importantly include sensitisation on the usefulness and benefit of improving organisational capacities to access these small grants funding mechanisms, particularly with respect to benefits to fisherfolk organisations and to fisherfolk themselves and their associated livelihoods, given that

⁷⁷ Fisherfolk focus group session to discuss priorities to effectively engage and action ecosystem stewardship, held at Fisheries Department, Barbados – February 13, 2020

⁷⁸ Barbados Institutional Analysis and Organisational Assessment Workshop. February 11-12, 2020

Area	Enabling factors	Constraining factors	Recommendations
	<ul style="list-style-type: none"> • Training programmes available through multiple organisations (e.g. Ministry of Health, Fisheries Division) in aspects such as safety at sea, first aid, food handling, public speaking, etc. (Table 7.1). 		<p>governmental fisheries-related state agencies have limited financial capacities.</p> <ul style="list-style-type: none"> • Collaborative approaches in provision of support and resources towards organisational strengthening may be beneficial, as this collaborative approach has worked well in the provision of training services otherwise to fisherfolk. • This strengthening would in turn improve their ability to seek financing and provide a foundation where they may be able to seek support/resources in other categories of technology, equipment and materials; and skills, knowledge and abilities.
Partnerships and networks for ecosystem stewardship	<ul style="list-style-type: none"> • UWI-CERMES is strongly positioned in terms of support rendered to both the Division, as well as fisherfolk organisations on fisheries management. • BARNUFO, the Fisheries Division and UWI-CERMES regularly collaborate on programmes or projects related to fisheries management e.g. in the drafting of a new Fisheries Policy, or in providing assistance in the drafting of industry-specific fisheries management plans for individual fisheries such as the sea-egg fisheries. • International organisation the United Nations Food and Agricultural Organisation (FAO), as well as the regional organisation the Caribbean Regional Fisheries Mechanism (CRFM) were also perceived as having strong relationships with the Fisheries Division – working closely with the Division in 	<ul style="list-style-type: none"> • While BARNUFO has positioned itself in the fisheries institution as a strong organisation to represent fisherfolk, there are perceived gaps identified in the organisation’s representation of fisherfolk nationally; illustrated by conflicting views on whether it encompasses the opinions and interests of all fisherfolk in the country based on its membership not fully representing many individual fisherfolk or fisherfolk organisations at the primary level who are not members of the group. 	<ul style="list-style-type: none"> • Strengthen partnerships for improved collaboration among stakeholders in the institution, particularly between government agencies that focus on the marine and coastal environments e.g. Barbados Fisheries Division and Integrated Coastal Zone Management Unit; and civil society and private sector organisations with an interest in coastal and marine management to strengthen co-management and support for ecosystem stewardship by fisherfolk. • Provide capacity building to the fisherfolk organisations, particularly the primary fisherfolk organisations; to strengthen their organisations and support a more inclusive and representative national fisherfolk organisation.

Area	Enabling factors	Constraining factors	Recommendations
	<p>terms of financial support (with respect to FAO) and technical support from both organisations to action management of the sector.</p>		
<p>Communication of information on sustainable practices for fisheries resources use</p>	<ul style="list-style-type: none"> • Communication by the Barbados Fisheries Division to external stakeholders is presently via conventional media e.g. advertising via radio/television, print media such as brochures and flyers. 	<ul style="list-style-type: none"> • Conventional media may be considered less effective in accessing their target audience (fisherfolk) directly; given fisherfolk regularly use technology-based communication medium such as WhatsApp to communicate among themselves and with their national fisherfolk organisation BARNUFO. Consideration towards application of this communication medium between the Division and fisherfolk may prove beneficial in filling a present communication gap as the Division’s website is presently non-functional. 	<ul style="list-style-type: none"> • Strengthening of information collection and sharing through improvements to the communication strategy that involves use of technology-based platforms used by fisherfolk. Improve the sharing of information and knowledge between Barbados Fisheries Division and fisherfolk via modern communication methods that are currently used by fisherfolk among their organisations and as individuals e.g. WhatsApp groups. • Additionally, use of Barbados Fisheries Division Facebook page to supplement a website as an information source, or creation of a website via a platform that is not dependent on responsible Ministry resources (e.g. open source website creation) to prevent loss of institutional information should the Division undergo Ministerial reassignment in future. • Information sharing improvements could be used to improve stakeholder inclusion through use of multiple avenues to gather comments and perspectives. For example, in addition to or as a complement for a workshop held to gather fisherfolk views on a draft management plan, invitation for further comment could be offered via a survey where fisherfolk (organisations and individuals), may submit their stakeholder perspectives beyond the workshop for consideration. This could be

Area	Enabling factors	Constraining factors	Recommendations
			<p>implemented using open-source methodologies e.g. SurveyMonkey⁷⁹ and disseminated through established technology networks among fisherfolk e.g. via WhatsApp groups to gather input and ensure a further inclusive and evidenced process.</p>

⁷⁹ SurveyMonkey is an online open-source (free) survey platform to create surveys; which also includes a paid back-end program option offering data analysis, sample selection and bias elimination as well as data representation tools.

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13 Appendices

13.1 Definitions of conceptual components for the institutional analysis framework

Conceptual component	Worksheet
<p>A. Policies. Laws and plans</p>	<p>This component focuses on the existing legal framework within the target country to address and guide fisheries management and planning. It involves the formal governance of a nation’s fisheries management which can either empower or constrain the ability to integrate <i>ecosystem stewardship</i>⁸⁰ practises within small-scale fisheries. The assessment of this component also involves regulations, rules and management plans that resulted from the policies and legislation identified. This can be used as an indicator of fisheries-related state agencies capacity to support fishing industry stewardship. For example, to determine whether legislation is adequate as Stewardship is an evolving concept for management of natural resources such as fisheries. Policy and legislation need to be assessed in order to identify the barriers at the institutional level that may hinder the promotion of ecosystem stewardship. This component is divided into:</p> <p>A.1 Fisheries Policy A.2 Fisheries Management Plan A.3 Fisheries Legislation</p>
<p>B. Advisory and/or decision-making mechanisms</p>	<p>Institutional arrangements - examine the institutional frameworks and mechanisms established for governing fisheries management and fostering ecosystem stewardship. This includes the establishment of multi-stakeholder committees or similar structures, which play an advisory or decision-making role in resource management. The relationship between these mechanisms and the agencies/stakeholders involved will also be analysed.</p>
<p>C. Fisheries-related Organisations</p>	<p>This conceptual component will map the fisheries-related state agencies as well as other fisheries-related organisations which play a key role in the fishery-related institutional arrangements of each country. This includes the core fisheries management organisations such as Fisheries Divisions/Departments/Authorities/Agencies and other associated departments, such as Environment, Coastal Management, Agriculture, Cooperatives, Markets and others. It will also include non-state organisations such as fisherfolk organisations (FFOs), civil society organisation (CSOs), private sector and academia, where relevant. Given that the level of involvement in the fisheries sector will differ within and among project countries. This section will investigate agencies roles and particularly their mandated role in fisheries management. Furthermore, an organisational capacity</p>

⁸⁰ *Ecosystem Stewardship* is understood as “a strategy to respond to and shape social-ecological systems under conditions of uncertainty and change to sustain the supply and opportunities for use of ecosystem services to support human well-being”.

	<p>assessment will be carried out to examine the core fisheries state agencies' current ability to support stewardship activity.</p> <p>Organisational Capacity Assessment: Under this key conceptual component, core capacitiesⁱ of fisheries-related state agencies capacity to support and enable ecosystem stewardship will be assessed. The capacities to be examined are:</p> <ol style="list-style-type: none"> I. Vision, mandate, culture- this section looks at the organisation's visions and goals, its operational culture and its internal governance mechanisms and how they promote ecosystem stewardship. It is reflected in the everyday organisational culture, how they communicate with fisherfolk and their organisations and the relationships they build. II. Knowledge and skills- this focuses on assessing the fisheries-related state agency's capacity to provide fisherfolk and fisherfolk organisations (FFOs) with the relevant knowledge and skills support required for improved stewardship actions. This section assesses the capacity in technical knowledge, skills and ability related to ecosystem stewardship. III. Resources- assesses the capacity, availability, and efficient access to resources related to organisations– in particular the resource support made available to FFOs from the state agency, as well as resources provided for execution of any ecosystem stewardship actions and practices. IV. Partnerships - is an assessment of the organisations capacity to foster partnerships and link activities, plans, projects and initiatives which involves ecosystem stewardship. It will look at their ability to build networks, and assist in building the networks of fisherfolk organisations, as resource users and ecosystem stewards.
<p>D. Processes and practices</p>	<p>For this conceptual component, the operational procedures for fisheries-related state agencies will be examined more closely. The processes and practices will be assessed in three sub-components. These are:</p> <p>C.1 Promotion of good governance- This is determined by probing the inclusivity of the decision-making process in fisheries governance. The system of institution (i.e. the decision-making process applied) determines the relative success of the structural processes to a certain degree in institutional capacity for improved fisheries management that integrates ecosystem stewardship (i.e. levels of exclusion, discrimination). This also assesses organisations internal structures and systems ability to create an environment that encourages and facilitates stewardship. It includes the channels of communication for sharing or receiving information from fisherfolk, and transparent and accountable systems. This will also assess the structures and systems in places for clear communication, involvement and integration within and among fisheries-related state agencies.</p>

	<p>C.2 Collaborative management- This sub-component focuses on the extent of cooperative management that exists in practice between fisheries-related state agencies and small-scale fisheries groups such as FFOs, as well as fisherfolk individuals and the local communities. It also identifies the degree of stakeholder collaboration in management practises (government, private sector and civil society/local communities).</p> <p>C.3 Adaptive management This assesses the ability of the fisheries-related state agencies to budget, manage and implement activities, using internal structures and mechanisms which are flexible and adaptive to internal or external changes, changes in the resources, or changes in the resource users. This looks at the organisations ability to learn actively, develop practices and policies for promoting stewardship; and implement, monitor and evaluate plans, projects, programmes of work for actions or systems enabling stewardship.</p> <p>C.4 Communication This sub-component assesses the extent to which fisheries information providers in StewardFish project countries are using communication tools/channels to communicate with fisherfolk, as well as their capacity to use the tools/channels effectively. It includes the channels of communication for sharing or receiving information from fisherfolk, and transparent and accountable systems. This will also assess the structures and systems in places to for clear communication, involvement and integration within and among fisheries-related state agencies.</p>
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13.2 In-country contacts/participants

13.2.1 List of workshop participants

Institutional Analysis and Organisational Assessment Validation Workshop, Barbados – February 11-12, 2020

First and Last Name	Organisation	Position/Title	Telephone	Email Address
Bertha Simmons	Independent consultant	StewardFish Mentor	-	bines.simmons@gmail.com
Ian Moore	Co-operatives and Friendly Societies	Representative	-	-
Christopher Parker	Fisheries Division	Fisheries Biologist	(246) 426-3745 /5973 (246) 427-8480	fishbarbados.fb@caribsurf.com
Maria Pena	Centre for Resource Management and Environmental Studies of the University of the	Project Officer	(246)417-4727	maria.pena@cavehill.uwi.edu

First and Last Name	Organisation	Position/Title	Telephone	Email Address
	West Indies (UWI-CERMES)			
Nikki Hassell	Independent consultant	-	-	nhassell0@gmail.com
Patrick McConney	UWI-CERMES	Director/Senior Lecturer – Marine Resource Management	(246) 417-4725	patrick.mcconney@gmail.com
Philip Jackman	Fisheries Division	Principal Fisheries Assistant	(246) 426-3745 /5973 (246) 427-8480	Philip.Jackman@barbados.gov.bb
Richard Suckoo	Coastal Zone Management Unit	Marine Biologist	-	info@coastal.gov.bb ; rsuckoo@coastal.gov.bb
Shelly-Ann Cox	UWI CERMES	PhD Candidate	-	shellsalc@gmail.com
Maren Headley	Caribbean Regional Fisheries Mechanism (CRFM) Secretariat	Secretariat	-	maren.headley@crfm.int
Shoneé Howell	Coastal Zone Management Unit	Water Quality Technician	-	showell@coastal.gov.bb
Susan Mohan	Coral Reef Restoration Alliance - CORALL	Representative	-	corallbarbados@gmail.com ; susan.mohan@gmail.com
Patrick Williams	National Conservation Commission (NCC)	Park Naturalist	-	ncc@ncc.gov.bb
Therese Moore	Fisheries Division	Biological Data Collector	(246) 426-3745 /5973 (246) 427-8480	Therese.Moore@barbados.gov.bb
Sheena Griffith	Barbados National Union of Fisherfolk Organisations (BARNUFO)	Representative	-	barnufo@caribsurf.com ;

First and Last Name	Organisation	Position/Title	Telephone	Email Address
Mercille Earle	Fisheries Division	Data Entry Clerk – Biological Section	(246) 426-3745 /5973 (246) 427-8480	earle_ml@hotmail.com ; mercille.earle@barbados.gov.bb
Terrence Phillips	Food and Agriculture Organisation of the United Nations (FAO)	Regional Project Coordinator – Stewardfish Project	-	Terrence.Phillips@fao.org
Greg Franklin	Fisheries Division	Data Collector	(246) 426-3745 /5973 (246) 427-8480	Gregory.Franklin@barbados.gov.bb
Tracy Phillips	Food and Agriculture Organisation of the United Nations (FAO)	Project Officer	-	Tracy.Phillips@fao.org
Melanie Andrews	Caribbean Natural Resources Institute (CANARI)	Technical Officer	(868)626-6062	melanie@canari.org
Deanna Albert	CANARI	Technical Officer	(868)626-6062	deanna@canari.org

13.2.2 List of key informant interviewees

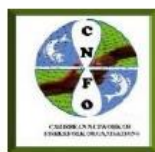
Organisation	Position/Title	Date of Interview
UWI CERMES	PhD Candidate	May 5, 2020
UWI CERMES	Professor of Marine Ecology and Fisheries	May 19, 2020

13.2.3 List of focus group participants

Fisherfolk focus group session to discuss priorities to effectively engage and action ecosystem stewardship, Barbados – February 13, 2020

Organisation	Position/Title
Individual Fisher	Fisher
Fisheries Division	Biological Data Collector
Primary Fisherfolk Organisation	Member
Individual fisherfolk, located at Paynes Bay	Vendor (retired)/ Previously sat on the Fisheries Advisory Committee

13.3 Institutional Analysis and Organisational Assessment Validation Workshop Agenda



Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-Scale Fisheries (StewardFish) project

Institutional Analysis and Organisational Assessment Workshop

February 11th and 12th, 2020

Fisheries Division Conference Room, Princess Alice Highway, Bridgetown

Agenda

Background

The Institutional Analysis and Organisational Assessment workshop is an activity under the StewardFish project. StewardFish aims 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. This action will contribute to Output 1.2.1 “State agency implementation gaps assessed regarding support for fisherfolk organisations and their role in stewardship” and Outcome 1.2 “Fisheries-related state agencies have capacity to support fishing industry stewardship” of StewardFish. StewardFish is funded by the Global Environment Facility (GEF) and is being implemented by the United Nations Food and Agriculture Organization (FAO). Please see project summary handout to learn more about StewardFish and the Caribbean Natural Resources Institute’s (CANARI) role as a regional co-executing partner.

Participants

Workshop participants will be representatives of fisheries-related state agencies and civil society organisations, academia and intergovernmental organisations with a role or interest in sustainable fisheries development in Barbados.

Facilitators

The workshop will be facilitated by CANARI and the Caribbean Regional Fisheries Mechanism Secretariat (CRFM Sec.) which is also a regional co-executing partner of the StewardFish project.

Objectives

The objectives of the workshop are to:

1. Present preliminary findings of the institutional analysis and organisational assessment of key fisheries-related state agencies to assess gaps in support for fisherfolk organisations and their role in stewardship.
2. Validate, refine and receive input on the findings of the institutional analysis and organisational assessment for inclusion in country report.
3. Develop recommendations for improving fisheries-related state agencies capacity to promote, facilitate and support ecosystem stewardship of fisherfolk organisations, for implementation by the CRFM Sec.

Day 1 Tuesday 11th February 2020

Time	Topics
8:30	Welcome and introductions
9:00	Overview of StewardFish
9:15	Overview of the institutional analysis workshop
9:30	Understanding the conceptual approach for the institutional analysis
10:30	Break
11:00	Exploring the policy and legal context for ecosystem stewardship in Barbados
12:30	Lunch
1:30	Exploring mechanisms for fisherfolk participation in decision-making
3:00	Understanding fisheries-related organisations in the fisheries institution in Barbados (Part 1)
4:30	End of Day 1

Day 2 Wednesday 12th February 2020

Time	Topics
8:30	Re-cap of Day 1
9:00	Understanding fisheries-related organisations in the fisheries institution in Barbados (Part 2)
10:30	Break
11:00	Support and resources for ecosystem stewardship by fisherfolk and their organisations
12:00	Communicating information on sustainable practices for the use of fisheries resources
12:30	Lunch
1:30	Overview of CRFM Secretariat's role in StewardFish
1:45	Validation of gaps identified in: the policy and legal context for ecosystem stewardship in Barbados; the mechanisms for fisherfolk participation in decision-making; and the fisheries-related organisations in Barbados
2:30	Recommended actions for addressing gaps
4:30	End

StewardFish is being funded by the Global Environment Facility (GEF), implemented by the Food & Agriculture Organisation of the United Nations (FAO) Sub-Regional Office for Latin America and the Caribbean, and executed by five (5) regional partners - Caribbean Natural Resources Institute (CANARI), Centre for Resource Management and Environmental Studies (UWI-CERMES), Caribbean ICT Research Programme (UWI-CIRP), Caribbean Network of Fisherfolk Organizations (CNFO), and the Caribbean Regional Fisheries Mechanism Secretariat (CRFM Sec.) - in Antigua and Barbuda, Barbados, Belize, Guyana, Jamaica, St. Lucia and St. Vincent and the Grenadines

13.4 Organisational Capacity Assessment Survey for National Fisheries Authorities



Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-Scale Fisheries project (StewardFish)

Organisational Capacity Assessment Survey for National Fisheries Authorities

StewardFish aims 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.

As part of the project, the Caribbean Natural Resources Institute (CANARI) is conducting **institutional analyses** and **organisational assessments** with key fisheries-related state agencies in each of the seven StewardFish project countries to identify gaps and develop recommendations for enhancing the capacity of fisheries-related state agencies to promote, facilitate and support ecosystem stewardship of fisherfolk organisations.

This is a key activity under Output 1.2.1 “State agency implementation gaps assessed regarding support for fisherfolk organisations and their role in stewardship” that will contribute to Outcome 1.2 “Fisheries-related state agencies have capacity to support fishing industry stewardship” of the StewardFish project. CANARI has already begun conducting desk studies, interviews and workshops to get information and engage a range of key stakeholders for the institutional analyses being conducted in each of the project countries.

While the institutional analyses look broadly at the fisheries institution⁸¹ in each country, the organisational assessments focus specifically on their national fisheries authorities as the primary unit of analysis. This survey therefore seeks to do a rapid organisational assessment of the national fisheries authority in your country to assess its internal capacity to support ecosystem stewardship of fisherfolk and their organisations.

The survey has 28 questions and is organised into the following four sections that will examine organisational motivation and capacity to support ecosystem stewardship by fisherfolk organisations:

⁸¹ CANARI defines an institution as the set of arrangements for making decisions about the development, management, and use of a natural resource, including the stakeholders, as well as, the laws, formal and informal policies, plans and structures that guide how these stakeholders interact with each other and with the resources.

1. Vision, mandate and culture (4 questions)
2. Practices (*8 questions*)
3. Knowledge and skills (11 questions)
4. Resources (5 questions)

Questions are a mix of both closed and open-ended questions.

A glossary of key terms is provided.

The results of the survey will be synthesised and included on the country institutional analysis and organisational assessment reports being prepared by CANARI under the StewardFish project.

CANARI values your contribution to this key activity under StewardFish and looks forward to your responses.

If you have any questions or concerns, please email Neema Ramlogan, Technical Officer, CANARI at neema@canari.org and for more information, please visit the project webpage: <https://canari.org/stewardfish-project>.

How to complete this survey:

It is recommended that this survey be completed as part of a small focus group including relevant and knowledgeable staff members in the national fisheries authority in your country.

Where applicable, website links, supporting documents and other relevant resources can be shared with CANARI to support responses provided.

CANARI may conduct a brief follow up interview with the lead respondent to clarify responses and get additional information as needed.

Glossary

Ecosystem Approach to Fisheries (EAF)	EAF strives to balance diverse societal objectives, by taking into account the knowledge and uncertainties about biotic, abiotic and human components of ecosystems and their interactions and applying an integrated approach to fisheries within ecologically meaningful boundaries. The core principles of EAF are human well-being, ecological well-being and good governance (FAO).
Ecosystem stewardship	The actions taken by individuals, groups or networks of actors, with various motivations and levels of capacity, to protect, care for or responsibly use the environment in pursuit of environmental and/or social outcomes in diverse social–ecological contexts (Bennett et. Al, 2018).
Institution	The set of arrangements for making decisions about the development, management, and use of a natural resource, including the stakeholders, as well as, the laws, formal and informal policies, plans and structures that guide how these stakeholders interact with each other and with the resources (CANARI).
Participatory approach	Participation in the context of natural resource management can be described as a process that: facilitates dialogue among all actors; mobilises and validates popular knowledge and skills; encourages communities and their institutions to manage and control resources; seeks to achieve sustainability, economic equity and social justice; and maintains cultural integrity (Renard and Valdés-Pizzini 1994).

Respondent information

Country:	Barbados
Name of national fisheries authority:	Fisheries Division
Name of lead respondent:	Philip Jackman
Position of lead respondent:	Deputy Chief Fisheries Officer (ag)
Email address of lead respondent:	Philip.Jackman@barbados.gov.bb
Contact number of lead respondent:	(246) -1 535 5806

Name and contact information of other persons who contributed to completing this survey

Name	Position in organisation	Email address
Gregory Franklin	Data Collector	Gregory.Franklin@barbados.gov.bb

Section 1: Vision, Mandate and Culture

This section looks at the organisation's *motivation* to support ecosystem stewardship by fisherfolk and fisherfolk organisations. It is reflected in the organisation's vision, mandate and culture.

1. Does the organisation have a vision statement that is supportive of /promotes ecosystem stewardship by fisherfolk? **Yes** Briefly explain your answer.

Our mission is to ensure the optimum utilization of the fisheries resources in the waters of Barbados for the benefit of the people of Barbados through management and development.

2. Does the organisation's mandate support ecosystem stewardship by fisherfolk? **Yes** Briefly explain your answer.
3. **The Chief Fisheries Officer shall develop and keep under Fisheries review schemes for the management and development of fisheries in zygement the waters of Barbados. development (2) (4 (b) (cl (4 (4 schemes. Each fisheries scheme shall include an identification of the fishery concerned and the assessment of the present state of its exploitation; a statement of the objectives to be achieved in the management and development of the fishery; the specification of any management and development measures to be taken and policies to be adopted with respect to the fishery; an indication of the main requirements for statistical information on the fishery and the means to be used to obtain such information; the specification, where appropriate, of any licensing programmes to be followed for the fishery, any limitations to be CAP. 391 Fisheries L.R.O. 1995 10 ss. 5-6 applied to local fishing operations and the amount of fishing, if any, to be allocated to foreign fishing vessels; and cf) such other matters as may be necessary to provide for the proper management and development of the fishery. (3) In preparing and reviewing a fisheries scheme the Chief Fisheries Officer may consult with local fishermen, any fishing cooperative or association, or any other persons affected by the fishery scheme and with the Fisheries Advisory Committee appointed under section 5.**
4. Which of the following core values/beliefs reflect the culture of the organisation?
Check/highlight all that apply.
 - The organisation believes that ecosystem stewardship by fisherfolk is important for sustainable use of fisheries and marine resources.
 - The organisation believes that ecosystem stewardship by fisherfolk is not important for sustainable use of fisheries and marine resources.
 - The organisation believes that fisherfolk can be effective ecosystem stewards.
 - The organisation believes that fisherfolk are not effective ecosystem stewards.
 - The organisation believes that fisherfolk should be included in decisions made about how fisheries and marine resources are managed.
 - The organisation believes that fisherfolk input into decisions about how fisheries and marine resources are managed is not important.
 - The organisation values local and/or traditional knowledge held by fisherfolk.
 - The organisation believes in the ecosystem approach to fisheries (EAF).
5. Do you have any additional information to share about your organisation's vision, mandate and culture as it relates to supporting ecosystem stewardship by fisherfolk and their organisations? You can also use this section to clarify any of the responses provided for question S1.3.

Section 2: Practices

This section looks at the how the organisation's core values and beliefs are translated into actions (practices). It focuses in particular on the actions that support ecosystem stewardship by fisherfolk and fisherfolk organisations in the following areas: decision-making; collaboration and partnerships; and information collection and sharing.

Decision-making - Please provide answers to the following questions about your organisation's decision-making practices.

1. Does the organisation **have a clear process** for including the opinions of fisherfolk in decisions made about fisheries and marine resources? **Yes** Briefly explain your answer.
They have representatives on the Fisheries Advisory commi
2. Does the organisation regularly and systematically include fisherfolk input in decisions about how fisheries and marine resources are managed? Briefly explain your answer.

Collaboration and partnerships - Please provide answers to the following questions about your organisation's collaboration and partnership practices

3. Select which of the following statements are true for the organisation. *Check/highlight all that apply.*
 - Fisherfolk generally view the organisation as a partner with whom they can collaborate on fisheries management (*participatory relationship*).
 - Fisherfolk generally view the organisation as an enforcer of fisheries management guidelines and regulations with whom they must comply (*top-down relationship*).
 - The organisation regularly highlights sustainable use practices undertaken by fisherfolk.
 - The organisation regularly highlights unsustainable use practices undertaken by fisherfolk.
4. Does the organisation regularly partner/collaborate with fisherfolk and their organisations for fisheries management initiatives? Yes If yes, please provide a recent of example.
The Fisheries Management plan is a result of consultative and collaborative processes.
5. Does the organisation regularly facilitate collaboration/partnerships between fisherfolk and other fisheries and marine stakeholders? **Yes** If, yes please provide a recent example.

Value chain initiative

Information collection and sharing – Please provide answers to the following question about your organisation's information collection and sharing practices.

6. Select which of the following statements are true for the organisation. *Check/highlight all that apply.*
 - The organisation collects local/traditional knowledge held by fisherfolk about fisheries and marine resources.
 - The organisation does not collect local/traditional knowledge held by fisherfolk about fisheries and marine resources.
 - The organisation uses local/traditional knowledge held by fisherfolk to inform management decisions about fisheries and marine resources.
 - The organisation does not use local/traditional knowledge held by fisherfolk to inform management decisions about fisheries and marine resources.
 - The organisation records best practices related to sustainable use and management of marine resources and shares this information regularly.

- The organisation provides information on sustainable fishing practices to fisherfolk in a manner that they can understand.
 - The organisation does not provide information on sustainable fishing practices in a manner they can understand to fisherfolk.
 - The organisation has a communication strategy to share the information with different stakeholders including fisherfolk.
 - The organisation does not have a communication strategy to share the information with different stakeholders including fisherfolk.
 - The organisation provides advice/guidance to fisherfolk for stewardship activities and initiatives.
 - The organisation does not provide advice/guidance to fisherfolk for stewardship activities and initiatives.
7. How does the organisation share information with fisherfolk about sustainable use practices for fisheries and marine resources?
Meetings, workshops
8. What has the organisation found to be the most effective way to share information with fisherfolk?
Public meetings, collaborative efforts and dissemination through the Government Information service
9. Do you have any additional information to share about your organisation's decision-making; collaboration and partnerships; and information collection and sharing practices as it relates to supporting ecosystem stewardship by fisherfolk and their organisations? You can also use this section to clarify any of the responses provided for questions S2.3 and S2.6.

Section 3: Knowledge and Skills

This section looks at the organisation's capacity to support ecosystem stewardship by fisherfolk and fisherfolk organisations. It focuses in particular on the knowledge and skills held by technical staff (e.g. managers, researchers, policy development officers, field officers etc.).

1. Do technical staff have knowledge of the Ecosystem Approach to Fisheries (EAF)? **Yes** Briefly explain your answer.
The technical staff has been exposed to necessary academic discipline
2. Do technical staff have specialist knowledge on ecosystems, their functions and ecosystem changes? **Yes** Briefly explain your answer.
As above
3. Do technical staff understand the socio-economic context of fisheries and marine resource use by fisherfolk and other stakeholders? **Yes** Briefly explain your answer.

In addition to training and retraining, they are equipped with the requisite skillsets.

4. Do technical staff have the skills to conduct socio-economic assessments? **Yes** Briefly explain your answer.

As above

5. Do technical staff have knowledge of aquaculture and other alternative or complementary livelihood options for which fisherfolk may be well suited? **Yes** Briefly explain your answer.

As three

6. Do technical staff have knowledge of how fisherfolk organisations function including key challenges that they may face and how they can be supported to resolve them? **Yes** Briefly explain your answer.

Members of staff are assigned to fisherfolk organisations

7. Does the organisation have the capacity to provide training for fisherfolk in different technical areas and organisational strengthening (these may include soft skills such as facilitation, development of training material, etc.)? **Yes** Briefly explain your answer.

The Fisheries Division provides regular training for fisherfolk.

8. Do technical staff have the skills to assist fisherfolk with mobilising funding for ecosystem stewardship activities and initiatives? **Yes** Briefly explain your answer.

As three

9. Do technical staff have skills in participatory approaches (e.g. participatory monitoring and evaluation, participatory planning, participatory management etc.)? **Yes** Briefly explain your answer.

As three

10. Do technical staff have communication skills needed to effectively communicate with a range of stakeholders including fisherfolk? **Yes** Briefly explain your answer.

As three

11. Does the organisation provide or access training and other kinds of capacity building for staff to regularly improve their technical knowledge and skills? Briefly explain your answer.

12. Do you have any additional information to share about the knowledge and skills of your organisation's technical staff as it relates to supporting ecosystem stewardship by fisherfolk and their organisations? **No**

Section 4: Resources

This section looks at the organisation's capacity to support ecosystem stewardship by fisherfolk and fisherfolk organisations. It focuses in particular on the finance, equipment, materials, tools and methods that the organisation has access to for supporting fisherfolk with ecosystem stewardship activities and initiatives.

1. Does the organisation provide funding assistance to fisherfolk to support ecosystem stewardship activities or initiatives? **Yes** Briefly explain your answer.

A annual subvention is given to the Barbados National Union of Fisherfolk Organisations

2. Does the organisation provide materials, equipment or technology to fisherfolk to support ecosystem stewardship activities or initiatives? **Yes** Briefly explain your answer.

In addition to the above, office space is provided

3. Does the organisation have access to tools, methods and good practices that can be used to support fisherfolk with ecosystem stewardship activities and initiatives? **Yes** Briefly explain your answer.

Members of staff are equipped with the necessary skillsets.

4. Does the organisation provide access to or assist fisherfolk organisation with accessing networks or resources outside of itself (such as technical experts, funding, projects, etc.)? **Yes** Briefly explain your answer.

The Fisheries Division has facilitated international funding for several activities.

5. Does the organisation have a dedicated website which can be used to share information and resources on ecosystem stewardship practices with fisherfolk? **No** Briefly explain your answer.

Due to changes in ministerial assignments, we are in the process reactivating our website

6. Do you have any additional information to share about your organisation's resources as it relates to supporting ecosystem stewardship by fisherfolk and their organisations? **No**



Caribbean Natural Resources Institute

INSTITUTIONAL ANALYSIS AND ORGANISATIONAL ASSESSMENT OF FISHERIES-RELATED STATE AGENCIES FOR ENABLING ECOSYSTEM STEWARDSHIP IN THE FISHERIES SECTOR OF BELIZE

September 2020



Cover photographs: Fisherfolk in Belize, Credit: Belize Fisheries Department. 2020.

CARIBBEAN NATURAL RESOURCES INSTITUTE

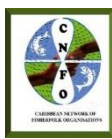
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Disclaimer:

This publication has been produced by CANARI as an output of the StewardFish project. However, the views expressed herein are those of the authors, and can therefore in no way be taken to reflect the official opinions of Fisheries Department of the Ministry of Agriculture, Fisheries, Forestry, The Environment and Sustainable Development, Belize, Global Environmental Facility, Food and Agriculture Organization of the United Nations or other co-executing partners of the StewardFish project.

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List of acronyms and abbreviations

ARIA	WRI's Adaptation: Rapid Institutional Analysis
CANARI	Caribbean Natural Resources Institute
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species
CLME+ SAP	Strategic Action Programme for the Sustainable Management of the Shared Living Marine Resources of the Caribbean and North Brazil Shelf Large Marine Ecosystems
CNFO	Caribbean Network of Fisherfolk Organisations
CRFM	Caribbean Regional Fisheries Mechanism
CSO	Civil Society Organisations
CZMAI	Coastal Zone Management Authority and Institute
EAF	Ecosystem Approach to Fisheries
FAO	Food and Agriculture Organization of the United Nations
FAB	Fisheries Advisory Board
FFO	Fisher Folk Organisation
GEF	Global Environmental Facility
GDP	Gross Domestic Product
IATTC	Inter-American Tropical Tuna Commission
ICCAT	International Commission for the Conservation of Atlantic Tunas
INFOPECSA	Centre for Marketing Information and Advisory Services for Fishery Products in Latin America and the Caribbean
IWC	International Whaling Commission
NBSAP	National Biodiversity Strategy and Action Plan
NFC	National Fisher's Cooperative
NIC	National Intersectoral Coordinating Mechanism
NTP	National Trade Policy
OSPESCA	Central America Fisheries and Aquaculture Organization
RAMSAR	Convention on Wetlands of International Importance
UWI-CERMES	Centre for Resource Management and Environmental Studies of the University of the West Indies
UWI CIRP	Caribbean ICT Research Programme of the University of the West Indies
WECAFC	FAO Western Central Atlantic Fisheries Commission
WRI	World Resources Institute

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Executive Summary

Fisheries plays an important role in the national economy of Belize, where fishing has traditionally been a means of subsistence in coastal communities and the main source of protein. Prior to 2016, fisheries was open-access in nature; however, the Managed Access Program was implemented at the national level which instituted rights-based measures ensuring only legitimate fishers could obtain licenses¹. Belize's development policy is built on the ecosystem approach; thus, importance is placed on conservation to maintain biodiversity.² Despite the socio-economic importance of the fisheries industry in Belize, there are several challenges that hinder the engagement of fisherfolk and their organisations in the sustainable use and management of fisheries resources. Challenges facing Belize's fisheries industry include illegal fishing, the threat of overfishing³, the discovery of offshore oil reserves, high deforestation rates, improper solid-waste management, rapid coastal development and increasing poverty⁴. State agencies, including fisheries authorities, vary widely in their support of fisherfolk organisations for different reasons, some within their control and others beyond.

The Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in the Caribbean Small-Scale Fisheries (StewardFish) project is aimed at implementing the 10-year 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) within seven Caribbean Regional Fisheries Mechanism (CRFM) member states (Antigua and Barbuda, Barbados, Belize, Guyana, Jamaica, Saint Lucia, St. Vincent and the Grenadines). The project aims to deliver enhanced stewardship of fisheries resources and livelihood benefits. CANARI conducted an Institutional Analysis and Organisational Assessment in Belize to contribute to Outcome 1.2 "Fisheries-related state agencies have capacity to support fishing industry stewardship" and Output 1.2.1 "state agency implementation gaps are assessed regarding support for fisherfolk organisations and their role in stewardship" of the project. The aim of the analysis was to identify current strengths, as well as opportunities for improvement in Belize's fisheries-related state agencies, in order to improve their capacity to support ecosystem stewardship by fisherfolk and their organisations as it related to the following areas (i) policies, laws and plans (ii) advisory and/or decision making mechanism (iii) fisheries related organisations (iv) processes and practices. The methods utilised included desk studies, interviews and validation webinars.

The institutional analysis and organisational assessment for Belize found that:

- The policy and legal context of fisheries resources management indicates strong consideration towards the ecosystem-approach to fisheries (EAF) with policies, laws and plans referencing ecological well-being of fisheries resources, socio-economic well-being of resource users including fisherfolk, and strong consideration for collaborative management and inclusion of stakeholders, such as fisherfolk, in decision-making. Belize notably employs a right-based access mechanism for fisheries resources called the Managed Access Program; effectively prioritising the use of fisheries resources towards bonafide fishers. Also notable in Belize's legal context is the legal allowance for co-management arrangements between government and civil society organisation, including fisherfolk organisations. Recommended actions to improve support for ecosystem stewardship by fisherfolk include support towards organisational strengthening of fisherfolk organisations to increase the potential for co-management arrangements between fisherfolk organisations and the government.

¹ Martinez, V.I. et al. n.d. Managed Access: A Rights-Based Approach to Managing Small Scale Fisheries in Belize. [online].

² FAO. 2018. Fishery and Aquaculture Country Profiles. Belize. Country Profile Fact Sheets. [online]

³ Environmental Defense Fund (EDF). 2016. Belize Implements National Sustainable Fisheries Reforms. [online]

⁴ Young, C. A. 2008. Belize's Ecosystems: Threats and Challenges to Conservation in Belize. Tropical Conservation Science. Vol. 1:18-33, 2008.

- Fisherfolk and their organisations were included in all studied National Intersectoral Coordinating Mechanisms (NICs) selected in this study; essential to successfully implementing and achieving ecosystem-based management (EBM) and an ecosystem approach to fisheries (EAF). Belize has had its Fisheries Advisory Board (FAB) without need for its legal mandate since the inception of the Fisheries Department in 1965. This mechanism has functioned in an advisory capacity effectively despite no legal mandate and is now being disbanded to make way for the legally institutionalised Fisheries Council under the Fisheries Resources Act (2020) – which will serve in the same capacity as the FAB – yet; under a legal mandate which strengthens its decision-making influence. Stakeholders have varying perspectives with respect to NICs effectiveness for including their interests in decision-making as these mechanisms are advisory bodies that recommend actions to the responsible Minister on fisheries management issues. The decision on whether to action any advice brought forth by the group remains at the discretion of the responsible Minister.
- Support and resources for fisherfolk are available from a range of sources including from government, civil society and international organisations either through ongoing programmes, or ad hoc efforts. Given limited capacities of the main government organisation responsible for fisheries management, the leveraging of available support external to this Department is critical. External support includes funding from international donors and intergovernmental agencies via financing to support and strengthen the provision and upkeep of other necessary resources such as technology, equipment and materials, as well as building capacity in skills, knowledge, abilities and the sustainability of formal fisherfolk organisations. Belize fisherfolk may benefit from improved organisational strengthening which would in turn improve their ability to access small grants funding mechanisms, given that governmental fisheries-related state agencies have limited financial capacities. Collaborative approaches in provision of support and resources towards organisational strengthening may be beneficial, as this collaborative approach has worked well in communication between stakeholders thus far.
- Belize’s fisheries institution includes a range of governmental, civil society, and private sector stakeholders with various roles, mandates, responsibilities and interests. Fisherfolk organisations in Belize engage in partnerships with government and civil society organisations such as co-managers of marine protected areas for various initiatives related to ecosystem management including livelihood development. Partnerships and networks are important as they help facilitate information flows, fill knowledge gaps, and strengthen expertise for ecosystem management, including stewardship. Although various stakeholders highlighted the need for capacity development of fisherfolk to effectively partner in ecosystem stewardship initiatives; this perception was more so related to organisational capacity and not to any perceived lack of understanding on the importance of sustainable use of resources or protection for the marine environment including how this relates to their livelihoods⁵.
- The Belize Fisheries Department has a communication strategy and action plan where varying communication media are used ranging from conventional (e.g. print media, radio/television, personal communication) to modern (e.g. websites, social media platforms). In-person communication has been perceived most effective via an outreach activity called boat-to-boat outreach done as a collaborative effort between the Department and co-managers of marine protected areas.
 - Consideration towards application of modern communication media between the Department and fisherfolk; particularly the younger demographic of fishers who are using these platforms more frequently; may prove beneficial in supplementing in-person

⁵ Interview with BFCA by CANARI, June 2020.

communication – given limited human capacities towards frequent and continuous outreach via boat-to-boat activities. As such, modern communication media such as the Department’s website should be frequently updated to reflect the work and educational material available from the Department.

1 Introduction

In 2013, countries bordering and/or located within the Caribbean and North Brazil Shelf Large Marine Ecosystems (CLME+ region) adopted a 10-year 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)⁶. The 10-year CLME+ SAP aims to contribute to the achievement of the regionally adopted long-term vision of “a healthy marine environment in the CLME+ that provides benefits and livelihoods for the well-being of the people of the region.” The CLME+ SAP consists of 6 Strategies and 4 Sub-strategies. SAP strategies 1-3, with a focus on governance, are cross-cutting, while strategies 4-6 tackle the three main marine ecosystems (reef, pelagic and continental shelf) in the CLME+ region. One of the key strategies of the CLME+ SAP is to achieve sustainable fisheries, including of small-scale fisheries which are important economic drivers for the sustainability of coastal communities and rural livelihoods and a vital source of employment, food and income for Caribbean people.

The *Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in the Caribbean Small-Scale Fisheries (StewardFish)* project is therefore aimed at implementing the CLME+ SAP within seven Caribbean Regional Fisheries Mechanism (CRFM) member states (Antigua and Barbuda, Barbados, Belize, Guyana, Jamaica, Saint Lucia, St. Vincent and the Grenadines) that have politically endorsed the CLME+ SAP by empowering small-scale fisherfolk throughout fisheries value-chains to engage in resource management, decision-making processes and sustainable livelihoods with strengthened institutional support at all levels.⁷ The project aims to deliver enhanced stewardship of fisheries resources and livelihood benefits through implementation of the four core project components (See Figure 1.1).

StewardFish recognises that there are several challenges that hinder the engagement of fisherfolk and their organisations in the sustainable use and management of fisheries in the region including fisheries-related state agencies not having adequate capacity to support fisherfolk and their organisations with ecosystem stewardship initiatives. Because state agencies, including fisheries authorities, vary widely in their support of fisherfolk organisations for different reasons, some within their control and others beyond, a situation specific analysis is required.

In support of this, CANARI conducted an Institutional Analysis and Organisational Assessment in each of the project countries to contribute to Outcome 1.2 “*Fisheries-related state agencies have capacity to support fishing industry stewardship*” and Output 1.2.1 “*state agency implementation gaps are assessed regarding support for fisherfolk organisations and their role in stewardship*” of the project.

The aim of the analysis was to identify current strengths, as well as opportunities for improvement in each project country’s fisheries-related state agencies, in order to improve their capacity to support ecosystem stewardship by fisherfolk and their organisations.

The analysis included:

- Designing an institutional analysis tool adapted from the Adaptation: Rapid Institutional Assessment (ARIA) methodology, including an organisational assessment survey targeted at the fisheries authorities
- Conducting desk studies, surveys, virtual and in-country interviews and focus groups with fisherfolk, fisheries authorities and other key state agencies in the project countries

⁶ CLME+ Strategic Action Programme <https://www.clmeproject.org/sap-overview/>

⁷ CANARI. 2019. StewardFish – Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-Scale Fisheries (StewardFish) project. [March 2020]

- Facilitating national workshops⁸ to present, validate, refine and receive input on the preliminary findings and identify priorities for improvement, in each project country
- Producing country reports of findings, including recommended priorities for improvement

This report provides the findings of the institutional analysis and organisational assessment conducted for Belize, between May to September 2020.

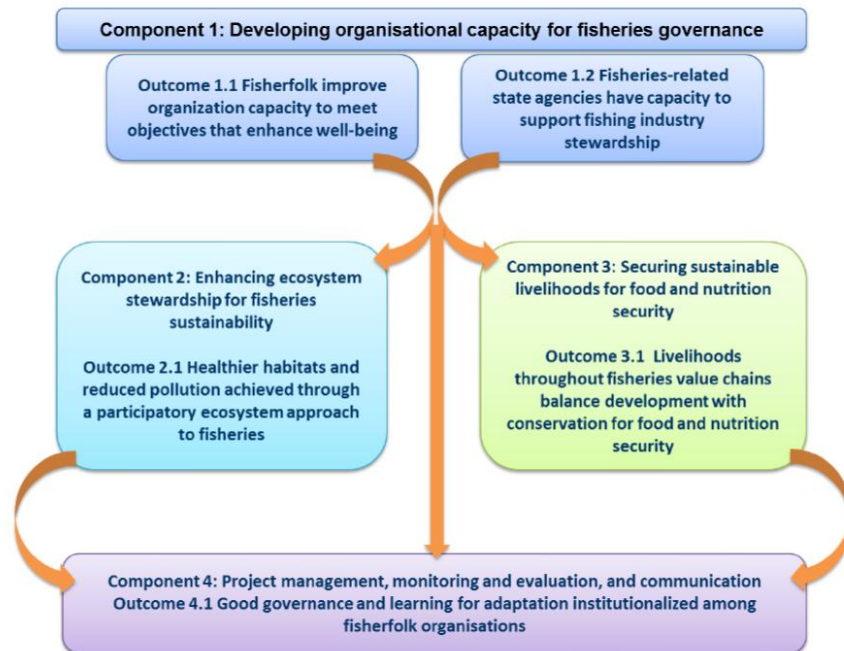


Figure 1.1 StewardFish Project Framework. Credit: FAO

1.1 How strong institutions can support ecosystem stewardship by fisherfolk

Stewardship is a terminology related to rights and responsibilities in governance processes. Application in natural resource management has expanded the understanding of stewardship to relay that “stewards” are stakeholders with responsibility for proper resource use, who will “take care” of a resource under communal or public property rights⁹. The term also importantly encompasses responsibility not only for proper use of resources but also right to life of other species and for future generations.¹⁰ The concept of ecosystem stewardship,



Figure 1.2: Members of the Caribbean Network of Fisherfolk Organisations (CNFO), a regional fisherfolk organisation, at the Stewardfish project Regional Mentors Training Workshop Oct 28-Nov 1, 2019. Credit: CANARI 2019

⁸ National workshops were initially carded to be conducted in-country for all project countries, however, due to the Covid19 pandemic as declared by the World Health Organisation on March 11, 2020, and subsequent restrictions on air travel, all workshops following the declaration date were conducted virtually through webinars.

⁹ Medeiros, R. P. et al. 2014. Enhancing Ecosystem Stewardship in Small-Scale Fisheries: Prospects for Latin America and the Caribbean. *Desenvolv. Meio Ambiente*, n. 32, 181-191.

¹⁰ Medeiros, R. P. et al. 2014. Enhancing Ecosystem Stewardship in Small-Scale Fisheries: Prospects for Latin America and the Caribbean. *Desenvolv. Meio Ambiente*, n. 32, 181-191.

particularly in the fisheries sector; includes reducing the vulnerability of the sector, promoting resilience and making use of opportunities to transform undesirable paths.

A fundamental concern of stewardship is capacity – i.e. whether individuals or groups are able to steward their resources. Capacity, which is in part determined by broader governance -including systems of institutions (i.e. laws and policies, formal and informal organisations, and decision-making processes and structural processes related to power and politics (i.e. economic inequality,

Local environmental stewardship is the actions taken by individuals, groups or networks of actors, with various motivations and levels of capacity, to protect, care for or responsibly use the environment in pursuit of environmental and/or social outcomes in diverse social-ecological contexts.¹¹

discrimination, exclusion from decision-making)—can either empower or constrain the sense of agency, available options and capacity of would-be stewards¹¹. From the paper “Environmental Stewardship: A Conceptual Review and Analytical Framework” Bennet *et. al* note for the small-scale fisheries sector that stewardship efforts can be supported by national laws or policy frameworks that protect local fisher’s rights and tenure, formalise local fishers’ stewardship responsibilities, or provide resources to support local community efforts to steward their own resources. Conversely, the paper notes that even when local small-scale fishers want to take action, the broader policy landscape may undermine their efforts by creating bureaucratic challenges.

Ensuring that the fisheries institution adequately enables ecosystem stewardship by fisherfolk, and their organisations will not only contribute to sustainable fisheries but will also help to ease the burden of already under-resourced fisheries state agencies to monitor and enforce fisheries regulations.

2 Institutional Analysis Framework

An institution is the set of arrangements for making decisions about the development, management, and use of a natural resource, including the stakeholders, as well as, the laws, formal and informal policies, plans and structures that guide how these stakeholders interact with each other and with the resources¹².

To conduct the rapid analysis CANARI developed and piloted an institutional analysis tool which was adapted from the World Resources Institute’s (WRI) Adaptation: Rapid Institutional Assessment (ARIA)¹³ methodology, including an organisational assessment survey targeted at national fisheries authorities. The tool analyses the institutional and organisational capacity of fisheries-related state agencies to support stewardship in the small-scale fisheries sector. The tool was used to conduct a baseline assessment and can subsequently be used for monitoring and evaluation as part of an institutional strengthening process.

The tool examines four conceptual components- fisheries-related policies, laws and plans, advisory and/or decision-making mechanisms, fisheries-related organisations and processes and practises to determine the capacity of the fisheries institution- to support the role of fisherfolk and their

¹¹ Nathan J. Bennett, Tara S. Whitty, Elena Finkbeiner, *et. al*. 2018. *Environmental Stewardship: A Conceptual Review and Analytical Framework*

¹² CANARI. 2011. Facilitating participatory natural resource management: A toolkit for Caribbean Managers. Laventille: CANARI.

¹³ WRI’s Rapid Institutional Analysis for Adaptation Tool. <https://accessinitiative.org/resources/adaptation-rapid-institutional-analysis-phase-1-workbook>

organisations in ecosystem stewardship. Refer to Table 2.1 for a description of each conceptual component. Appendix 13.1 includes more detailed definitions of conceptual components.

Table 2.1 The four conceptual components assessed in the rapid institutional analysis

Conceptual component	Description of component
Policies, laws and plans	Examined fisheries and fisheries-related policies, plans and legislation (including rules and regulations) to determine how they may be empowering or constraining the ability to integrate ecosystem stewardship practices within the country's small-scale fisheries sector.
Advisory and/or decision-making mechanisms	Examined the presence, composition and functioning of existing multi-stakeholder mechanisms (e.g. Fisheries Advisory Committee) established for advising or making decisions for fisheries management.
Fisheries-related organisations	Examined the roles and responsibilities of fisheries-related state agencies, as well as other fisheries-related organisations [e.g. fisherfolk organisations, civil society organisation (CSOs), private sector organisations and academia] which play a key role in the fisheries-related institutional arrangements of the project country. Additionally, an organisational capacity assessment was carried out to examine the national fisheries authority's current ability to support ecosystem stewardship by small-scale fisherfolk and included an examination of the authority's: <ul style="list-style-type: none"> ○ Vision, mandate, culture ○ Knowledge and skills ○ Resources ○ Partnerships
Processes and practices	Examined the various processes and practices in the country's fisheries institution related to: <ul style="list-style-type: none"> ○ Good governance- assessed the application of good governance practices, particularly fisherfolk inclusion, in decision-making processes in the fisheries sector. ○ Collaborative management- assessed the extent to which cooperative management exists in practice between fisheries-related state agencies and small-scale fisherfolk and their organisations. The degree of stakeholder collaboration in management practices was also assessed. ○ Effective communication- assessed the extent to which providers of fisheries information in the project country were using defined communication strategies, tools and channels to communicate with fisherfolk, as well as their capacity to use the tools and channels effectively; including the structures and systems in place for clear communication.

The tool was implemented using a variety of data collection methods (See Section 3 on Methodology) in order to capture a broad range of stakeholder perceptions and input; as well as to gather perspectives on the realised benefit of existing laws, rules, regulations, processes, practices and procedures of the fisheries institutions.

Based on the information collected the institutional analysis and organisational assessment report will discuss the following key aspects in regard to the capacity of the fisheries institution to support the role of fisherfolk and their organisations in ecosystem stewardship:

- Policy, legal and planning context for ecosystem stewardship
- Mechanisms for fisherfolk participation in decision-making
- Support and resources available to fisherfolk and their organisations for ecosystem stewardship
- Partnerships and networks for ecosystem stewardship
- Communication of information on sustainable practices for fisheries resources use
- Organisational capacity of the fisheries authority to support fisherfolk and their organisations with ecosystem stewardship

3 Methodology

A rapid analysis of the institutional and organisational capacity of fisheries-related state agencies to enable stewardship in the fisheries sector was conducted for Belize during the period May – July 2020. The analysis piloted an institutional and organisational capacity assessment tool developed by CANARI (Refer to Section 2). The rapid analysis included the following key research methods:

- I. **Desk study:** CANARI collated and reviewed information readily available on Belize’s fisheries sector with a focus on the small-scale fisheries industry and its institutional and organisational environment; particularly as it relates to roles and capacities to support ecosystem stewardship by small-scale fisheries. This was carried out at an early stage of the assessment, to inform and guide the subsequent methods.
- II. **Validation webinar:** following initial desk study; a validation webinar was held on June 10, 2020 via Zoom platform which included participants from government (e.g. Belize Fisheries Department, Environmental Department), civil society (e.g. Turneffe Atoll Sustainability Association) and regional academia (e.g. UWI-CERMES). The full participants list can be viewed in Appendix 13.2.1. The validation webinar was conducted to corroborate and supplement information collated in the desk study with stakeholders (See Appendix 13.3 for webinar agenda). The webinar replaced a previously scheduled two-day national, in-country validation workshop, which was cancelled due to COVID-19 restrictions globally. The webinar approach utilised pre and post webinar surveys to support validation and supplementation of information on aspects related to fisheries management in Belize (See Appendix 13.4 and 13.5 for pre and post webinar surveys respectively). Information from the pre-survey was used to prioritise topics for webinar sessions, and the post-survey provided an opportunity for participants to share additional information as desired on any of the topics covered.
- III. **Interviews:** virtual key informant interviews were conducted from May – July 2020 and included key stakeholders in government (Belize Fisheries Department), civil society organisations such as Belize Audobon Society and Turneffe Atoll Sustainability Association, and academia from the University of Belize, Environmental Research Institute. The full list of key informant interviewees’ associated organisations is attached at Appendix 13.2.2.
- IV. **Survey:** an organisational capacity assessment survey was administered with the Belize Fisheries Department to collect information on the organisation’s current ability to support ecosystem stewardship by small-scale fisherfolk. (See Appendix 13.6 for completed survey).

4 Background

4.1 Geography

Belize is an independent commonwealth nation on the east coast of Central America with a total land area of 22, 810 square kilometres and a coastline of about 386 kilometres. The continental shelf

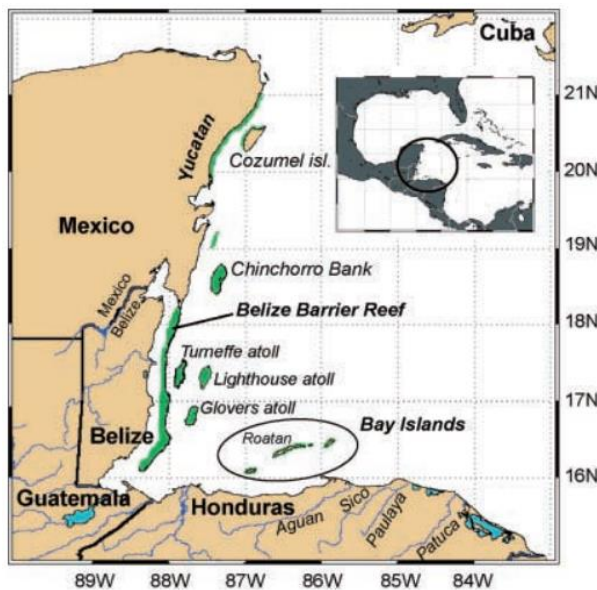


Figure 4.1: Map of Mesoamerican Reef showing the Belize Barrier Reef. Credit: Andréfouët et al. 2002

is 10,491 square kilometres and the exclusive economic zone extends 34,426 square kilometres.¹⁴ The marine environment of Belize lies within the Mesoamerican Reef which stretches for approximately 1,006 kilometres along the coastlines of Honduras, Guatemala, Belize and Mexico¹⁵ (Figure 4). This barrier reef is the largest in the Western Hemisphere; and includes Belizean reefs which contain three atolls, a large barrier reef, and fringing and rhomboid-shaped reefs in the south¹⁶. Inside the reef, the water is shallow and is rarely deeper than a few metres; while beyond the reef, the offshore areas drop off, plummeting to between 1,000 to 4,000 feet in depth. The combination of warm, shallow bays and lagoons, mangrove cays, barrier reef and abyssal depths provide a diverse environment for numerous species of marine life.¹⁷ An interlocking network of rivers and creeks also support this diverse habitat for marine life and fishing¹⁸. Current environmental issues include deforestation, pollution (including marine pollution) from sewage, industrial effluents, agricultural runoff and improper solid waste disposal. Natural hazards also exist such as hurricanes (which occur during the Atlantic hurricane season from June to November) and coastal flooding.¹⁹

4.2 Governance

The nation is a parliamentary democracy and constitutional monarchy, having Queen Elizabeth II as head of state, represented by a Governor-General. There is a two-party national assembly composed of a 12-member Senate, and 31-member House of Representatives. There are six administrative districts, and, with the exception of Belize City, they are administered by a locally elected town board of 7 members. Belize City is administered by a city council of 9 elected members.²⁰ The estimated population of Belize at 2016 was 380,010 people²¹. Over half of the population is rural, with population density slightly higher in the north and east; and between 25-30 percent of the population residing in Belize City.

¹⁴ FAO. 2018. Fishery and Aquaculture Country Profiles. Belize. Country Profile Fact Sheets. [online]

¹⁵ The Nature Conservancy (TNC). 2020. Places we Protect. Mesoamerican Reef [online]

¹⁶ Andréfouët, S. et al. 2002. Revisiting coral reef connectivity. *Coral Reefs*. 21:43-48.

¹⁷ Martinez, V.I. et al. n.d. Managed Access: A Rights-Based Approach to Managing Small Scale Fisheries in Belize.

¹⁸ FAO. 2018. Fishery and Aquaculture Country Profiles. Belize. Country Profile Fact Sheets. [online]

¹⁹ CIA The World Factbook. 2020. Central America: Belize. [online]

²⁰ Commonwealth Secretariat. 2020. Belize: Constitution and politics. [online]

²¹ Statistical Institute of Belize. 2020. Country Statistics. [online]

4.3 Economy

Belize's economy is predominantly agricultural and is vulnerable to fluctuations in world commodity markets. The main foreign exchange earner is tourism, followed by agricultural exports including sugar, bananas, citrus, marine products and crude oil. Despite having the third highest per capita income in Central America, average income figures mask income disparities between the rich and poor, contributing to poverty and inequality. The economy has also been affected by hurricanes which negatively impacted tourism and agriculture sectors²²

4.4 Overview of fisheries sector

The Belize Fisheries Department under the Ministry of Agriculture, Fisheries, Forestry, Environment and Sustainable Development is responsible for fisheries in Belize; with a mission to provide management of its aquatic and fisheries resources through optimisation of present and future benefits through efficient and sustainable management.²³ The Department is headed by the Fisheries Administrator, assisted by several

technical staff that work under four units: the Policy and Planning Unit, the Conservation and Compliance Unit, the Capture Fisheries Unit and the Ecosystem Management Unit. Main activities of the Department include conservation and sustainable use of fishery resources, registration and licenses, fisheries research, education, communication with fishing cooperatives, marine reserve management, enforcement of fishery law, and export and research permits. Legislation that directly impacts the fishing industry includes the High Seas Fishing Act, Cap. 210:10, 2003 and the Fisheries Act, Cap. 210, 2000. However, in 2020, the Senate of Belize passed a new Fisheries Resources Act No. 7 of 2020 which replaced previous legislation (Fisheries Act, Cap. 210, 2000) and aims to modernise and transform Belize's small-scale fishing industry. The new act aims to do so through a shift in fisheries management from a focus on fish stocks and harvests to ecosystem-based management and supports the building of resilient livelihoods for communities²⁴.

The fishing industry is divided into a domestic and high seas fishery. The domestic fishery produces on average 5,000 tonnes of fish per year²⁵ and is characterised by small-scale, artisanal fisheries which employs 2,716 licensed fishers using 770 licensed artisanal vessels²⁶. It is estimated roughly 3 percent of fishers are women²⁷. Vessels of the fishing fleet are of two types: wooden sailing sloops and skiffs²⁸. Approximately 15,000 Belizeans directly benefit from the fisheries industry. Fishers are

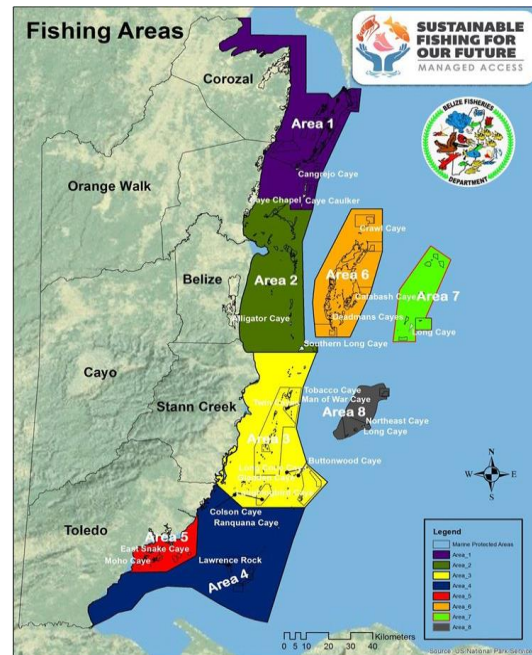


Figure 4.2: Map showing Belize fishing areas, as part of the Managed Access Program, each area is identified by a colour code, Credit: Belize Fisheries Department

²² CIA The World Factbook. 2020. Central America: Belize. [online]

²³ Belize Fisheries Department. 2013. About us [online]

²⁴ World Conservation Society (WCS). 2020. New Fisheries Law in Belize Protects Both Marine Species and Livelihoods. WCS News Release. 21 January 2020 [online]

²⁵ FAO. 2018. Fishery and Aquaculture Country Profiles. Belize. Country Profile Fact Sheets. [online].

²⁶ Martinez, V.I. et al. 2018. Managed Access: A Rights-Based Approach to Managing Small Scale Fisheries in Belize. Presentation at Global Conference on Tenure and User Rights in Fisheries 2018. Achieving Sustainable Development Goals by 2030. 10-14 September 2018, Yeosu, Republic of Korea. [online].

²⁷ FAO. 2018. Fishery and Aquaculture Country Profiles. Belize. Country Profile Fact Sheets. [online].

²⁸ Martinez, V.I. et al. n.d. Managed Access: A Rights-Based Approach to Managing Small Scale Fisheries in Belize

highly organised within fishing cooperatives with more than 85% of licenced fishers being members/owners of an established fishermen cooperative²⁹.

Under a rights-based approach to fisheries management known as Managed Access Program, there are 9 fishing zones (Figure 4.2) established in territorial waters. The programme was designed to encourage greater participation of traditional fishers in the decision-making process of fisheries management which directly impacts their livelihoods, and improve benefits derived from fish stocks such as increased fish landings, reduction in fishing effort, larger size classes and increased prices and revenues³⁰. Fishing is done by free diving, traps, gillnetting, casitas (lobster shades), trolling and handlines with a focus primarily on reef species including lobster, conch, finfish, sea cucumber and sharks.³¹ Target species of economic value include spiny lobster, queen conch, snappers and groupers. Beyond the barrier reef, fishing activities are minimal and restricted to the small fishing settlements associated with the offshore cays or recreational fishing occurring in hotels/resorts on selected cays.

Fisheries plays an important role in the national economy, accounting for three percent of national Gross Domestic Product (GDP) in 2015. Fisheries sector exports valued USD 64.4 million in 2014; but declined to USD 15.6 million in 2016 mainly as a result of lower spiny lobster, queen conch and shrimp exports. Ninety percent of lobster, conch and farmed shrimp produced in Belize are sold directly to foreign markets with the remainder available for local market sale to consumers and the tourism sector.³² Prior to 2016, fisheries was open-access in nature; however, the Managed Access Program was implemented at the national level which instituted measures ensuring only legitimate fishers could obtain licenses³³. Domestic fish consumption was estimated at 13.8 kg per capita in 2013. Fishing has traditionally been a means of subsistence in coastal communities and the main source of protein. The sector has however transformed to commercial activity over the years meaning availability of fish as an inexpensive source of protein for communities has been affected.

Belize's development policy is built on the ecosystem approach; thus, importance is placed on conservation to maintain biodiversity.³⁴ Environmental challenges facing Belize's fisheries industry include illegal fishing, the threat of overfishing³⁵, the discovery of offshore oil reserves, high deforestation rates, improper solid-waste management, rapid coastal development and increasing poverty³⁶. The country is internationally known for its environmental conservation efforts and importance is placed on its marine environment. Belize has nine Marine Protected Areas (MPAs) directly managed or co-managed by the Belize Fisheries Department, three marine National Parks, two National Monuments, twelve fish spawning aggregations sits and two marine wildlife sanctuaries.³⁷

²⁹ Martinez, V.I. et al. 2018. Managed Access: A Rights-Based Approach to Managing Small Scale Fisheries in Belize. Presentation at Global Conference on Tenure and User Rights in Fisheries 2018. Achieving Sustainable Development Goals by 2030. 10-14 September 2018, Yeosu, Republic of Korea. [online]

³⁰ Martinez, V.I. et al. n.d. Managed Access: A Rights-Based Approach to Managing Small Scale Fisheries in Belize. [online]

³¹ Martinez, V.I. et al. 2018. Managed Access: A Rights-Based Approach to Managing Small Scale Fisheries in Belize. Presentation at Global Conference on Tenure and User Rights in Fisheries 2018. Achieving Sustainable Development Goals by 2030. 10-14 September 2018, Yeosu, Republic of Korea. [online]

³² FAO. 2018. Fishery and Aquaculture Country Profiles. Belize. Country Profile Fact Sheets. [online]

³³ Martinez, V.I. et al. n.d. Managed Access: A Rights-Based Approach to Managing Small Scale Fisheries in Belize. [online].

³⁴ FAO. 2018. Fishery and Aquaculture Country Profiles. Belize. Country Profile Fact Sheets. [online]

³⁵ Environmental Defense Fund (EDF). 2016. Belize Implements National Sustainable Fisheries Reforms. [online]

³⁶ Young, C. A. 2008. Belize's Ecosystems: Threats and Challenges to Conservation in Belize. *Tropical Conservation Science*. Vol. 1:18-33, 2008.

³⁷ Fugazza, M., Vivas Eugui, D. and Rosenow, S. United Nations Conference on Trade and Development (UNCTAD). Evidence-based and policy coherent Oceans Economy and Trade Strategies. Sector data factsheet: Belize.

Belize demonstrates strong commitment to sustainability and environmental stewardship being a party or cooperating non-contracting party to several agreements covering biodiversity, marine ecosystems and fisheries [e.g. Convention on Biological Diversity (CBD), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), United Nations Convention on the Law of the Sea (UNCLOS), Ramsar Convention on Wetlands of International Importance (RAMSAR), FAO Code of Conduct for Responsible Fisheries]. The nation is also member to regional fisheries bodies including:

- Caribbean Regional Fisheries Mechanism (CRFM)
- Central America Fisheries and Aquaculture Organisation (OSPESCA)
- Centre for Marketing Information and Advisory Services for Fishery Products in Latin America and the Caribbean (INFOPESCA)
- Inter-American Tropical Tuna Commission (IATTC)
- International Commission for the Conservation of Atlantic Tunas (ICCAT)
- International Whaling Commission (IWC)
- Western Central Atlantic Fishery Commission (WECAFC)³⁸

Belize has co-management mechanisms where fisherfolk, through their organisations and cooperatives, are involved in ecosystem stewardship. These mechanisms are supported by legislation. Different types of protected areas are managed differently – MPAs are managed by the government (Fisheries Department), while National Parks and Wildlife Sanctuaries are co-managed. Each protected area has its own regulations, which are implemented by the protected area manager³⁹. The recently enacted Fisheries Resources Act (2020) speaks to assigning management responsibilities via co-management arrangements where, after consultation with the Fisheries Council (a legally established mechanism, which includes fisherfolk, to advise the Minister on fisheries resources⁴⁰), the Minister may, by execution of a legally binding agreement, assign co-management responsibility in whole or in part to locally registered, non-governmental organisations including fishing cooperatives or fishing organisations. Current co-management arrangements exist between environmental civil society organisations to manage marine areas e.g. Turneffe Atoll Sustainability Association which works with Belize Fisheries Department in Fishing Area 6; the Turneffe Atoll Marine Reserve. While legislation supports co-management arrangements with fisherfolk organisations, to date there are no fishing areas currently co-managed by Belize Fisheries Department alongside a fisherfolk organisation. Rather; environmental non-governmental organisations have established co-management arrangements with the Department to manage marine protected areas – some of which are either entirely or in part – fishing areas established under the Managed Access Program.

4.5 Stakeholder involvement in the fisheries institution of Belize

Belize's fisheries institution includes a range of government, civil society, academia and private sector stakeholders with a variety of roles, mandates and responsibilities that influence the development and management of the fisheries sector. As part of the institutional analysis, key stakeholders were briefly identified and analysed to get an understanding of the range of stakeholders involved in the sector. Table 4.1 provides a list of key stakeholder types involved in the fisheries institution in Belize. The list provided in the table is not meant to be exhaustive, but rather to give the reader some insight into the various stakeholder groups that are likely to benefit by

³⁸ FAO. 2018. Fishery and Aquaculture Country Profiles. Belize. Country Profile Fact Sheets. [online]

³⁹ Bonefish & Tarpon TRUST. The system of co-management in Belize. September 23, 2019. [online].

⁴⁰ Fisheries Resources Act No. 7 of 2020.

improved ecosystems stewardship among fisherfolk. The stakeholder identification and analysis was informed by desk study, virtual interviews and stakeholders who participated in the validation webinar; to understand stakeholders' perceptions of decision-making power and relationships among the various stakeholders in the fisheries institution.⁴¹

Stakeholders directly within the fisheries institution, such as the Belize Fisheries Department, co-managers of fishing areas such as the Turneffe Atoll Sustainability Association or Belize Audubon Society, national fisherfolk organisations such as Belize Fishermen Cooperative Association (BFCA), and academia which work alongside these stakeholders such as the University of Belize, Environmental Research Institute – were perceived as having the greatest decision-making power related to fisheries management decisions compared to stakeholders indirectly related to the fisheries institution (e.g. shipping sector stakeholders). In support of this perception; stakeholders referenced the stakeholder engagement process regarding the drafting and approval of the Fisheries Resources Act (2020) which involved delays in final approval due to concerns raised by fisherfolk associations.⁴² The legislation has been through several consultation and review sessions during both government administrations⁴³, thus including roughly a decade of consultation input before being enacted⁴⁴.

The Belize Fisheries Department was perceived as a high-level decision maker directly within the fisheries institution, supported by stakeholder perceptions of the Department being the authority on fisheries management and decision-making⁴⁵. The institution also has a Fisheries Advisory Board (FAB) developed in 1965 alongside the Belize Fisheries Department. While the Board was not legally institutionalised under the previous Fisheries Act (2000) it still functioned as an advisory mechanism to the responsible Minister (for fisheries resources management) in diverse topics related to fisheries management, conservation and development issues. Fisheries cooperatives in Belize exercise decision-making power and influence in and through this mechanism. The relative decision-making influence of the FAB is reliant on its interaction with the responsible Minister and is dependent upon this interpersonal and professional dynamic.⁴⁶ The recently enacted Fisheries Resources Act (2020) has legally established a Fisheries Council which will function as the FAB had done previously.

Despite this, some fisherfolk stakeholders perceive their level of decision-making power to be low – with one fisherfolk organisation representative indicating that while fisherfolk perspectives are encouraged, many of the suggestions put forth by fisherfolk are not considered when making decisions.⁴⁷ . The representative further noted the need for fisherfolk organisations to be more *directly* included at the decision-making level of fisheries management. However, this perspective differs from that of co-managers of fishing areas who perceive that fisherfolk are directly included in

⁴¹ A national validation workshop, which would have included a participatory stakeholder analysis exercise, was initially carded to be conducted in Belize, however, due to the COVID-19 pandemic as declared by the World Health Organisation on March 11, 2020, and subsequent restrictions on air travel, this workshop had to be conducted virtually through a webinar. Consequently, the approach to conducting the stakeholder analysis was also changed.

⁴² Interview with University of Belize Environmental Research Institute employee by CANARI, June 2020

⁴³ The SanPedro Sun. 2019. Belize Network of NGOs calls on the GOB to modernize fisheries legislation. Sunday, October 13, 2019. [online]. <https://www.sanpedrosun.com/environment/2019/10/13/belize-network-of-ngos-calls-on-the-gob-to-modernize-fisheries-legislation/> [Cited May 22, 2020]

⁴⁴ Interview with Belize Audubon Society, May, 2020

⁴⁵ Interview with University of Belize Environmental Research Institute , BFCA, TASA, BAS by CANARI, May – June 2020

⁴⁶ McConney, P., R. Mahon and R. Pomeroy. 2003. Belize case study: Fisheries Advisory Board in the context of integrated coastal management. Caribbean Coastal Co-management Guidelines Project. Caribbean Conservation Association, Barbados. 70pp.

⁴⁷ Interview with Belize Fishermen Cooperative Association Ltd (BFCA) by CANARI, June 2020.

the processes and activities related to fisheries management⁴⁸, supported by their inclusion on Managed Access Committees for fishing areas, or involvement in consultations hosted by co-managers of marine protected areas towards the drafting of marine area-specific fisheries management plans e.g. Turneffe Atoll Sustainability Association consultations with fisherfolk and the inclusion of fisherfolk on the Turneffe Atoll Advisory Committee which provides advice on efficient management of the Reserve and is involved in the drafting of the Turneffe Atoll Management Plan. Ultimately the stakeholder analysis highlighted conflicting stakeholder perceptions of fisherfolk's level of decision-making power among stakeholders with fisherfolk being of the view that their role in decision-making processes is advisory in nature, leading to their perception that their decision-making power is low⁴⁹.

In terms of relationships, there is a strong perception by co-managers of marine resources areas (e.g. Belize Audubon Society and Turneffe Atoll Sustainability Association) that management of their respective protected areas includes strong networking and relationships with fisheries resource users including fisherfolk – demonstrated by their inclusion on managed access committees and advisory committees for specific marine protected areas; as well as inclusion in management planning and engagement via outreach programmes. Co-managers for these areas (in co-management agreements with the Belize Fisheries Department) practice a form of stakeholder engagement known as “boat outreach”; where community officials of the co-management organisations go out onto the fishing grounds within the management areas and meet with fisherfolk directly on their fishing vessels to either disseminate information or gather information from fisherfolk.⁵⁰ The civil society organisations legally established as co-managers of marine areas use this type of outreach to develop and maintain strong relationships with fisherfolk in their responsible areas. There is a perception of strong levels of involvement of co-managers of marine protected areas in fisheries management decisions such as the drafting of a new Fisheries Policy and Act, or in providing assistance in the drafting of marine area-specific fisheries management plans for individual fishing areas e.g. stakeholder consultation by Turneffe Atoll Sustainability Association for the Turneffe Atoll Management Plan.

Evident from the analysis was also a strong relationship between the Belize Fisheries Department as the main authority for fisheries management in Belize and international intergovernmental funding organisations such as the World Bank, which provide financial and technical support through projects to improve fisheries management. The Belize Marine Conservation and Climate Adaptation project is an example of this relationship – which is a five year project spanning 2015-2020 that was implemented by the World Bank and funded by the Adaptation Fund grant with the objective to implement priority ecosystem-based marine conservation and climate adaptation measures towards strengthening climate resilience of the Belize Barrier Reef System⁵¹. Another example is the Environmental Defense Fund; which partnered with the Government of Belize on the drafting of the Fisheries Resources Act (2020).

⁴⁸ Interview with BAS & TASA by CANARI, June 2020.

⁴⁹ Interview with University of Belize Environmental Research Institute by CANARI, June 2020.

⁵⁰ Interview with Belize Audubon Society (BAS) by CANARI, May 2020

⁵¹ Government of Belize. Belize Fisheries Department. 2016. Belize Marine Conservation and Climate Adaptation Project (2015-2020) [online]. <http://www.fisheries.gov.bz/mccap/>

Table 4.1 Analysis of key stakeholders in the Belize fisheries institution

Type of/Stakeholder		Role/Interests	How will they be affected by improved ecosystem stewardship by fisherfolk/fisherfolk organisations?
Government	Belize Fisheries Department , Ministry of Agriculture, Fisheries, Forestry, The Environment and Sustainable Development	<ul style="list-style-type: none"> Responsible for conservation and sustainable use of fishery resources, registration and licenses, fisheries research, education, liaise with fishing cooperatives, management of marine reserves, fisheries law enforcement, export and research permits.⁵² Responsibilities are programmed into four units: Administration, Capture Fisheries Unit, Ecosystem Management Unit, Policy and Planning Unit and Conservation Compliance Unit 	<ul style="list-style-type: none"> Improved ecosystem stewardship by fisherfolk and their organisations may lead to increased co-management agreements between the Belize Fisheries Department and fisherfolk organisations. Co-management arrangements that include fisherfolk can help with strengthening partnerships between Fisheries Department and fisherfolk, creating a sustainable environment for resource conservation alongside development of the fisheries industry as stakeholders will share aligned goals (makes use of opportunities to transform undesirable paths i.e. unsustainable exploitation of resources) Efficient utilisation of the Department’s resources by ‘sharing the burden’ of management alongside ecosystem stewards
Government	Coastal Zone Management Authority and Institute	<ul style="list-style-type: none"> Responsible for implementing and monitoring policies that govern the use and development of the coastal zone in Belize Role in the management of Belize’s coastal resources including implementing coastal monitoring programmes and assisting with preparation of a national coastal zone management plan.⁵³ Lead role in conducting marine scientific research in Belize, including maintaining a data centre and providing information to stakeholders as required Role in providing training and support to other agencies involved in coastal zone management. 	<ul style="list-style-type: none"> Improved efficiency in distribution of limited resources through ‘sharing the burden’ alongside co-management with ecosystem stewards e.g. a fisherfolk organisation approved to execute a coastal monitoring programme or assist in execution of activities under such a programme.

⁵² Belize Fisheries Department. 2013. About Us [online].

⁵³ Coastal Zone Management Authority and Institute (CZMAI). 2019. CZM Authority, CZM Institute. [online].

Type of/Stakeholder		Role/Interests	How will they be affected by improved ecosystem stewardship by fisherfolk/fisherfolk organisations?
Government	Belize Port Authority, Ministry of Transport and National Emergency Management	<ul style="list-style-type: none"> • Principle maritime agency with responsibility for regulating and developing Belize’s ports, harbours and shipping, and for the safety of all vessels navigating within Belize’s territorial waters • Interest in providing a safe and secure maritime environment for future generations 	<ul style="list-style-type: none"> • Improved ecosystem stewardship by fisherfolk can contribute to sustainable use and rehabilitation of marine ecosystems that will benefit all stakeholders with an interest in a safe and resilient marine environment – including the Port Authority. For example, activities undertaken by a fisherfolk organisation to rehabilitate a mangrove ecosystem in order to provide fisheries nurseries will directly benefit the fisherfolk – however; in replanting and rehabilitating mangrove the fisherfolk will
Government	National Meteorological Service of Belize	<ul style="list-style-type: none"> • National authority responsible for providing meteorological and climate-based products and services in order to protect life and property and contribute to the achievement of social, economic, and physical well-being of the people of Belize⁵⁴ • National Focal Point for Belize on the Intergovernmental Panel on Climate Change (IPCC) 	<ul style="list-style-type: none"> • Improved fisherfolk ecosystem stewardship may facilitate collaborative opportunities for the National Meteorological Service to obtain and include information relevant to the socio-economic impacts of climate change on fisherfolk, through for example inclusion of local and traditional knowledge of fisherfolk on the impacts of climate change on marine ecosystems and fishing communities
Government	Department of the Environment, Ministry of Agriculture, Fisheries, Forestry, The Environment and Sustainable Development	<ul style="list-style-type: none"> • Responsible for enforcing the Environmental Protection Act which grants broad regulatory and enforcement authority for the prevention and control of environmental pollution, conservation and management of natural resources⁵⁵ 	<ul style="list-style-type: none"> • Improved ecosystem stewardship by fisherfolk and their organisations can contribute to the prevention and control of environmental pollution, conservation and management of natural resources which is of interest to the Department of the Environment • Reduced need for monitoring and enforcement due to increased compliance of fisherfolk with regulations

⁵⁴ Government of Belize. 2020. National Meteorological Service of Belize. Purpose. [online]

⁵⁵ Government of Belize. 2020. Department of the Environment [online]

Type of/Stakeholder		Role/Interests	How will they be affected by improved ecosystem stewardship by fisherfolk/fisherfolk organisations?
Government	Protected Areas Conservation Trust	<ul style="list-style-type: none"> Provides funds for supporting conservation and promoting environmentally sound management of Belize's natural and cultural resources Interest in supporting conservation and promoting environmentally sound management of Belize's resources⁵⁶ 	<ul style="list-style-type: none"> Improved ecosystem stewardship by fisherfolk and their organisations in Belize may contribute to building their capacities to be involved in the management and monitoring of biodiversity Greater support and understanding by fisherfolk for marine management decisions particularly for protected areas
Multi-stakeholder	Fisheries Advisory Board (FAB)	<ul style="list-style-type: none"> Functions as an administratively constituted body with responsibility to advise on the management and development of fisheries in Belize including providing advice on and reviewing fisheries management plans, amendments to legislation, proposals for access agreements or development projects, initiatives for regional harmonisation of fisheries regimes and coordination of policies and activities of government departments and ministries⁵⁷ 	<ul style="list-style-type: none"> Improved fisherfolk ecosystem stewardship may strengthen the FAB by improving the technical knowledge of fisherfolk and their input towards advisory information for the Minister on all aspects of fisheries development and management including conservation and sustainable use of fishery resources.
Multi-stakeholder	Fisheries Council	<ul style="list-style-type: none"> Legally mandated advisory body to the Minister responsible for fisheries Responsible for making recommendations on aspects related to fisheries resources conservation, management, development, monitoring and review, and all other matters as detailed in the Fisheries Resources Act (2020) 	<ul style="list-style-type: none"> Improved fisherfolk ecosystem stewardship may strengthen the Fisheries Council by improving the technical knowledge of fisherfolk and their input towards advisory information for the Minister on all aspects of fisheries development and management including conservation and sustainable use of fishery resources.

⁵⁶ Protected Areas Conservation Trust. [online] <https://www.pactbelize.org/>

⁵⁷ McConney, P., R. Mahon and R. Pomeroy. 2003. Belize case study: Fisheries Advisory Board in the context of integrated coastal management. Caribbean Coastal Co-management Guidelines Project. Caribbean Conservation Association, Barbados. 70pp.

Type of/Stakeholder		Role/Interests	How will they be affected by improved ecosystem stewardship by fisherfolk/fisherfolk organisations?
Civil Society	Belize Audubon Society	<ul style="list-style-type: none"> • Role in protected areas co-management, environmental education, advocacy, community development and research programs⁵⁸ • Presently manages seven protected areas and is responsible for fishing area seven⁵⁹ 	<ul style="list-style-type: none"> • As co-managers of fishing area seven and seven protected areas, the Belize Audubon Society will benefit from improved ecosystem stewardship by fisherfolk and their organisations as these users will be in line with the management objectives of the area • Improved ecosystem stewardship will also result in more efficient utilisation of the organisation's resources by 'sharing the burden' of management alongside ecosystem stewards
Civil Society	Southern Environmental Association	<ul style="list-style-type: none"> • Interest in improving stewardship and the environmental integrity of key marine areas in southern Belize through effective, collaborative protected areas management, community involvement, and strategic partnerships for the benefit of all stakeholders • Responsible for the co-management of two MPAs (Gladden Spit and Silk Cayes Marine Reserve and Sapodilla Cayes Marine Reserve) alongside Belize Fisheries Department 	<ul style="list-style-type: none"> • Greater support and understanding by fisherfolk for marine management decisions particularly for protected areas • Improved ecosystem stewardship will also result in more efficient utilisation of the organisation's resources by 'sharing the burden' of management alongside ecosystem stewards
Civil Society	Turneffe Atoll Sustainability Association	<ul style="list-style-type: none"> • Responsible for co-managing the Turneffe Atoll Marine Reserve • Role in natural resource management, science, monitoring and enforcement, education and outreach, infrastructure and administration⁶⁰ • Co-manager for Turneffe Atoll Marine Reserve identified also as fishing area six 	<ul style="list-style-type: none"> • Greater support and understanding by fisherfolk for marine management decisions particularly for protected areas • Improved ecosystem stewardship will also result in more efficient utilisation of the organisation's resources by 'sharing the burden' of management alongside ecosystem stewards

⁵⁸ Belize Audubon Society. 2014-2015. <http://www.belizeaudubon.org/membership.html#>

⁵⁹ Virtual Interview, Belize Audubon Society, May 26, 2020

⁶⁰ Belize Network of NGOs. Turneffe Atoll Sustainability Association. <http://belizengos.org/turneffe-atoll-sustainability-association-tasa/>

Type of/Stakeholder		Role/Interests	How will they be affected by improved ecosystem stewardship by fisherfolk/fisherfolk organisations?
Civil Society	Toledo Institute for Development and Environment (TIDE)	<ul style="list-style-type: none"> Responsible for co-managing the Port Honduras Marine Reserve⁶¹ Role in park management planning, education and community development.⁶² 	<ul style="list-style-type: none"> Greater support and understanding by fisherfolk for marine management decisions particularly for protected areas Improved ecosystem stewardship will also result in more efficient utilisation of the organisation's resources by 'sharing the burden' of management alongside ecosystem stewards
Civil Society	National Fisher's Cooperative (NFC)	<ul style="list-style-type: none"> An umbrella fisherfolk cooperative operational for 50 years and currently with over 250 producing members, many of which come from small fishing communities relying on lobster and conch⁶³ Represents the interests of fisherfolk Interest in long-term sustainability of fish stocks (particularly of lobster and conch) to support livelihoods, including sustainable business enterprises 	<ul style="list-style-type: none"> The capacity of fisherfolk and their organisations would be built through improved fisherfolk ecosystem stewardship as they would have improved knowledge of the resources, awareness on implications of unsustainable practices and understand the benefit of promoting resilience Fishing cooperatives/organisations that adopt and promote more sustainable fishing practices among their membership are likely to have more sustainable and viable business enterprises. A positive reputation in this regard can potentially create opportunities for these cooperatives/organisations to form new partnerships with other organisations with similar values willing to provide capacity building and other resources to support development of these cooperatives. More sustainable fish stocks
Civil Society	Belize Fishermen Cooperative Association Ltd (BFCA)	<ul style="list-style-type: none"> Represents the interests of fisherfolk Interest in long-term sustainability of fish stocks to support livelihoods, including sustainable business enterprises 	
Civil Society	Belize Federation of Fishers (BFF)	<ul style="list-style-type: none"> Umbrella organisation representing the interests of fisherfolk. Members include primary fisherfolk associations and cooperatives e.g. Toledo Fishermen Association, Chunox Fishermen Association, Placencia Producer Cooperative Role in educating, building capacity and advocating for fishers and achieving sustainable fishing for future generations 	

⁶¹ <http://protectedareas.gov.bz/marine-reserves/>

⁶² Toledo Institute for Development and Environment (TIDE). TIDE History. <http://tidebelize.org/history/>

⁶³ National Fisher's Cooperative. About Us. <https://www.nationalfisherscoop.com/>

Type of/Stakeholder		Role/Interests	How will they be affected by improved ecosystem stewardship by fisherfolk/fisherfolk organisations?
Civil Society	Primary Fisherfolk Organisations e.g. Northern Fishermen Cooperative, Placencia Fishermen Producers Cooperative Society, Caribena Fishermen Cooperative, Rio Grande Fishermen Cooperative ⁶⁴	<ul style="list-style-type: none"> • Represent fisherfolk from local communities • Interest in long-term sustainability of fish stocks to support livelihoods, including sustainable business enterprises 	
Private Sector	Rainforest Seafood	<ul style="list-style-type: none"> • A private, non-fishing cooperative seafood trader which produces locally packaged frozen food items such as frozen shrimp and lobster tails.⁶⁵ 	<ul style="list-style-type: none"> • Improved capacities of fisherfolk in Belize to act as ecosystem stewards may contribute to building their capacity to provide consistent quality products for private sector trader companies to offer value-added products to the local market and expand into the regional and international markets.
Academia	University of Belize, Environmental Research Institute	<ul style="list-style-type: none"> • Role in building local capacity for environmental research and monitoring • Interest in sustainable use and conservation of natural resources⁶⁶ 	<ul style="list-style-type: none"> • Improved ecosystem stewardship by fisherfolk and their organisations in Belize may contribute to building their capacities to be involved in the management and monitoring of biodiversity • Improved access to traditional and local ecological knowledge; as collaborative networks, based on shared interests for sustainable management and conservation of fisheries resources, between academia, government and fisherfolk organisations may be more likely

⁶⁴ Vincent Gillett. 2015. Case Study: Belize Fisheries and Tourism Markets – exploring linkages to enhance development, competitiveness and greater local participation.

⁶⁵ Vincent Gillett. 2015. Case Study: Belize Fisheries and Tourism Markets – exploring linkages to enhance development, competitiveness and greater local participation.

⁶⁶ University of Belize Environmental Research Institute. About Us. <http://www.uberibz.org/about-us>

5 Policy and legal context for ecosystem stewardship

National policies, laws or plans can either encourage ecosystem stewardship by fisherfolk or undermine it.⁶⁷ To determine whether existing fisheries and coastal and marine related policies, laws and plans in Belize were supporting or constraining ecosystem stewardship, selected priority policies, laws and plans were assessed to determine whether they were adequately in line with the principles of the ecosystem-approach to fisheries (EAF), namely whether they considered:

- human well-being: a condition in which all members of society are able to determine and meet their needs and have a large range of choices to meet their potential; and
- ecosystem well-being: a condition in which the ecosystem maintains its diversity and quality — and thus its capacity to support people and the rest of life — and its potential to adapt to change and provide a viable range of choices and opportunities for the future.
- good governance: governance arrangements that enable broad stakeholder participation are similarly expected to confer support for management and foster stewardship among fisherfolk and other resource users.⁶⁸

EAF recognises the need to maintain the productivity of ecosystems for present and future generations, conserving critical habitats, reducing pollution and degradation, minimising waste and protecting endangered species. It also recognises that this will not be achieved without the cooperation of people, i.e. unless the ecosystem contributes to human well-being, providing sustainable goods and services and sources of livelihood.⁶⁹ Consideration of the latter is likely to encourage fisherfolk and other resource users to sustainably use, protect and conserve the resources they depend on for livelihoods. A holistic governance framework which considers importance of not only the ecological well-being of fisheries resources – but equally considers socio-economic well-being of fishery resource users and collaborative management mechanisms in the approach to fishery resources management – will increase the likelihood of ecosystem stewardship from fisherfolk in the small-scale fisheries industry.

5.1 Findings for policy, legal and planning context for ecosystem stewardship in Belize

Table 5.1 identifies some of the national fisheries and coastal and marine related policies, laws and plans within the fisheries institution in Belize. Policies, plans and laws identified are either directly related to the fisheries sector; for example – the Fisheries Resources Act (2020) which makes provisions in line with international best practices for optimal management of aquatic and fisheries resources and allowing for sustainability, conservation and development – or indirectly related to the fisheries sector, for example the Wildlife Protection Act which provides for regulations and restrictions to protect species, including marine species.

⁶⁷ Bennett, N.J. et al. 2018. Environmental stewardship: a conceptual review and analytical framework. *Environmental Management*, 61(4), pp.597-614.

⁶⁸ Turner, R. et al. 2019. Viability and Sustainability of Small-Scale Fisheries in Latin America and The Caribbean. *MARE Publication Series* 19. p475

⁶⁹ FAO. 2002. The ecosystem approach to fisheries. <http://www.fao.org/3/a-y4773e.pdf>

Table 5.1 Identified policies, laws and plans relevant to the fisheries institution in Belize

Policies	<ul style="list-style-type: none"> • Belize Fisheries Policy⁷⁰ • National Trade Policy (NTP) (2019-2030)
Laws	<ul style="list-style-type: none"> • Fisheries Resources Act (2020) • Belize Coast Guard Service (Amendment) Act (2016) • National Protected Areas System Act (2015) • High Seas Fishing Act (2013) • Merchant Ships Registration Act (2010) • Environmental Protection (Amendment) Act (2009) • Belize Port Authority Act (1980, Rev. Ed. 2003) • Coastal Zone Management Act (1998, Rev. Ed. 2000) • Wildlife Protection Act (1982, Rev. Ed. 2000) • Protected Areas Conservation Trust (PACT) Act (1996) • Maritime Areas Act (1992) • Belize Tourism Board Act (1990)
Plans	<ul style="list-style-type: none"> • Managed Access Program (2016)⁷¹ • Management Plan South Water Caye Marine Reserve (2019-2023) • Belize’s 2016-2020 National Biodiversity Strategy and Action Plan (NBSAP) (2016-2020) • Integrated Coastal Zone Management Plan (2016-2020) • Turneffe Atoll Management Plan (2012-2017) • Sapodilla Cayes Marine Reserve Management Plan (2011-2016) • Management Plan Port Honduras Marine Reserve (2011-2016) • Gladden Spit and Silk Cayes Marine Reserve Management Plan (2011-2016) • Glover’s Reef Marine Reserve World Heritage Site (2008-2013) • Caye Caulker Forest and Marine Reserve – Integrated Management Plan (2004-2009) • The Revised Bacalar Chico National Park & Marine Reserve Management Plan (2004) • Hol Chan Marine Reserve Management Plan (2002)

Selected key national policies, laws and/or plans were prioritised for deeper analysis. Instruments were selected based on their direct relevance to the fisheries sector (i.e. Fisheries policy, law or plan) as well as through a prioritisation process facilitated during the validation webinar’s pre-survey, webinar discussion and post survey, where participants were asked to select the national policies, laws and/or plans that they felt were most relevant to the sustainable development of the fisheries sector in Belize. Participants were informed that the policies, laws and/or plans identified and selected did not have to be directly related to the fisheries sector but could be broad and cross cutting such as a national climate change policy or biodiversity management plan. The following instruments were identified and analysed against the principles of EAF in Table 5.2.

- National Trade Policy (2019-2030)
- Fisheries Resources Act 2020
- Managed Access Program (2016)
- National Biodiversity Strategy and Action Plan (2016-2020)

⁷⁰ A Belize Fisheries Policy was reference during validation webinar however, document was not sourced to conduct analysis.

⁷¹ Under the Managed Access Program started in 2016; fishing areas were gazetted in early 2017, providing legal basis for fishing areas. Personal communication, I. Martinez via email to D. Albert July 2020.

- National Protected Areas Systems Act (2015)
- High Seas Fishing Act (2013)
- Coastal Zone Management Act (Rev. Ed. 2000)
- Wildlife Protection Act (1982, Rev. Ed. 2000)

Overall in Table 5.2, analysis against EAF principles reveals strong inclusion of ecological well-being of fisheries resources as all selected policies, legislation and plans consider aspects such as conservation measures, consideration towards EAF approaches and principles, and the establishment and effective management of protected areas as well as regulations to guide fisheries resources use (e.g. bag quotas) and protection of wildlife. There is also strong inclusion of socio-economic well-being and acknowledgement of user rights/local rights – indicating strong consideration for both socio-economic well-being as well as inclusion of stakeholders in decision-making. There is the identification in multiple legislative documents on the importance of socio-economic well-being as a pillar to achieve sustainable use and development of fisheries and marine resources. Collaborative management is also strongly indicated particularly under the direct fisheries-related legislation with the legal institutionalisation of the Fisheries Council, and co-management arrangements which allow for the designation of civil society organisations as co-managers for marine protected areas. Legally, the mechanism exists for fisherfolk organisations to become co-managers once they fit criteria and capacities to do so.

Presently, the Belize Fisheries Department has co-management agreements with the following non-governmental organisations: Belize Audubon Society, Hol Chan Marine Reserve, Southern Environmental Association, Turneffe Atoll Sustainability Association and Toledo Institute for Development and Environment. These arrangements have allowed implementation of fisheries management and marine conservation strategies to ensure sustainable livelihoods for fisherfolk.⁷²

The main fisheries related law (Fisheries Resources Act, 2020) makes consideration to ecological and socio-economic well-being and considers collaborative management and inclusion of stakeholders. The legislation speaks to assigning management responsibilities via co-management arrangements where, after consultation with the Fisheries Council, the Minister may, by execution of a legally binding agreement, assign co-management responsibility in whole or in part to locally registered, non-governmental organisations including fishing cooperatives or fishing organisations.

⁷² Oceans Economy and Trade Strategy: Belize. Draft Report prepared for UNCTAD and DOALOS. Version of 29 November, 2019. <https://unctad.org/meetings/en/SessionalDocuments/ditc-ted-04122019-belize-Legal-draft.pdf>

Table 5.2 Analysis of key fisheries related policies, laws and plans in Belize

Name of Policy, Law, Plan	Description	The policy/law/plan considers the ecological well-being of fisheries resources	The policy/law/plan considers socio-economic well-being of resource users including fisherfolk	The policy/law/plan considers collaborative management and inclusion of stakeholders in decision-making
Coastal Zone Management Act (Rev. Ed. 2000)	Provides for improvement of coastal zone management in Belize through establishment of Coastal Zone Management Authority and Institute; and the preparation of the Integrated Coastal Zone Management Plan detailing mechanisms to improve the monitoring of activities within the coastal zone	<ul style="list-style-type: none"> Promotes sustainable use of coastal resources including the development of technical guidelines for the sustainable use of coastal resources Considers planning for the establishment of marine protected areas and for the conservation of threatened or potentially threatened or endangered species 	<ul style="list-style-type: none"> Promotes use and conservation of marine resources for economic and social benefit of Belize Promotes multiple uses of the sea with a view to minimise use conflict Establishes institute (information center) to collect and disseminate economic, social, technological, scientific, environmental and legal development in marine areas and coastal zones of Belize 	<ul style="list-style-type: none"> Promotes cooperation among stakeholders (government, non-government, private sector etc.) on matters likely to have impact on ecology of coastal zone
Fisheries Resources Act (2020)	Primary fisheries legislation that guides the management of aquatic and fisheries resources of Belize	<ul style="list-style-type: none"> Promotes sustainable use and conservation of fisheries resources to “...<i>optimise present and future benefits through long term conservation, management sustainable use and development within the fisheries water of Belize...</i>”⁷³ 	<ul style="list-style-type: none"> Supports user/local rights for fishers Notes that the precautionary approach shall apply to conservation and management in order to protect fisheries and “<i>take into account livelihoods and users of fisheries resources</i>” 	<ul style="list-style-type: none"> Supports collaborative management through appointment of officers (Part No. 5 Appointment of officers, 5(3) of the Act where the Fisheries Administrator may appoint any member of a local fishing cooperative’s management committee with which the Division has a co-

⁷³ Fisheries Resources Act No. 7 of 2020.

Name of Policy, Law, Plan	Description	The policy/law/plan considers the ecological well-being of fisheries resources	The policy/law/plan considers socio-economic well-being of resource users including fisherfolk	The policy/law/plan considers collaborative management and inclusion of stakeholders in decision-making
		<ul style="list-style-type: none"> Speaks to the application of EAF and the precautionary approach to conservation and management of fishery resources Considers that management decisions be based on best available information and designed to maintain and/or restore stocks at a level capable of producing maximum sustainable yield or any other approved reference relevant to environmental, social and economic factors as well as fishing patterns and interdependence of stocks and species interactions Supports sustainable fisheries management efforts (managed access, establishing landing sites, traceability, vessel monitoring) 	<ul style="list-style-type: none"> Considers rights in the definition of 'managed access': <i>"Belize's fisheries management tool that establishes secure fishing tenure for fishing areas (also called territorial Use Rights for Fishing or TURF); and allocates secure licenses to fish in a specified zone called managed access area."</i> Considers interdependence between human and ecosystem well-being and socio-economic aspects, aligning with the EAF approach Considers welfare and livelihood of fishers and the fishing community Supports sustainable fisheries management efforts (managed access, establishing landing sites, traceability, vessel monitoring) 	<p>management agreement – to be a Fisheries Officer.</p> <ul style="list-style-type: none"> Supports co-management of marine/fishery areas through legal agreements: <i>Minister may enter into co-management agreements and delegate co-management responsibility (complete or partial) with a local, registered, non-governmental organisation, fishing cooperative, fishing organisation</i> Supports stakeholder engagement in aspects of management e.g. extensive stakeholder engagement in the establishment (and continued use of) Managed Access Program
High Seas Fishing Act (2013)	Makes provisions for Belize's implementation of the Agreement to promote Compliance with the	<ul style="list-style-type: none"> Promotes long term conservation and management, and sustainable 	Considers penalties in relation to the nature, circumstances, extent and gravity of the prohibited act or acts committed and its financial	<ul style="list-style-type: none"> Promotes consultation on international fisheries management (This refers to

Name of Policy, Law, Plan	Description	The policy/law/plan considers the ecological well-being of fisheries resources	The policy/law/plan considers socio-economic well-being of resource users including fisherfolk	The policy/law/plan considers collaborative management and inclusion of stakeholders in decision-making
	International Conservation and Management Measures by Fishing Vessels on the High Seas adopted by the Conference of the FAO in 1993, and other matters relating to fishing by Belize fishing vessels in the marine waters beyond territorial waters	<ul style="list-style-type: none"> • use of marine resources on the high seas • Grants powers to make regulations related to pollution, fishing gear, shark finning, bottom trawling, etc. 	and economic impact on the fishing industry (and the environment)	consultation with other neighbouring nations)
Integrated Coastal Zone Management Plan (2016-2020)	A cross-sectoral planning framework which recommends actions to ensure sustainable coastal resource use through balance of conservation with the economic and social needs of Belize	<ul style="list-style-type: none"> • Encourages sustainable coastal resource use and management including activities such as coastal research and monitoring, protected areas management, mangrove protection, coastal habitat and species conservation, invasive species management, fisheries management, etc. 	<ul style="list-style-type: none"> • Addresses support for integrated development planning, building alliances to benefit Belizeans, and adaptation to climate change • Considers the socio-ecological vulnerability and resilience as well as socio-economic climate adaptation capacity of Belize 	<ul style="list-style-type: none"> • The Coastal Zone Management Authority and Institute has no mandate for implementation of the plan. The organisation relies on mainstreaming the plan, with adoption and implementation by respective government and non-governmental agencies⁷⁴
National Biodiversity Strategy and Action Plan (2016-2020)	A 5-year plan intended to define the current state of biodiversity, threats, and strategies and priority actions to ensure conservation and sustainable use	<ul style="list-style-type: none"> • Covers conservation of biodiversity, sustainable use of biodiversity and fair and equitable sharing of the benefits arising from use of genetic resources⁷⁵ 	<ul style="list-style-type: none"> • Considers present limited understanding of changing socio-ecological systems and need to promote understanding of them related to climate change impacts. 	<ul style="list-style-type: none"> • Highlights actions for capacity development towards implementation of the Plan including strengthening collaborative partnerships between government

⁷⁴ National Biodiversity Strategy and Action Plan Belize 2016-2020

⁷⁵ National Biodiversity Strategy and Action Plan Belize 2016-2020

Name of Policy, Law, Plan	Description	The policy/law/plan considers the ecological well-being of fisheries resources	The policy/law/plan considers socio-economic well-being of resource users including fisherfolk	The policy/law/plan considers collaborative management and inclusion of stakeholders in decision-making
			<ul style="list-style-type: none"> • Acknowledges the population's <i>"dependence on the socio-economic benefits from Belize's marine and terrestrial resources"</i> and notes <i>"the duty to be responsible stewards, with fair and equitable sharing of the costs to conserve it"</i> • Notes that the sustainable use and conservation can be achieved when socio-economic needs are addressed through integrated and holistic approaches 	<p>departments and ministries, private sector and civil society</p>
<p>National Protected Areas Systems Act (2015)</p>	<p>Provides for the maintenance of coordinated management of a system of protected areas (including marine reserves, protected seascape or spawning aggregation sites) in Belize that are effectively managed, ecologically based, consistent with international law and based on best available scientific information and the principles of sustainable development</p>	<ul style="list-style-type: none"> • Establishes national parks, nature reserves (including marine reserves spawning aggregation site), wildlife sanctuaries, natural monuments • Prohibits hunting/killing of animals or collecting plants and other related activities in nature reserves, wildlife sanctuaries and natural monuments 	<ul style="list-style-type: none"> • Makes allowances for the issuing of permits for fishing in any national park, wildlife sanctuary or natural monument where such activity will not destroy/detract from the principle for establishing the area 	<ul style="list-style-type: none"> • Co-management agreements are addressed in Part VI of the Act where the Minister may enter into an agreement with an NGO, or another organisation, local community or other part for co-management or the regulation of human activities that affect the environment in the areas (e.g. fishing). [Part VI, No. 30 Power to enter into co-management agreement].

Name of Policy, Law, Plan	Description	The policy/law/plan considers the ecological well-being of fisheries resources	The policy/law/plan considers socio-economic well-being of resource users including fisherfolk	The policy/law/plan considers collaborative management and inclusion of stakeholders in decision-making
National Trade Policy (2019-2030)	Guides the development of a competitive economy by utilising trade as a significant driver for inclusive and sustainable socio-economic development ⁷⁶	<ul style="list-style-type: none"> Section 10.4 'Trade and Environment' speaks to sustainable development, promoting integration of environmentally safe and sustainable practices, promoting eco-friendly economic activities and reviewing legislation to strengthen policies to protect the environment⁷⁷ 	<ul style="list-style-type: none"> Recognises socio-economic development is affected by a variety of aspects including demographics and technological efficiency Identifies fisheries and marine products as priority economic areas for Belize 	<ul style="list-style-type: none"> Emphasises that strong political drive and close collaboration among all stakeholders (public and private) will be key success factors of the trade policy⁷⁸ Includes, for example, strengthening of relevant stakeholders in administration and regulation of non-tariff measures
Protected Areas Conservation Trust Act (Rev. Ed. 2015)	Establishes a trust for protection, conservation and enhancement of the natural and cultural resources of Belize through establishment of a Trust Fund for the purpose of funding towards these objectives. The Fund is financed through a non-traditional revenue generation strategy where a conservation fee is paid by foreign visitors departing Belize, and through a 20% fee from protected areas	<ul style="list-style-type: none"> The Protected Areas Conservation Trust (PACT) is responsible for facilitating and development of a strategic plan for the National Protected Areas System Plan, including facilitating implementation. Under secondary activities that qualify for Trust Funding; completing further ecological assessments and scientific investigation in protected areas is listed. 	<ul style="list-style-type: none"> Funds 'green-oriented' infrastructure projects within protected areas consistent with approved management plans. Under secondary activities that qualify for Trust funding; community development around protected areas is referenced including technical assistance for managing protected areas, community-driven projects to complement objectives of the Trust, community activities that enable sustainable 	<ul style="list-style-type: none"> Functions of the Trust include <i>"to promote coordination of, and collaboration within, the National Protected Areas System"</i>

⁷⁶ Government of Belize. National Trade Policy (2019-2030)

⁷⁷ Government of Belize. National Trade Policy (2019-2030)

⁷⁸ Government of Belize. National Trade Policy (2019-2030)

Name of Policy, Law, Plan	Description	The policy/law/plan considers the ecological well-being of fisheries resources	The policy/law/plan considers socio-economic well-being of resource users including fisherfolk	The policy/law/plan considers collaborative management and inclusion of stakeholders in decision-making
	revenues obtained via entrance, concession, permit and license fees; along with other grants and donations obtained.		development and training for communities for skills in protected areas management and mitigation and adaptation projects for example.	
Wildlife Protection Act (Rev. Ed. 2000)	Provides for conservation, restoration and development of wildlife; for the regulation of its use and all matters connected to wildlife (including species that live either wholly or partially in marine habitats such as whales, dolphins, salt-water crocodile, manatee, caribbean monk seal and morelet's crocodile)	<ul style="list-style-type: none"> • Places restrictions on hunting in any area closed to hunting wildlife (hunting of any species, to have any part of any species in possession, or to have gun, spear, or any other means for hunting in their possession whilst in the closed area • Prohibit the hunting of any obviously immature wildlife/female accompanied by young 	<ul style="list-style-type: none"> • Issue of licences, fees: Game Warden may issue licences consistent with the principles of good wildlife management 	<ul style="list-style-type: none"> • No specific mention of collaborative management and inclusion of stakeholders in decision-making

6 Mechanisms for fisherfolk participation in decision-making

Taking action is a fundamental part of ecosystem stewardship. Stewardship actions include the range of approaches, activities, behaviours, and technologies that are applied to protect, restore or sustainably use the environment. In the case of small-scale fisheries, stewardship actions by fisherfolk and/or their organisations are influenced by formal or informal decision-making processes about the use of fisheries resources that may or may not involve fisherfolk. Participation and involvement of stakeholders in the fisheries management decision-making process is advantageous as it facilitates common understanding, establishes trust, manages conflict, increases stakeholder responsibility and accountability and enhances the legitimacy and acceptance of management policies and decisions thereby contributing to more effective enforcement of rules and regulations and increasing likelihood of compliance⁷⁹. To determine the extent to which fisherfolk were being included in decision-making processes related to the management of fisheries and other coastal and marine resources the institutional analysis examined the existence, composition and functioning of current National Intersectoral Coordinating Mechanisms (NICs).

The CLME+ SAP identified interactive governance arrangements such as NICs essential to successfully implementing and achieving EBM and EAF. In the CLME+ region NICs can be broad or narrow based on the scope and ecosystem approach being used. Examples of NICs include: Fisheries Advisory Committees or Councils, Ocean Governance Committees, sustainable development commissions, integrated coastal management institutions and climate change bodies.

NICs operate within the policy cycle and involves interactions across multiple scales, stakeholders, sectors and levels of governance (local, national, regional and international). A NIC can be considered as the operational arm of good and effective governance or policy processes.⁸⁰

Inclusion of fisherfolk and fisherfolk organisations within NICs will encourage and support ecosystem stewardship by increasing the stakeholder inclusion of these resource users in the governance aspect of fisheries management, contribute to building and establishing trust and provide an avenue for including their perspectives among other advantages.

6.1 Findings for mechanisms for fisherfolk participation in decision-making in Belize

The pre-webinar survey and national validation webinar were used to engage participants to validate current NICs in Belize identified during the desk study; as well as to identify any missing current NICs related to the coastal and marine sector in Belize. Participants were also asked during the webinar to share information on the composition of the NIC, especially whether it included fisherfolk or not, or if this information was unknown to share where additional information could be sourced for further analysis.

Table 6.1 shows the NICs that were identified during the desk study and by participants via pre-webinar survey and during the national validation webinar. Additional focus is given to the Fisheries Advisory Board and Fisheries Council as the directly related fisheries management NICs.

⁸⁰ Compton, S., McConney, P., Monnereau, I., Simmons, B. and Mahon, R. 2016. Good practice guidelines for successful National Intersectoral Coordinating Mechanisms (NICs). CLME+ COMMUNICATION – CERMES Technical Report no. 88.

Table 6.1 Relevant national intersectoral coordinating mechanisms (NICs) relevant to the fisheries sector of Belize

NIC	Purpose	Composition	Are fisherfolk members of the NIC?	Active/Inactive
Fisheries Council	Established under the new Fisheries Resources Act No. 7 of 2020 to deal with stakeholder concerns and advise government on fisheries management practices, including establishment of fishing priority areas	<ul style="list-style-type: none"> ○ Chief Executive Officer of Ministry responsible for fisheries who shall be the Chair, ○ Chief Executive Officer of CZMAI or his designate, ○ Chief Environmental Officer or his designate, ○ Senior Economist of the Ministry responsible for economic development or his designate, ○ Chief Tourism Officer of the Ministry responsible for tourism or his designate, ○ two members selected from among the largest producing and registered fishing cooperatives, ○ two members selected from among the registered fishermen organisations, ○ one member representing a non-governmental organisation with an interest in conservation and sustainable use of fisheries resources, the corporate headquarters of which is in Belize, ○ a person with expertise in fisheries science, ○ Fisheries Administrator 	Yes; explicit inclusion of two fishing cooperatives and two fishermen organisations representatives	Inactive, Enacted within recently passed Fisheries Resources Act 2020 and will serve to replace the Fisheries Advisory Board
Fisheries Advisory Board	The Fisheries Advisory Board has never been incorporated into legislation but has remained an administratively constituted body and exists and operates as such. The Fisheries Advisory Board advises the Minister on fisheries management including aspects related to the management plan, amendments to regulations, acts, access agreements, and coordination of policies and activities related	Structure was typically via the Minister (of the responsible ministry) appointing members upon joint advice of the Permanent Secretary and Fisheries Administrator who use criteria for selection including: knowledge of fisheries industry, experience in fisheries industry, active engagement in a sector closely related or overlapping with fishing industry, expertise in legal matters and particularly Fisheries Regulations, knowledge of maritime transport and expertise in management and development planning. ⁸²	Yes; organisations that have served on the FAB have included: Fishing cooperatives and secondary body,	Active, Due to be replaced by the newly enacted Fisheries Council under the new Fisheries

⁸² McConney, P., R. Mahon and R. Pomeroy. 2003. Belize case study: Fisheries Advisory Board in the context of integrated coastal management. Caribbean Coastal Co-management Guidelines Project. Caribbean Conservation Association, Barbados. 70pp.

	to fisheries resources. ⁸¹ This Fisheries Advisory Board will be replaced by the Fisheries Council, formally and legally enacted under the Fisheries Resources Act of 2020.		independent fishers	Resources Act of 2020.
Managed Access Committee	Under the Managed Access Program, area-based committees for each fishing area are formed with responsibility to vet applications for managed access licences for fishers of the area and make recommendations to the Fisheries Department. They also make management recommendations for their respective areas, represent fishermen from their community that are resource users, and provide feedback to fisherfolk in their communities. Each committee is guided by a specific terms of reference. ⁸³	Composed primarily of elected affiliates (part of a fishermen organisation) and independent fishermen from each stakeholder community. Committees also include co-managers of the MPAs and representatives from the Belize Fisheries Department.	Yes; includes fisherfolk as independents and/or members and representatives of fisherfolk organisations	Active
Turneffe Atoll Advisory Committee ⁸⁴	To advise on efficient management of Turneffe Atoll Marine Reserve	Members are appointed by the post they hold in respective organisations and the committee includes representatives from: Fisheries Department, Forestry Department, Coastal Zone Management Authority and Institute, Turneffe Atoll Sustainable Association, Turneffe Atoll Trust, Association of Protected Areas Management Organisations, Protected Areas Conservation Trust, Ministry responsible for Tourism, Ministry responsible for Natural Resources, Environmental Research Institute of the University of Belize, an International non-governmental organisation, Belize Fishermen Federation, Belize Fishermen Cooperative Association, a representative with primary tourism business located at Turneffe, private landowners of Turneffe and any other person as appointed by the Fisheries Administrator. ⁸⁵	Yes; includes representatives of Belize Fishermen Federation and Belize Fishermen Cooperative Association	Active

⁸¹ McConney, P., R. Mahon and R. Pomeroy. 2003. Belize case study: Fisheries Advisory Board in the context of integrated coastal management. Caribbean Coastal Co-management Guidelines Project. Caribbean Conservation Association, Barbados. 70pp.

⁸³ Martinez, V.I. et al. n.d. Managed Access: A Rights-Based Approach to Managing Small Scale Fisheries in Belize.

⁸⁴ Example of one of the fishing areas' Managed Access Committee

⁸⁵ Turneffe Atoll Marine Reserve. Management. [online]. <http://www.turneffeatollmarinereserve.org/reserve-management>

Of the NICs (and NIC-like structures) identified, all included fisherfolk in its composition. The Fisheries Advisory Board which functioned in an advisory role since 1965; has never been legally institutionalised but functioned, despite not having a legal mandate, to advise the responsible minister responsible for fisheries resources management in diverse topics related to fisheries management, conservation and development issues.⁸⁶ This NIC would now be replaced by the legally institutionalised Fisheries Council established under the Fisheries Resources Act 2020. The Council is proposed to deal with stakeholder concerns and advise government on fisheries management practices, including establishment of fishing priority areas. The Council will include twelve members, four of which are to be fisherfolk and one a representative of a non-governmental organisation working in conservation and sustainable use of fisheries resources.

The perceived decision-making power of the Fisheries Advisory Board differed among stakeholders engaged for this study, with co-managers of marine protected areas having the perception that the Board had high decision-making power; while fisherfolk perceived the Board's decision-making power to be minimal. Other stakeholders highlighted the advisory nature of the Board being the constraining factor – in that the relative decision-making influence of the Board is reliant on its interaction with the responsible minister and is dependent upon this interpersonal and professional dynamic.⁸⁷

7 Support and resources for ecosystem stewardship by fisherfolk and their organisations

To undertake ecosystem stewardship, would-be stewards must have the support and resources to do so. In this case “support and resources” refer to the finances, technology and equipment and education, skills and knowledge needed to effectively undertake ecosystem stewardship actions. In addition to directly supporting ecosystem stewardship actions, access to these resources may also ensure that aspects of fisherfolk's human well-being (e.g. access to training to ensure safety at sea) are considered by support agencies and may provide motivation for stewardship actions.

To determine whether fisherfolk have adequate support and resources to undertake ecosystem stewardship actions, the institutional analysis examined some of the projects, programmes and initiatives in Belize that have provided or are providing finances, technology and equipment and capacity building (e.g. education, skills and knowledge) to fisherfolk and their organisations.

Through desk study, post-webinar survey for the national validation webinar, as well as virtual interviews with Belize stakeholders; various projects, programmes and initiatives aimed at providing support and resources to fisherfolk and fisherfolk organisations were identified by stakeholders and are highlighted in Table 7.1. It should be noted the listed support and resources set out in Table 7.1 is not meant to be comprehensive but is rather representative in providing general insight into the type of support and resources that are available to fisherfolk and fisherfolk organisations in Belize.

Overall, opportunities exist for Belizean fisherfolk organisations to receive a range of support and resources including small grants, fishing equipment and training in sustainable practices, small business management and leadership. The environmental civil society organisations in Belize, many of which are co-managers of marine protected areas alongside the Belize Fisheries Department,

⁸⁶ McConney, P., R. Mahon and R. Pomeroy. 2003. Belize case study: Fisheries Advisory Board in the context of integrated coastal management. Caribbean Coastal Co-management Guidelines Project. Caribbean Conservation Association, Barbados. 70pp.

⁸⁷ McConney, P., R. Mahon and R. Pomeroy. 2003. Belize case study: Fisheries Advisory Board in the context of integrated coastal management. Caribbean Coastal Co-management Guidelines Project. Caribbean Conservation Association, Barbados. 70pp.

often access funding in order to support their mandates and activities which include providing support and resources to fisherfolk who operate in their responsible areas as a target stakeholder. However, improved organisational strengthening and capacity building of fisherfolk organisations would improve their ability to directly access financing towards support and resources in actioning ecosystem stewardship projects.

Funding provided by international development organisations significantly enables the support provided through grants for projects which are collaboratively implemented among stakeholders such as the government (Belize Fisheries Department) and civil society organisations.

Table 7.1 Projects, programmes and initiatives providing support and resources to fisherfolk and fisherfolk organisations in Belize

Name of project/programme/initiative	Description of project/programme/initiative	Type of support /resources provided	Organisation delivering project/programme/initiative	Organisation type
Managed Access Program (2016) ⁸⁸	<p>A rights-based fishing program which gives traditional fishers access to fishing grounds. It was piloted in 2011 at Glover’s Reef Marine Reserve and Port Honduras Marine Reserve to change the ‘open access’ fishing system in Belize to one of limited entry. The program was expanded nationally in 2016.</p> <p>The Program assigns local user rights to fisherfolk via a licensing system which assigns a specific number of fishers to each fishing area; identified by a colour coded system attached to boats and an identification on each fisher’s license as to their assigned fishing area.</p> <p>All fishers which venture into a given fishing area must be licensed to fish in that area and are to fish within a designated fishing area in order to be allowed access and rights to fish; meaning – in a fishing boat crew – all fishers in the crew must be registered within the area as registered fishers. This supports fisherfolk by assigning their local user rights and protecting the resources they rely on from overexploitation by managing the number of fishers allowed.</p>	<ul style="list-style-type: none"> • Aims to reduce fishing pressure and illegal fishing through provision of secure fishing grounds to traditional fishers • Addresses issues caused by open-access nature of fishery including pressures of increasing numbers of fishers in a mature fishery, decline in catches especially for Spiny Lobster and Queen Conch • At the pilot sites, the first four years of implementation included a socio-economic survey that fishers were asked to complete when renewing their licenses annually • Stricter license issuances resulted in criteria that ensures persons who obtain access are <i>bonafide</i> users of the area • Consultation and education and outreach process was conducted by the Managed Access technical team before implementation of program at sites and included all licensed fishers • Consultations, surveys, meetings, focus groups held in order to ensure policies developed had the fisherfolk support for implementation 	Belize Fisheries Department	Government

⁸⁸ Martinez, V.I. et al. n.d. Managed Access: A Rights-Based Approach to Managing Small Scale Fisheries in Belize

Name of project/programme/initiative	Description of project/programme/initiative	Type of support /resources provided	Organisation delivering project/programme/initiative	Organisation type
<p>Resilient Central America (ResCA) Programme</p> <p><i>Regional programme that included Belize as a project country</i></p>	<p>Programme aimed at contributing to food security by promoting resilience to climate change in the agricultural and fisheries sector of Central American countries.</p> <p>In Belize the programme included a subproject aimed at supporting improvements in Belize's conch and lobster fishery production through full electronic traceability of the fisheries supply chain. It involves the use of a technology called "Tally", created by ThisFish⁸⁹ which tracks the product from landing to buyer. The National Fishermen Cooperative which is the second largest fishing cooperative in Belize was an implementing partner in this project (alongside the Belize Fisheries Department and The Nature Conservancy and other conservation NGOs). The use of the technology will allow the cooperative to better monitor activities and ensure traceability. The cooperatives produce and commercialise seafood in Belize therefore; improved knowledge of their activities will assist in their business monitoring and management.</p>	<ul style="list-style-type: none"> • Training in new electronic product tracking technology, Tally • Technology: Tally software 	<p>The Nature Conservancy, Belize Fisheries Department, National Fishermen Cooperative</p>	<p>Government, Civil Society</p>
<p>Conservation of Marine Resources in Central America</p>	<p>Project aimed at contributing to the conservation of the ecological functions of the Mesoamerican Reef System.</p>	<p>Project activities in Belize included:</p> <ul style="list-style-type: none"> • Training of fishers in reef monitoring, tour guiding, leadership 	<p>Regional cooperation between Central America and</p>	<p>International Development Organisation; Civil Society</p>

⁸⁹ ThisFish Inc. is a company which develops and provides seafood traceability and production software that improves business efficiency and increases trust and accuracy in supply chain data. <http://this.fish/>

Name of project/programme/initiative	Description of project/programme/initiative	Type of support /resources provided	Organisation delivering project/programme/initiative	Organisation type
<p>Project (Phases I and II)</p> <p><i>Regional project that included Belize as a project country</i></p>	<p>One of the activities for Belize under the project included the award of a small grants to various civil society organisations co-managing protected areas. One such small grant was awarded to the Turneffe Atoll Trust to strengthen Turneffe’s fishing community by enhancing their ability to become environmental stewards and set the stage for Turneffe to become a model sustainable fishery.</p>	<ul style="list-style-type: none"> • Information sharing on sustainable fishing practices through fish fairs • Equipment: provision of scale and caliper to trained fishing vessels in order to measure and estimate size and weight limits and used information to complete logbooks for improved data collection to inform management 	<p>Germany, implemented by the Fund for Mesoamerican Barrier Reef System and financed by the Federal Republic of Germany through KfW⁹⁰</p> <p>Belize partners: Toledo Institute for Development and Environment, Protected Areas Conservation Trust</p> <p>Small grants awarded to the following co-managers of protected areas: Turneffe Atoll Trust, Belize Audubon</p>	

⁹⁰ KfW is a German state-owned development bank, based in Frankfurt, Germany

Name of project/programme/initiative	Description of project/programme/initiative	Type of support /resources provided	Organisation delivering project/programme/initiative	Organisation type
			Society, Southern Environmental Association.	
Protected Areas Conservation Trust – Small and Medium sized Grants Programme	\$800,000 small and medium sized grants programme targeted at civil society organisations for projects under the themes of Protected Areas Management and Conservation, Protected Areas Promotion and Development, and Environmental Education and Awareness	Small grant of \$50,000 was awarded to the Belize Fishermen Cooperative Association for financial support in execution of the project “Improvement of Marine Biodiversity through empowerment of fishers”	Protected Areas Conservation Trust	Government
Global Environmental Facility - Small Grants Programme	An ongoing small grants programme implemented by the Global Environment Facility that provides financial and technical support to communities and civil society organisations globally to meet the overall objective of global environmental benefits secured through community-based initiatives and actions	Small grants have been awarded to fisherfolk organisations in Belize for the following projects: <ul style="list-style-type: none"> ○ “Building Community resilience in Copper Bank Village for the Successful Implementation of Managed Access in a Dynamic Fishing Industry” - awarded to Copper Bank Fishermen Association⁹¹ ○ “Building Capacity of Sarteneja Village to Contribute to the Success of Managed Access in Belize” -awarded to Sarteneja Fishermen Association⁹² 	Global Environmental Facility - Small Grants Programme	International Development Organisation
Restoring Fisheries in Mesoamerican Barrier Reef System Project	Project aimed at improving stakeholder participation in governance, education and outreach, enforcement, fisheries science and institutional strengthening	Training in small business management and financial management for fishers	Funded by the European Union and coordinated by Toledo Institute for	International Development Organisation; Government

⁹¹ Project Number: [BZE/SGP/OP6/Y2/CORE/BD/2017/05](#)

⁹² Project Number: [BZE/SGP/OP6/Y2/CORE/CD/2016/06](#)

Name of project/programme/initiative	Description of project/programme/initiative	Type of support /resources provided	Organisation delivering project/programme/initiative	Organisation type
			Development and Environment in partnership with Belize Fisheries Department, the Belize Audubon Society and the Southern Environmental Association	
Marine Conservation and Climate Change Adaptation Project	Project aimed at implementing priority ecosystem-based marine conservation and climate adaptation measures to strengthen the climate resilience of the Belize Barrier Reef System. The project includes promotion of sustainable alternative livelihoods and income diversification for affected users of the reef	Training to fisherfolk household members on tour guiding, motor repairs, alternative livelihoods	Led by the Ministry of Agriculture, Fisheries, Forestry, Environment and Sustainable Development with fiduciary management assistance from the Protected Areas Conservation Trust as the national-level implementing entity and the World Bank as	International Development Organisation; Government

Name of project/programme/initiative	Description of project/programme/initiative	Type of support /resources provided	Organisation delivering project/programme/initiative	Organisation type
			the multi-lateral implementing entity. The five-year project is funded by the Adaptation Fund grant.	
On-going work programme of the Belize Audubon Society	As part of its regular work programme the Belize Audubon Society offers capacity building for fisherfolk and their organisations	<ul style="list-style-type: none"> • Training in a range of areas including grant writing • Information sharing 	Belize Audubon Society	Civil Society

8 Partnerships and networks for ecosystem stewardship

Partnerships and networks connect institutions and organisations across levels and scales. For fisherfolk organisations seeking to engage in ecosystem stewardship, partnerships and networks are important as these arrangements help facilitate information flows, fill knowledge gaps, and strengthen expertise for ecosystem management, including stewardship.⁹³ This section discusses a few current or past partnerships or networks in Belize that included fisherfolk organisations and how these have impacted ecosystem management.

8.1 Findings for partnerships and networks for ecosystem stewardship

Fisherfolk organisations in Belize engage in partnerships with government and civil society organisations such as co-manager civil society organisations for various initiatives related to ecosystem management including livelihood development.

Although various stakeholders highlighted the need for capacity development of fisherfolk to effectively partner in ecosystem stewardship initiatives; this perception was more so related to organisational capacity (e.g. organisational capacity to manage projects and financial sustainability) and not to any perceived lack of understanding on the importance of sustainable use of resources or protection for the marine environment including how this relates to their livelihoods⁹⁴. Table 8.1 provides a number of examples of partnerships between fisherfolk and other stakeholders in the areas related to ecosystem management:

Table 8.1 Partnerships and networks for ecosystem stewardship with fisherfolk and their organisations

Area	Description of partnership and/or network
Management planning	<ul style="list-style-type: none"> Stakeholder engagement with Belize Fisheries Department and fisherfolk on drafting of policy and legal context related to fisheries resources management via stakeholder consultation and input towards creation of the Fisheries Policy as well as the newly enacted Fisheries Resources Act 2020.
Decision-making and advice	<ul style="list-style-type: none"> Fisherfolk are represented on the Fisheries Advisory Board, a multi-stakeholder advisory group for the Minister responsible for Fisheries Resources Management. The Board will be replaced by the Fisheries Council; established as a legally mandated Council under the Fisheries Resources Act 2020, which will have fisherfolk representation (as mandated in the Act).
Collaborative management	<ul style="list-style-type: none"> The Belize Fisheries Department and its civil society co-managers for marine protected areas in Belize maintain strong collaborative management of marine resources relevant to the fisheries industry. This co-management relationship facilitates stronger networking and support available to fisherfolk in assigned fishing areas that either fall within these marine protected areas or neighbour them. Each of these fishing areas has a Managed Access Committee, which includes fisherfolk, which makes decisions on the licensing of fishing vessels and other matters related to the fishing area.

⁹³ Building Transformative Capacity for Ecosystem Stewardship in Social–Ecological Systems https://www.researchgate.net/publication/226922986_Building_Transformative_Capacity_for_Ecosystem_Stewardship_in_Social-Ecological_Systems

⁹⁴ Interview with BFCa by CANARI, June 2020.

	<ul style="list-style-type: none"> • Under the Managed Access Program, fishers helped with enforcement of fishing limits through active participation in monitoring and reporting of commercial species catches. This resulted in declines in illegal and unreported fishing activities.⁹⁵
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9 Communication of information on sustainable practices for fisheries resources use

Communication is the means to share information on best practices, lessons learnt, available support/resources, training, networking, and opportunities for participatory decision-making that can support effective ecosystem stewardship. The institutional analysis examined the extent to which providers of fisheries information in Belize were using defined communication strategies, tools and channels to communicate with fisherfolk, as well as their capacity to use the tools and channels effectively; including the structures and systems in place for clear communication.

One of the key providers of fisheries information, including on sustainable use practices, to fisherfolk in Belize, is the Belize Fisheries Department. Communication by the Department is guided by its Communication, Education and Public Awareness Strategy and Action Plan for the Fisheries, which was created in 2017 with support from the Belize Marine Conservation and Climate Adaptation Project. The plan considers its target audience, key messages and channels and tools to execute. The channels established in this written document coincide with established communications activities being undertaken by co-managers of areas e.g. boat-to-boat communication, community and national events, website and social media platforms.

The contents of the plan reflect information obtained from a variety of stakeholders involved in the fisheries institution in Belize, including co-manager groups such as the Turneffe Atoll Sustainability Association, Belize Audubon Society, academia, and fisherfolk groups such as BFCA, including use of key message points (e.g. strengthening of fisherfolk organisations to support access to ecosystem stewardship funding), and of channels and tools such as boat-to-boat communication, conversing with women, social media, education and the curriculum and community and national events, etc.

The Department shares information about sustainable use practices via traditional media e.g. radio, newspaper and television; as well as through modern communication methods e.g. social media platforms such as Facebook, and the Department's website. The Department has found in practice; the boat-to-boat communication is most effective in sharing information with fisherfolk as fishers spend most of their time at sea and are notably more approachable when visited on their fishing grounds in the field. Social media has also been noted as reaching a larger group due to technological access by the younger fishers or by fishers' kids passing on the information to their parents.⁹⁶

10 Organisational Assessment of fisheries authority in Belize

While fisheries authorities have adopted EAF principles as an approach; evidenced by their inclusion in policies and plans (see Table 5.2), many have not yet adopted these principles within their administrative procedures and/or do not currently possess the capacities to facilitate effective collaborative management procedures.

⁹⁵ Reef Resilience Network. 2016. Belize – Fisheries Management. Belize Lobster and Conch Fisheries: Collective Impact of Managed Access Program puts Fisheries on Path to Recovery.

⁹⁶ Organisational Capacity Assessment Survey for National Fisheries Authorities (Appendix 13.6)

As part of the institutional analysis, an organisational assessment of the of the state agency with direct responsibility for fisheries management was conducted in each country to identify gaps and develop recommendations to better adopt the EAF approach and subsequently support fisherfolk and their organisations in actioning ecosystem stewardship. The assessment was conducted via survey to provide a rapid assessment of the state agency’s internal capacity to support ecosystem stewardship by fisherfolk and their organisations. The questions in the survey examined the following four capacity areas to explore the organisational motivation and capacity for supporting ecosystem stewardship by fisherfolk:

1. Vision, mandate and culture – the organisation’s visions and goals, its operational culture and its internal governance mechanisms and how they promote ecosystem stewardship.
2. Practices – the translation of the organisation’s core beliefs into actions that support ecosystem stewardship by fisherfolk organisations as it relates to decision making, collaboration and information sharing.
3. Knowledge and skills – the organisation’s capacity to provide fisherfolk and fisherfolk organisations with the relevant knowledge and skills support required for improved stewardship actions.
4. Resources – focuses on the finance, equipment, materials, tools and methods that the organisation has access to for supporting fisherfolk with ecosystem stewardship activities and initiatives.

The assessment was conducted as an organisational self-assessment – where the selected agency, either through a small focus group (including relevant and knowledgeable staff members) or via an elected representative, completed the survey.

In the case of Belize, the organisational assessment focused on the Fisheries Department.

10.1 Findings from organisational assessment of the fisheries authority in Belize

The Belize Fisheries Department, in its responsibilities related to fisheries management; is a key stakeholder in the fisheries institution in Belize and plays an important role in supporting ecosystem stewardship by fisherfolk. Improved ecosystem stewardship by fisherfolk and their organisations can benefit the Department by reducing or minimising the burden on the Department’s limited financial and human resources for enforcement of fisheries regulations and contributing to the sustainable use, conservation and protection of costal and marine resources for which the Department has management responsibility.

The Belize Fisheries Department functions under a mission to provide the country and people of Belize with the best management possible of the nation’s aquatic and fisheries resources, with the intent to optimise present and future benefits via efficient and sustainable management.

Table 10.1 provides a synthesis of the organisational assessment survey findings for the Belize Fisheries Department found in Appendix 13.6 and recommendations for addressing gaps related in the four capacity areas evaluated. Each capacity area is also given an overall ranking based on the findings using a traffic light rating system, where:

	Indicates that the agency is effectively supporting ecosystem stewardship by fisherfolk and their organisations in the capacity area, with non-critical gaps to be addressed
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	Indicates that the agency is adequately supporting ecosystem stewardship by fisherfolk and their organisations in the capacity area, but there are some critical gaps to be addressed
	Indicates that the agency factor is not adequately supporting ecosystem stewardship by fisherfolk and their organisations in the capacity area and there are critical gaps to be addressed

Table 10.1 Organisational assessment of Belize Fisheries Department

Capacity area	Evaluation question and explanation	Response provided by agency	Overall ranking for section based on responses	Gaps/Recommended areas for strengthening
Vision, Mandate and Culture	Organisation has a vision statement that is supportive of /promotes ecosystem stewardship by fisherfolk	Yes		<ul style="list-style-type: none"> Based on organisational responses, the vision and mission appear to have been recently revised or has not been updated in public forum such as the Department's website – which has a different listed Mission. The organisation's improvements to the vision and mission which encompass an ecosystem approach; should be reflected on public media; which is accessible to a wide range of stakeholders in the wider institution – including donors who may require/query the organisation's approach towards EAF as a prerequisite for funding related to projects on EAF.
	Organisation's mandate supports ecosystem stewardship by fisherfolk Explanatory notes provided by agency: <ul style="list-style-type: none"> Department's vision which is <i>"A sustainable and resilient fisheries sector that effectively contributes to food security and the socio-economic development of Belize"</i> reflects supporting/promotion of ecosystem stewardship. Department's mission supports ecosystem stewardship which is <i>"To achieve sustainable fisheries management and development through improved governance, research, private sector and civil society participation, gender equality and equity, community stewardship and effective enforcement and compliance."</i> The Belize Fisheries Department's mandate supports ecosystem stewardship by fisherfolk. The Department continuously engages fisherfolk concerning natural resources and supports communication and involvement between its stakeholders (fishers). The mandate supports the integration of fisheries in all decision-making processes and supports ecosystem stewardship by fishers. Core values/beliefs that the Department identifies as its culture are: <ul style="list-style-type: none"> belief that ecosystem stewardship by fisherfolk is important for sustainable use of fisheries and marine resources. belief that fisherfolk can be effective ecosystem stewards and should be included in decision-making on management; values local and/or traditional knowledge; and Believes in the EAF. 	Yes		
Practices	Organisation has a clear process for including opinions of fisherfolk in decisions made about fisheries and marine resources	Yes		<ul style="list-style-type: none"> Inclusion of fisherfolk and their organisations in management initiatives focused on action-based participation versus consultative-based participation e.g. inclusion of fisherfolk and their organisations alongside
	Organisation regularly and systematically includes fisherfolk's input in decisions about how fisheries and marine resources are managed	Yes		
	Organisation regularly partners/collaborates with fisherfolk and their organisations for fisheries management initiatives	Yes		
	Organisation regularly facilitates collaboration/partnerships between fisherfolk and other fisheries and marine stakeholders	Yes		

	<p>Explanatory notes provided by agency:</p> <ul style="list-style-type: none"> • Consultations are used by the Department for including the opinions of fisherfolk in decisions made about fisheries and marine resources via meetings, workshops and forums on fisheries management. • Fisherfolk are included in multiple advisory roles for management of fisheries resources e.g. Fisheries Advisory Board (soon to be replaced by the Fisheries Council), Managed Access Committees, working groups and specific marine protected areas management committees. The Fisheries Council will allow for four fisherfolk representatives on the council. • The Department perceives fisherfolk view them (the Belize Fisheries Department) as a partner with whom they can collaborate on fisheries management; and the organisation identifies that it regularly highlights sustainable use practises by fisherfolk. The organisation collaborates with fisherfolk and their organisations by supporting the work fisherfolk organisations action under projects and providing guidance where necessary. One key example is the collaborative efforts in and under the Managed Access Program which went from an approach implemented at two pilot sites in 2011 to a National Program in 2016. • Department integrates local/traditional knowledge about fisheries and marine resources to inform management decisions; and records best practices related to sustainable use and management of marine resources; which is regularly shared with fisherfolk to provide information on sustainable fishing practices in a manner that they can understand. The Department has a communication strategy to share information with different stakeholders including fisherfolk and provides advice/guidance to fisherfolk for stewardship activities and initiatives. • The Belize Fisheries Department shares information with fisherfolk about sustainable use practices via traditional media like the radio, newspaper and television and also via social media (especially Facebook). The Department also has a website where information is shared for fishers and the general public to access. Many times, outreach with fishers is also done in the fishing communities or out at sea (visiting fishers at their fishing grounds and through a “boat to boat” approach). • The organisation has found that the most effective way to share information with fishers is via the “boat to boat” approach as fishers spend most of their time at sea and are more approachable when visited in their fishing grounds. Social media (Facebook) has also shown to get the information out to a larger group as the younger generation has more access to technology (younger fishers have more access to this and also fishers’ kids pass on the information to them). 		<p>implementation and enforcement of management plans.</p> <ul style="list-style-type: none"> • Given that both legal and policy context, as well as organisational practices allow for and accommodate the co-managerial option to assign management of marine resources areas to civil society organisations given they meet the required criteria to function as co-managers effectively; organisational strengthening and support for fisherfolk organisations to improve their capacity to become co-managers and take on a more active role in management of marine resources should be considered.
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Knowledge and Skills	Technical staff have knowledge of EAF	Yes		<ul style="list-style-type: none"> • Staff knowledge of EAF has been through exposure to related workshops and trainings over time. It may benefit the Department to have focused training on EAF for employees; in order to ensure equivalent knowledge and exposure on EAF principles to those who may; for example, have not attended workshops/trainings focused on this topic in detail thus far. • The Belize Fisheries Department does not currently have the capacity (human/financial) to provide training for fisherfolk in technical areas related to EAF and ecosystem stewardship, as well as organisational strengthening necessary to ensure adequate execution of ecosystem stewardship activities. The Department has indicated however it can support the execution of training. It is therefore recommended that the Department seek to leverage its strengths (e.g. fisherfolk engagement and a good rapport with fisherfolk organisations) towards a collaboration with a stakeholder willing to provide the necessary capacity to execute this training for fisherfolk towards improving their capacities for ecosystem stewardship.
	Technical staff have specialist knowledge on ecosystems, their functions and ecosystem changes	Yes		
	Technical staff understand socio-economic context of fisheries and marine resource use by fisherfolk and other stakeholders	Yes		
	Technical staff have knowledge of aquaculture and other alternative or complementary livelihood options for which fisherfolk may be well suited	Yes		
	Technical staff have knowledge of how fisherfolk organisations function including key challenges that they may face and how they can be supported to resolve them	Yes		
	Organisation has the capacity to provide training for fisherfolk in different technical areas and organisational strengthening (these may include soft skills such as facilitation, development of training material, etc.)	No		
	Technical staff has the skills to assist fisherfolk with mobilising funding for ecosystem stewardship activities and initiatives	Yes, Limited		
	Technical staff has skills in participatory approaches (e.g. participatory monitoring and evaluation, participatory planning, participatory management etc.)	Yes, Limited		
	Technical staff has communication skills needed to effectively communicate with a range of stakeholders including fisherfolk	Yes		
	Organisation provides or accesses training and other kinds of capacity building for staff to regularly improve their technical knowledge and skills	Yes		
Explanatory notes provided by agency: <ul style="list-style-type: none"> • Various staff trained and knowledgeable in fisheries management; with different levels of exposure to this knowledge. • Technical staff have an understanding of the socio-economic context of fisheries and marine resource use by fisherfolk and other stakeholders – as staff are often deployed for field work in communities and out at sea thereby gaining practical understanding of the context of resource use by fishers. • Capacity exists within the Department (individual employees) to conduct socio-economic assessments; which has been previously done by the Department during the roll out of the rights-based Managed Access Program. • Technical staff have an understanding and knowledge of alternative livelihood options, with projects focused on this topic having been carried out by the Department previously. There exists some organisational knowledge on aquaculture for example, however – the mandate and management of aquaculture have been 				

	<p>separated from that of fisheries as there is a specific aquaculture unit within the umbrella Ministry</p> <ul style="list-style-type: none"> • Technical staff that work closely with stakeholders (i.e. fisherfolk) have a good understanding of how their organisations operate and function; as well as the challenges they face. Staff also possess communication skills applicable to a wide range of stakeholders – developed over years of engagement (especially of fisherfolk) via various approaches (e.g. website, workshops, boat-to-boat, social media) and under various projects or programs. • The Department supplements its knowledge and skills foundation through workshops, seminars, conferences and meetings (national, internationally and most recently; via virtual platforms such as webinars). • Constant communication and engagement, continuous follow up and support, and an overall good relationship with fisherfolk has been integral in supporting ecosystem stewardship by fisherfolk and their organisations. 		<ul style="list-style-type: none"> • Capacity exists within individual technical staff to assist fisherfolk with mobilising funding for ecosystem stewardship activities and initiatives; however, many times the limiting factor is available to dedicate towards this action, both in terms of proposal development proposal and finding the funding necessary for these activities and initiatives.
Resources	<p>Organisation provides funding assistance to fisherfolk to support ecosystem stewardship activities or initiatives</p>	No	<ul style="list-style-type: none"> • The Department has limited access to resources (e.g. tools, documents) which are majority accessed through the published material available from the United Nations Food and Agriculture Organisation (FAO). It is recommended the Department leverage collaborations and networks made between Caribbean civil society organisations (e.g. CNFO, CANARI), international donor agencies (e.g. FAO, The Nature Conservancy, World Bank), and partners regionally who may face the same, or similar, challenges in fisheries management (e.g. other StewardFish target countries) in order to increase their available
<p>Organisation provides materials, equipment or technology to fisherfolk to support ecosystem stewardship activities or initiatives</p>	No, Limited		
<p>Organisation has access to tools, methods and good practices that can be used to support fisherfolk with ecosystem stewardship activities and initiatives</p>	No		
<p>Organisation provides access to or assists fisherfolk organisation with accessing networks or resources outside of itself (such as technical experts, funding, projects, etc.)</p>	Yes		
<p>Organisation has a dedicated website which can be used to share information and resources on ecosystem stewardship practices with fisherfolk</p>	Yes		
<p>Explanatory notes provided by agency:</p> <ul style="list-style-type: none"> • The Department does not provide funding assistance to fisherfolk to support ecosystem stewardship activities or initiatives. Fisherfolk organizations usually get funding via donors; through grants that they apply for. However, these grant applications are supported by the Fisheries Department and in some cases, there is in-kind support. • The Belize Fisheries Department does not directly provide materials, equipment or technology to support ecosystem stewardship activities or initiatives. It does however 			

	<p>have the capacity to do so under a project-specific basis (e.g. in execution of projects funded by donors which provide financial capacities specifically towards this action.</p> <ul style="list-style-type: none"> • The Department assists fisherfolk organisations with accessing networks or resources via projects that these organisations apply for and by putting them in contact with technical experts. 		<p>pool of published material resources.</p> <ul style="list-style-type: none"> • The Belize Fisheries Department has a website which is used to share information with fisherfolk and the general public: www.fisheries.gov.bz This website appears to require updating e.g. mission is not reflective of what is presented in the Vision, Mandate, Culture section above.
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11 Enabling and constraining factors and recommendations for strengthening fisheries institution to support ecosystem stewardship by fisherfolk

Table 11.1 sets out some of the key enabling and constraining factors based on the findings from the institutional analysis and organisational assessment. It also provides recommendations to improve strengthening of the fisheries institution in Belize, to better support fisheries ecosystem stewardship by fisherfolk and their organisations. Enabling and constraining factors and recommendations are presented below under the categories of:

- Policy, legal and planning context for ecosystem stewardship
- Mechanisms for fisherfolk participation in decision-making
- Support and resources available to fisherfolk and their organisations for ecosystem stewardship
- Partnerships and networks for ecosystem stewardship
- Communication of information on sustainable practices for fisheries resources use

Gaps and areas for strengthening the organisational capacity of Belize's Fisheries Department to support ecosystem stewardship by fisherfolk are presented in Table 10.1.

Table 11.1 Stewardship current enabling and constraining factors and recommendations

Area	Enabling factors	Constraining factors	Recommendations
<p>Policy, legal and planning context for ecosystem stewardship</p>	<ul style="list-style-type: none"> Overall, the policy and legal context analysed in detail in Table 5.2 indicates strong consideration towards all principles of EAF approach: ecological well-being of fisheries resources, socio-economic well-being of resource users including fisherfolk, and collaborative management and inclusion of stakeholders in decision-making. The Fisheries Resources Act 2020 makes considerable mention to ecological and socio-economic well-being as definitive terms important in management of fisheries resources; as well as establishes (as was existent in the previous legislation) the co-management mechanisms which would allow not only non-governmental organisations such as Turneffe Atoll Sustainability Association or Belize Audubon Society, but civil society groups including fisherfolk organisations – the ability to co-manage areas under a legally established and agreed upon co-managerial contract with the Belize Fisheries Department. The legislation thus enables stewardship via co-management arrangements & inclusion of fisherfolk in the Fisheries Council, to be established via the Fisheries Resources Act. The Managed Access Program instituted rights-based measures ensuring only legitimate fishers could obtain licenses⁹⁷. Policies, laws and plans otherwise analysed in Table 5.2 illustrate overall strong consideration towards an EAF approach in Belize fisheries 	<ul style="list-style-type: none"> Despite the legal mechanism to allow for fisherfolk organisation co-management arrangements, no area is currently co-managed by the Fisheries Department and a fisherfolk organisation. Based on desk study and interviews conducted; the organisational capacity of fisherfolk organisations is the underlying issue to address here in order to strengthen their capacity towards co-managerial status including aspects such as organisational strengthening of their structure and roles, financial sustainability and management of projects, grants and budgets towards execution of workplans. No cabinet approved and dated national policy appears to be in place for Belize presently; however, there is one being drafted currently, which is in line with the legislation (Fisheries Resources Act 2020) recently approved. 	<ul style="list-style-type: none"> Ensure equitable representation of fisherfolk in development of the policy and legal context related to fisheries management in Belize, using an inclusive and participatory approach that spans not only a consultative phase but planning and design phases through to enactment, enforcement and implementation. This participatory approach should include involvement of national intersectoral coordinating mechanisms (NICs) where fisherfolk are represented currently e.g. the Fisheries Council.

⁹⁷ Martinez, V.I. et al. n.d. Managed Access: A Rights-Based Approach to Managing Small Scale Fisheries in Belize. [online].

Area	Enabling factors	Constraining factors	Recommendations
	<p>management; and strong consideration towards an ecosystem approach represented in the legal context of related fields such as development, biodiversity, or trade.</p>		
<p>Mechanisms for fisherfolk participation in decision-making</p>	<ul style="list-style-type: none"> • The explicit inclusion of fisherfolk organisations in the FAB, and subsequently the Fisheries Council when it is formally created under the Fisheries Resources Act (2020); is an enabling factor which includes fisheries resource users (fisherfolk) in the advisory body for the Minister to confer on matters related to fisheries management. • In terms of other NICs, fisherfolk are explicitly included in all the identified NICs, including importantly – the Managed Access Committees for each established fishing area. An example of one is included in Table 6.1. These committees are consulted on matters related to fisheries resources and marine resources management including fishing licenses to be issued, management plans for the areas and effectiveness in implementation of those management plans (annual reviews). 	<ul style="list-style-type: none"> • Whilst this is enacted in law and in practice, the perspective varies as some perceive the mechanism – whilst inclusive – not truly collaborative; and rather view it as more consultative. These views may however; be subjective to inclusion of one particular fisherfolk organisation versus another (e.g. BFCA vs. BFF) indicating internal conflicts within stakeholder types may affect perceptions of mechanism effectiveness. • The FAB and subsequently – the Fisheries Council, are both advisory groups at their core and as such, the decision on whether to action any advice brought forth by the group remains at the discretion of the responsible Minister. 	<ul style="list-style-type: none"> • Where possible – include multiple national fisherfolk organisations in NICs for inclusiveness; as different groups are representative of different fisherfolk communities that may have varying perspectives requiring an avenue for consideration in order to avoid the misrepresentation of perceptions and ensure internal conflicts/opposing perceptions within stakeholder types are considered in the process of management for fisheries and marine resources.
<p>Support and resources available to fisherfolk and their organisations for ecosystem stewardship</p>	<ul style="list-style-type: none"> • Opportunities exist for Belizean fisherfolk organisations to receive a range of support through provision of technology, equipment and materials, financing, and skills, knowledge and abilities and resources including small grants, fishing equipment and training in sustainable practices, small business management and leadership. • Funding provided by international development organisations significantly enables the support provided through grants for projects which are 	<ul style="list-style-type: none"> • Given limited financial resources of the main fisheries-related organisation in execution of its mandate (Belize Fisheries Department), the main financing accessible to fisherfolk organisations is through funding provided by international development organisations and their programmes (e.g. GEF SGP) – which requires 	<ul style="list-style-type: none"> • Belize fisherfolk may benefit from improved organisational strengthening which would in turn improve their ability to seek financing and provide a foundation where they may be able to seek support/resources in other categories of technology, equipment and materials; and skills, knowledge and abilities. This may also support the fisherfolk in lobbying to be established as co-managers of areas alongside Belize Fisheries Department and could co-manage the areas

Area	Enabling factors	Constraining factors	Recommendations
	<p>collaboratively implemented among stakeholders such as the government (Belize Fisheries Department) and civil society organisations (e.g. Co-managers for marine protected areas such as Belize Audubon Society).</p> <ul style="list-style-type: none"> Funding mechanisms also have access options for smaller organisations such as fisherfolk organisations and there is evidence that there are fisherfolk organisations currently who have been awarded GEF SGP grants for example (Table 7.1). 	<p>organisations to have strong organisational structures.</p>	<p>where they have traditional fishing rights and presently fish.</p> <ul style="list-style-type: none"> Leverage support afforded to fisherfolk organisations by other fisheries institution stakeholders towards improving financial sustainability of the fisherfolk groups. Belize Fisheries Department, Co-managers of protected areas and other relevant stakeholder types (e.g. University of Belize, Environmental Research Institute) may collaborate on education and sensitization of why financial sustainability and organisational strengthening of fisherfolk organisations will result in trickle down benefits to the organisations (e.g. Improved organisational capacities towards managing projects focused on ecosystem stewardship and eventually, in management of fishing areas alongside the Belize Fisheries Department). Mentoring/mentorship could also be considered as an aspect towards strengthening support and resources for fisherfolk – even within this fisherfolk type where national fisherfolk organisations that are strongly established; may mentor primary fisherfolk organisations and support them.
Partnerships and networks for ecosystem stewardship	<ul style="list-style-type: none"> Partnerships and networks exist between government, civil society (co-managers of marine protected areas as well as fisherfolk organisations), and other stakeholder types (e.g. academia, donors) related to management planning, decision-making and advisory power, and collaborative management. Co-managers of protected areas are strongly positioned in terms of support rendered to both 	<ul style="list-style-type: none"> Although various stakeholders highlighted the need for capacity development of fisherfolk to effectively partner in ecosystem stewardship initiatives; this perception was more so related to organisational capacity and not to any perceived lack of understanding on the importance of sustainable use 	<ul style="list-style-type: none"> Provide capacity building to the fisherfolk organisations, particularly in organisational strengthening, in order to leverage the opportunities existent for co-management options available under legal mechanisms to allow fisherfolk organisations to become co-managers of marine and fisheries resources that they rely on.

Area	Enabling factors	Constraining factors	Recommendations
	<p>the Belize Fisheries Department, as well as fisherfolk organisations on fisheries management. Other key stakeholders here include University of Belize, Environmental Research Institute with respect to data analysis and research, and international, intergovernmental agencies towards providing much needed funding, and also technical support and assistance in execution of projects e.g. technical support to implement new technology in tracing fisheries supplies value chains.</p>	<p>or protection for the marine environment including how this relates to their livelihoods⁹⁸</p>	
<p>Communication of information on sustainable practices for fisheries resources use</p>	<ul style="list-style-type: none"> • The Belize Fisheries Department is the main fisheries-related organisation and is therefore also the main source of communication related to fisheries management in the country. Communication by the Department to external stakeholders is presently via a variety of channels, guided by a full communications, education and public awareness strategy and action plan. The plan considers its target audience, key messages and channels and tools to execute. The channels established in this written document coincide with established communications activities being undertaken by co-managers of areas e.g. boat-to-boat communication, community and national events, website and social media platforms. • Consultations are a key part of fisherfolk participation. Community-level consultations occur (meetings) as well as outreach by some co-managers of fishing areas e.g. Belize Audubon Society which operates an outreach 	<ul style="list-style-type: none"> • While stakeholders such as the Belize Fisheries Department and co-managers of marine protected areas follow a synced approach to consultations with fishers and their organisations including collaborating frequently together e.g. during community outreach, boat-to-boat outreach, etc.; they do not appear to have a synced, written strategy and action plan among them. Co-managers interviewed were aware of a strategy or plan for the Belize Fisheries Department; but did not have a synced plan alongside the Department. Rather, some co-managers have either created or are in the process of creating their individual written communication strategies and action plans. 	<ul style="list-style-type: none"> • Whilst many fisheries-related organisations (e.g. co-managers of marine protected areas) are practising the communication detailed under the Fisheries Department Strategy and Action Plan; these stakeholder types do not have a synced strategy and action plan for their work together. Sharing of the plan between Belize Fisheries Department and co-managers of areas may assist co-managers in executing their mandates in a more documented and focused manner where planned execution could be monitored for efficiency. This will also save time and efforts in duplication of work as the strategy and action plan exists for the Department and could be used as a point of reference for co-managers – rather than co-managers creating individual plans

⁹⁸ Interview with BFCa by CANARI, June 2020.

Area	Enabling factors	Constraining factors	Recommendations
	<p>program for fisherfolk where the community liaison officer goes out on the fishing grounds and meets the fisherfolk on their boats to engage them of aspects of fisheries management. This is supported by the Fisheries Department through human capacity (where possible, the fisheries officials accompany the co-managers during boat-to-boat outreach, or via provision of technical material in mediums appropriately tailored to fisherfolk e.g. brochures, flyers, interactive games with small prizes for correctly answering questions related to laws, regulations, etc.</p>	<ul style="list-style-type: none"> • Younger generations of fishers in Belize have been more prominently engaged via social media and technological platforms. The Belize Fisheries Department website presently has gaps in information under the Educational Material, Publications and Regulations sections where recent work done by the Department has not been updated e.g. Fisheries Resources Act 2020 not reflected in the Regulations section of the website. 	

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13 Appendices

13.1 Definitions of conceptual components for the institutional analysis framework

Conceptual component	Worksheet
A. Policies. Laws and plans	<p>This component focuses on the existing legal framework within the target country to address and guide fisheries management and planning. It involves the formal governance of a nation’s fisheries management which can either empower or constrain the ability to integrate <i>ecosystem stewardship</i>⁹⁹ practises within small-scale fisheries. The assessment of this component also involves regulations, rules and management plans that resulted from the policies and legislation identified. This can be used as an indicator of fisheries-related state agencies capacity to support fishing industry stewardship. For example, to determine whether legislation is adequate as Stewardship is an evolving concept for management of natural resources such as fisheries. Policy and legislation need to be assessed in order to identify the barriers at the institutional level that may hinder the promotion of ecosystem stewardship. This component is divided into:</p> <p>A.1 Fisheries Policy A.2 Fisheries Management Plan A.3 Fisheries Legislation</p>
B. Advisory and/or decision-making mechanisms	<p>Institutional arrangements - examine the institutional frameworks and mechanisms established for governing fisheries management and fostering ecosystem stewardship. This includes the establishment of multi-stakeholder committees or similar structures, which play an advisory or decision-making role in resource management. The relationship between these mechanisms and the agencies/stakeholders involved will also be analysed.</p>
C. Fisheries-related Organisations	<p>This conceptual component will map the fisheries-related state agencies as well as other fisheries-related organisations which play a key role in the fishery-related institutional arrangements of each country. This includes the core fisheries management organisations such as Fisheries Divisions/Departments/Authorities/Agencies and other associated departments, such as Environment, Coastal Management, Agriculture, Cooperatives, Markets and others. It will also include non-state organisations such as fisherfolk organisation, civil society organisation (CSOs), private sector and academia, where relevant. Given that the level of involvement in the fisheries sector will differ within and</p>

⁹⁹ *Ecosystem Stewardship* is understood as “a strategy to respond to and shape social-ecological systems under conditions of uncertainty and change to sustain the supply and opportunities for use of ecosystem services to support human well-being”.

	<p>among project countries. This section will investigate agencies roles and particularly their mandated role in fisheries management. Furthermore, an organisational capacity assessment will be carried out to examine the core fisheries state agencies' current ability to support stewardship activity.</p> <p>Organisational Capacity Assessment: Under this key conceptual component, core capacities of fisheries-related state agencies capacity to support and enable ecosystem stewardship will be assessed. The capacities to be examined are:</p> <ol style="list-style-type: none"> I. Vision, mandate, culture- this section looks at the organisation's visions and goals, its operational culture and its internal governance mechanisms and how they promote ecosystem stewardship. It is reflected in the everyday organisational culture, how they communicate with fisherfolk and their organisations and the relationships they build. II. Knowledge and skills- this focuses on assessing the fisheries-related state agency's capacity to provide fisherfolk and fisherfolk organisations with the relevant knowledge and skills support required for improved stewardship actions. This section assesses the capacity in technical knowledge, skills and ability related to ecosystem stewardship. III. Resources- assesses the capacity, availability, and efficient access to resources related to organisations– in particular the resource support made available to FFOs from the state agency, as well as resources provided for execution of any ecosystem stewardship actions and practices. IV. Partnerships - is an assessment of the organisations capacity to foster partnerships and link activities, plans, projects and initiatives which involves ecosystem stewardship. It will look at their ability to build networks, and assist in building the networks of fisherfolk organisations, as resource users and ecosystem stewards.
<p>D. Processes and practices</p>	<p>For this conceptual component, the operational procedures for fisheries-related state agencies will be examined more closely. The processes and practices will be assessed in three sub-components. These are:</p> <p>C.1 Promotion of good governance- This is determined by probing the inclusivity of the decision-making process in fisheries governance. The system of institution (i.e. the decision-making process applied) determines the relative success of the structural processes to a certain degree in</p>

	<p>institutional capacity for improved fisheries management that integrates ecosystem stewardship (i.e. levels of exclusion, discrimination). This also assesses organisations internal structures and systems ability to create an environment that encourages and facilitates stewardship. It includes the channels of communication for sharing or receiving information from fisherfolk, and transparent and accountable systems. This will also assess the structures and systems in places for clear communication, involvement and integration within and among fisheries-related state agencies.</p> <p>C.2 Collaborative management- This sub-component focuses on the extent of cooperative management that exists in practice between fisheries-related state agencies and small-scale fisheries groups such as FFOs, as well as fisherfolk individuals and the local communities. It also identifies the degree of stakeholder collaboration in management practises (government, private sector and civil society/local communities).</p> <p>C.3 Adaptive management This assesses the ability of the fisheries-related state agencies to budget, manage and implement activities, using internal structures and mechanisms which are flexible and adaptive to internal or external changes, changes in the resources, or changes in the resource users. This looks at the organisations ability to learn actively, develop practices and policies for promoting stewardship; and implement, monitor and evaluate plans, projects, programmes of work for actions or systems enabling stewardship.</p> <p>C.4 Communication This sub-component assesses the extent to which fisheries information providers in StewardFish project countries are using communication tools/channels to communicate with fisherfolk, as well as their capacity to use the tools/channels effectively. It includes the channels of communication for sharing or receiving information from fisherfolk, and transparent and accountable systems. This will also assess the structures and systems in places to for clear communication, involvement and integration within and among fisheries-related state agencies.</p>
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13.2 In-country contacts/participants

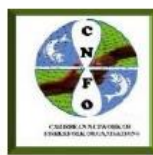
13.2.1 List of Institutional Analysis and Organisational Assessment Validation Webinar Participants, 10th June 2020

First and Last Name	Organisation	Position/Title	Email Address
Gilberto Young	Belize Fisheries Department	Assistant Fisheries Officer	gilberto.young@fisheries.gov.bz
Isabel Martinez		Fisheries Officer	Managed.Access@governmentofbelize.onmicrosoft.com
Shelly Ann Cox	UWI-CERMES	PhD Candidate	shellsalc@gmail.com
Sanya Compton	UWI-CERMES	Research Projects Assistant	sanyacompton@gmail.com
Gareth Murillo	Belize Co-Ops Department		gmurillo.blzcoopsdept@gmail.com
Victor Paulino	Belize Co-Ops Department		vpaulino2.blzcoopsdept@gmail.com
Hugo Miranda	Belize Co-Ops Department		hmiranda.blzcoopsdept@gmail.com
Maren Headley	Caribbean Regional Fisheries Mechanism		
Alegria Martin	Environmental Department		
Leroyg Almendarez	Belize Invest		
Andy Sutherland	Foreign Trade		
S Martinez	Belize Port Authority		
June Masters			
Terrence Phillips	Food and Agriculture Organisation of the United Nations (FAO)	Regional Project Coordinator – Stewardfish Project	Terrence.Phillips@fao.org
Neema Ramlogan	CANARI	Technical Officer	neema@canari.org
Melanie Andrews	CANARI	Technical Officer	melanie@canari.org
Deanna Albert	CANARI	Technical Officer	deanna@canari.org
Aaron Peter	CANARI	Junior Technical Officer	aaron@canari.org

13.2.2 List of key informant interviewees

Organisation	Position/Title	Date of Interview
Belize Audubon Society	Executive Director, Marine Protected Area Manager, Environmental Education and Communications Director	May 26, 2020
Belize Fishermen Cooperative Association	Executive Director	June 24, 2020
Belize Fisheries Department	Fisheries Officer, Belize Fisheries Assistant	July 1, 2020
Turneffe Atoll Sustainability Association	Executive Director, Education and Outreach Coordinator	June 4, 2020
University of Belize, Environmental Research Institute	Administrative Director/Science Director (Marine)	June 26, 2020

13.3 Institutional Analysis and Organisational Assessment Validation Webinar Agenda



Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-Scale Fisheries (StewardFish) project

Institutional Analysis and Organisational Assessment Webinar

June 10th, 2020

Provisional Agenda

Background

The Institutional Analysis and Organisational Assessment webinar¹ is an activity under the StewardFish project. StewardFish aims 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. This action will contribute to Output 1.2.1 “State agency implementation gaps assessed regarding support for fisherfolk organisations and their role in stewardship” and Outcome 1.2 “Fisheries-related state agencies have capacity to support fishing industry stewardship” of StewardFish. StewardFish is funded by the Global Environment Facility (GEF) and is being implemented by the United Nations Food and Agriculture Organization (FAO). Please see project summary handout to learn more about StewardFish and the Caribbean Natural Resources Institute’s (CANARI) role as a regional co-executing partner.

Participants

Webinar participants will be representatives of fisheries-related state agencies and civil society organisations, academia and intergovernmental organisations with a role or interest in sustainable fisheries development in Belize.

Facilitators

The webinar will be facilitated by CANARI and the Caribbean Regional Fisheries Mechanism Secretariat (CRFM Sec.) which is also a regional co-executing partner of the StewardFish project.

Objectives

The objectives of the webinar are to:

1. Present preliminary findings of the institutional analysis and organisational assessment of key fisheries-related state agencies to assess gaps in support for fisherfolk organisations and their role in stewardship.
2. Validate, refine and receive input on the findings of the institutional analysis and organisational assessment for inclusion in country report.

¹ National Institutional Analysis and Organisational Assessment workshops were initially carded to be conducted in-country for all project countries, however, due to the covid19 pandemic as declared by the world health organisation on march 11, 2020, and subsequent restrictions on air travel, all workshops following the declaration date will be conducted virtually through webinars.

3. Develop recommendations for improving fisheries-related state agencies capacity to promote, facilitate and support ecosystem stewardship of fisherfolk organisations, for implementation by the CRFM Sec.

Documents provided

- Provisional agenda
- StewardFish project summary
- Webinar Concept Note
- Link to webinar pre-survey
- Link to webinar registration
- Handout for “Overview of the StewardFish project and institutional analysis webinar” session
- Handout for “Understanding the conceptual approach for the institutional analysis” session
- Link to webinar post-survey (*to be sent separately*)

Provisional Agenda

Time	Topics
9:45	Log in and testing of platform and audio*
10:00	Welcome and introductions
10:10	Overview of the StewardFish project and institutional analysis webinar
10:15	Understanding the conceptual approach for the institutional analysis
10:35	Exploring the policy and legal context for ecosystem stewardship in Belize
11:15	Exploring mechanisms for fisherfolk participation in decision-making
11:35	Recommended actions for addressing ecosystem stewardship gaps in fisheries institution in Saint Belize
12:00	End of Webinar

Attendees are kindly asked to log in at least **15 minutes before the webinar begins to check audio function and quality.*

13.4 Institutional Analysis and Organisational Assessment Validation Webinar – Pre-webinar Survey

#1

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Monday, June 08, 2020 10:13:33 AM
Last Modified: Monday, June 08, 2020 10:27:25 AM
Time Spent: 00:13:51

Page 2

Q1

Considering the current status (e.g. challenges, opportunities) of the fisheries sector in your country, which of the following three fisheries-related national policies, plans or laws do you think are most relevant to the sustainable development of the fisheries sector. Please select your top three from the list below. You can select more than one from each category.

**National Trade Policy (2019-2030),
Fisheries Resources Act (2020),
Wildlife Protection Act Chapter 220. Rev. Ed 2000**

Q2

Are there any other policies, plans or laws, not listed above that you think are most relevant to the sustainable development of the fisheries sector?

Respondent skipped this question

Q3

Please share below the name(s) of at least 1-2 current national decision-making mechanism(s) related to the coastal and marine sector that you are aware of in your country (e.g. Fisheries Advisory Committee, Climate Change Committee, Biodiversity Committee etc.)

Belize Fisheries Department & Coastal Zone Management Authority and Institution

Q4

Please share with us where we can get more information on the mechanism(s) you would have listed in Question 3 above. This can be a webpage and/or the name of a lead contact for the mechanism identified.

Both institution have a website and are on Social Media (Facebook)

#2

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Monday, June 08, 2020 5:39:48 PM
Last Modified: Monday, June 08, 2020 5:48:56 PM
Time Spent: 00:09:07

Page 2

Q1

Considering the current status (e.g. challenges, opportunities) of the fisheries sector in your country, which of the following three fisheries-related national policies, plans or laws do you think are most relevant to the sustainable development of the fisheries sector. Please select your top three from the list below. You can select more than one from each category.

**Fisheries Resources Act (2020),
National Parks System Act Chapter 215. Rev. Ed. 2000**

Q2

Are there any other policies, plans or laws, not listed above that you think are most relevant to the sustainable development of the fisheries sector?

Respondent skipped this question

Q3

Please share below the name(s) of at least 1-2 current national decision-making mechanism(s) related to the coastal and marine sector that you are aware of in your country (e.g. Fisheries Advisory Committee, Climate Change Committee, Biodiversity Committee etc.)

Fisheries Advisory Committee

Q4

Please share with us where we can get more information on the mechanism(s) you would have listed in Question 3 above. This can be a webpage and/or the name of a lead contact for the mechanism identified.

The Belize Fisheries Department

#3

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Monday, June 08, 2020 7:05:42 PM
Last Modified: Monday, June 08, 2020 7:07:59 PM
Time Spent: 00:02:16

Page 2

Q1

Considering the current status (e.g. challenges, opportunities) of the fisheries sector in your country, which of the following three fisheries-related national policies, plans or laws do you think are most relevant to the sustainable development of the fisheries sector. Please select your top three from the list below. You can select more than one from each category.

National Trade Policy (2019-2030),
Fisheries Resources Act (2020),
National Parks System Act Chapter 215. Rev. Ed. 2000

Q2

Are there any other policies, plans or laws, not listed above that you think are most relevant to the sustainable development of the fisheries sector?

Respondent skipped this question

Q3

Please share below the name(s) of at least 1-2 current national decision-making mechanism(s) related to the coastal and marine sector that you are aware of in your country (e.g. Fisheries Advisory Committee, Climate Change Committee, Biodiversity Committee etc.)

Managed Access Working Group

Q4

Please share with us where we can get more information on the mechanism(s) you would have listed in Question 3 above. This can be a webpage and/or the name of a lead contact for the mechanism identified.

Belize Fisheries Department

#4

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Tuesday, June 09, 2020 5:47:58 PM
Last Modified: Tuesday, June 09, 2020 6:00:07 PM
Time Spent: 00:12:09

Page 2

Q1

Considering the current status (e.g. challenges, opportunities) of the fisheries sector in your country, which of the following three fisheries-related national policies, plans or laws do you think are most relevant to the sustainable development of the fisheries sector. Please select your top three from the list below. You can select more than one from each category.

National Trade Policy (2019-2030),
Fisheries Resources Act (2020),
High Seas Fishing Act (2013)

Q2

Are there any other policies, plans or laws, not listed above that you think are most relevant to the sustainable development of the fisheries sector?

Policy

National Agriculture and Food Policy - Draft

Law

Co-operative Societies Act

Q3

Please share below the name(s) of at least 1-2 current national decision-making mechanism(s) related to the coastal and marine sector that you are aware of in your country (e.g. Fisheries Advisory Committee, Climate Change Committee, Biodiversity Committee etc.)

Fisheries Advisory Board

Q4

Please share with us where we can get more information on the mechanism(s) you would have listed in Question 3 above. This can be a webpage and/or the name of a lead contact for the mechanism identified.

A staff member participates.

13.5 Institutional Analysis and Organisational Assessment Validation Webinar – Post-webinar Survey

#1

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Tuesday, June 16, 2020 6:14:18 PM
Last Modified: Tuesday, June 16, 2020 6:46:27 PM
Time Spent: 00:32:08

Page 2: Please answer the below questions to the best of your knowledge.

Q1

The Caribbean Regional Fisheries Mechanism (CRFM) is seeking your input into the design of a pilot project to help strengthen institutional support for ecosystem stewardship by fisherfolk and their organisations in Belize. With this in mind, please share your opinion on the level of priority for each of the actions listed as it relates to strengthening institutional support for ecosystem stewardship.

Updating and revising fisheries-related policies and laws to adequately include principles of the Ecosystem Approach to Fisheries (EAF) (i.e. ecosystem well-being, human well-being and good governance)	Medium priority
Strengthening mechanisms to support involvement of fisherfolk in decision-making processes related to the coastal and marine sector	Medium priority
Building capacity among fisheries-related state agencies to communicate information on ecosystem stewardship including building awareness among fisherfolk and other key stakeholders about the policy and legal context for ecosystem stewardship	High priority
Building capacity for collaborative management between fisheries related state agencies and fisherfolk organisations	High priority
Designing programmes to support ecosystem stewardship by fisherfolk and their organisations	Medium priority

Q2

Do you have any other suggested actions to strengthen institutional support for ecosystem stewardship not listed above?

Build the capacity of fisherfolk to better understand the EAF and more effectively participate in decision-making processes.

Q3

Please share with us at least 1-2 projects, programmes or initiatives that provide/have provided finances (e.g. grants, small grants), technology and equipment and/or capacity building (e.g. education, skills and knowledge) to fisherfolk and their organisations in your country in the past 5 years. Please include the name of the project, programme or initiative and briefly describe the type of support it provided to fisherfolk. Please also include any relevant websites or the name and contact information for key persons from whom CANARI can get further information.

The Nature Conservancy in Belize facilitated the deployment of an electronic traceability system to National Fishermen Co-operative in February, 2019. The technology also aims at digitizing the fisheries supply chain.

<https://www.facebook.com/TNCBelize/>

<https://www.resilientcentralamerica.org/en/the-belize-fisheries-department-national-fishermen-cooperative-and-the-nature-conservancy-in-belize-trial-a-pioneering-technology-to-digitize-fisheries-supply-chain/>

Protected Areas Conservation Trust (PACT) grant to the Belize Fishermen Co-operative Association (BFCA) for a capacity building program entitled "Improvement of Marine Biodiversity Through Empowerment of Fishers" around April, 2015.

#2

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Tuesday, June 23, 2020 5:06:24 PM
Last Modified: Tuesday, June 23, 2020 5:13:11 PM
Time Spent: 00:06:46

Page 2: Please answer the below questions to the best of your knowledge.

Q1

The Caribbean Regional Fisheries Mechanism (CRFM) is seeking your input into the design of a pilot project to help strengthen institutional support for ecosystem stewardship by fisherfolk and their organisations in Belize. With this in mind, please share your opinion on the level of priority for each of the actions listed as it relates to strengthening institutional support for ecosystem stewardship.

Updating and revising fisheries-related policies and laws to adequately include principles of the Ecosystem Approach to Fisheries (EAF) (i.e. ecosystem well-being, human well-being and good governance)	High priority
Strengthening mechanisms to support involvement of fisherfolk in decision-making processes related to the coastal and marine sector	High priority
Building capacity among fisheries-related state agencies to communicate information on ecosystem stewardship including building awareness among fisherfolk and other key stakeholders about the policy and legal context for ecosystem stewardship	Medium priority
Building capacity for collaborative management between fisheries related state agencies and fisherfolk organisations	High priority
Designing programmes to support ecosystem stewardship by fisherfolk and their organisations	High priority

Q2

Do you have any other suggested actions to strengthen institutional support for ecosystem stewardship not listed above?

Strengthening the national coordinating bodies (GOB and none governmental organizations to have an active say and role of the development of adequate policies for the sector.

Q3

Please share with us at least 1-2 projects, programmes or initiatives that provide/have provided finances (e.g. grants, small grants), technology and equipment and/or capacity building (e.g. education, skills and knowledge) to fisherfolk and their organisations in your country in the past 5 years. Please include the name of the project, programme or initiative and briefly describe the type of support it provided to fisherfolk. Please also include any relevant websites or the name and contact information for key persons from whom CANARI can get further information.

Institutional strengthening project (traceability project on lobsters) and is ongoing with full participation and expertise of The Nature for Conservancy , Belize.

#3

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Friday, June 26, 2020 11:22:13 AM
Last Modified: Friday, June 26, 2020 12:34:56 PM
Time Spent: 01:12:43

Page 2: Please answer the below questions to the best of your knowledge.

Q1

The Caribbean Regional Fisheries Mechanism (CRFM) is seeking your input into the design of a pilot project to help strengthen institutional support for ecosystem stewardship by fisherfolk and their organisations in Belize. With this in mind, please share your opinion on the level of priority for each of the actions listed as it relates to strengthening institutional support for ecosystem stewardship.

Updating and revising fisheries-related policies and laws to adequately include principles of the Ecosystem Approach to Fisheries (EAF) (i.e. ecosystem well-being, human well-being and good governance)	High priority
Strengthening mechanisms to support involvement of fisherfolk in decision-making processes related to the coastal and marine sector	Medium priority
Building capacity among fisheries-related state agencies to communicate information on ecosystem stewardship including building awareness among fisherfolk and other key stakeholders about the policy and legal context for ecosystem stewardship	Medium priority
Building capacity for collaborative management between fisheries related state agencies and fisherfolk organisations	Medium priority
Designing programmes to support ecosystem stewardship by fisherfolk and their organisations	Medium priority

Q2

Respondent skipped this question

Do you have any other suggested actions to strengthen institutional support for ecosystem stewardship not listed above?

Q3

Please share with us at least 1-2 projects, programmes or initiatives that provide/have provided finances (e.g. grants, small grants), technology and equipment and/or capacity building (e.g. education, skills and knowledge) to fisherfolk and their organisations in your country in the past 5 years. Please include the name of the project, programme or initiative and briefly describe the type of support it provided to fisherfolk. Please also include any relevant websites or the name and contact information for key persons from whom CANARI can get further information.

European Union funded project -Restoring Fisheries in the Mesoamerican Barrier Reef System: small business management and financial management training to fishers.

Contact person: project officer - Jasmine Tzul Faber jfaber@tidebelize.org

Marine Climate Change Adaptation project (MCCAP) - training to fishers and fisherfolk household members - tour guide training, motor repair training, alternative livelihoods

Contact person: project manager - Dr. Sandra Grant: pc.mccap@fisheries.gov.bz

MARFUND funded project: project conservation of marine resources in Central America - tour guide training, fishers provided with lobster shades

Contact person at Belize Fisheries Department: Adriani Nicholson - Assistant Fisheries Officer - adriani.nicholson@fisheries.gov.bz

#4

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Friday, June 26, 2020 1:31:49 PM
Last Modified: Friday, June 26, 2020 1:33:05 PM
Time Spent: 00:01:15

Page 2: Please answer the below questions to the best of your knowledge.

Q1

The Caribbean Regional Fisheries Mechanism (CRFM) is seeking your input into the design of a pilot project to help strengthen institutional support for ecosystem stewardship by fisherfolk and their organisations in Belize. With this in mind, please share your opinion on the level of priority for each of the actions listed as it relates to strengthening institutional support for ecosystem stewardship.

Updating and revising fisheries-related policies and laws to adequately include principles of the Ecosystem Approach to Fisheries (EAF) (i.e. ecosystem well-being, human well-being and good governance)	Medium priority
Strengthening mechanisms to support involvement of fisherfolk in decision-making processes related to the coastal and marine sector	Medium priority
Building capacity among fisheries-related state agencies to communicate information on ecosystem stewardship including building awareness among fisherfolk and other key stakeholders about the policy and legal context for ecosystem stewardship	Medium priority
Building capacity for collaborative management between fisheries related state agencies and fisherfolk organisations	Medium priority
Designing programmes to support ecosystem stewardship by fisherfolk and their organisations	Medium priority

Q2

Do you have any other suggested actions to strengthen institutional support for ecosystem stewardship not listed above?

No

Q3

Please share with us at least 1-2 projects, programmes or initiatives that provide/have provided finances (e.g. grants, small grants), technology and equipment and/or capacity building (e.g. education, skills and knowledge) to fisherfolk and their organisations in your country in the past 5 years. Please include the name of the project, programme or initiative and briefly describe the type of support it provided to fisherfolk. Please also include any relevant websites or the name and contact information for key persons from whom CANARI can get further information.

#5

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Friday, June 26, 2020 3:14:42 PM
Last Modified: Friday, June 26, 2020 3:16:53 PM
Time Spent: 00:02:11

Page 2: Please answer the below questions to the best of your knowledge.

Q1

The Caribbean Regional Fisheries Mechanism (CRFM) is seeking your input into the design of a pilot project to help strengthen institutional support for ecosystem stewardship by fisherfolk and their organisations in Belize. With this in mind, please share your opinion on the level of priority for each of the actions listed as it relates to strengthening institutional support for ecosystem stewardship.

Updating and revising fisheries-related policies and laws to adequately include principles of the Ecosystem Approach to Fisheries (EAF) (i.e. ecosystem well-being, human well-being and good governance)	High priority
Strengthening mechanisms to support involvement of fisherfolk in decision-making processes related to the coastal and marine sector	Medium priority
Building capacity among fisheries-related state agencies to communicate information on ecosystem stewardship including building awareness among fisherfolk and other key stakeholders about the policy and legal context for ecosystem stewardship	High priority
Building capacity for collaborative management between fisheries related state agencies and fisherfolk organisations	High priority
Designing programmes to support ecosystem stewardship by fisherfolk and their organisations	Medium priority

Q2

Respondent skipped this question

Do you have any other suggested actions to strengthen institutional support for ecosystem stewardship not listed above?

Q3

Please share with us at least 1-2 projects, programmes or initiatives that provide/have provided finances (e.g. grants, small grants), technology and equipment and/or capacity building (e.g. education, skills and knowledge) to fisherfolk and their organisations in your country in the past 5 years. Please include the name of the project, programme or initiative and briefly describe the type of support it provided to fisherfolk. Please also include any relevant websites or the name and contact information for key persons from whom CANARI can get further information.

Oceans economy trade strategy



Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-Scale Fisheries project (StewardFish)

Organisational Capacity Assessment Survey for National Fisheries Authorities

StewardFish aims 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.

As part of the project, the Caribbean Natural Resources Institute (CANARI) is conducting **institutional analyses** and **organisational assessments** with key fisheries-related state agencies in each of the seven StewardFish project countries to identify gaps and develop recommendations for enhancing the capacity of fisheries-related state agencies to promote, facilitate and support ecosystem stewardship of fisherfolk organisations.

This is a key activity under Output 1.2.1 “State agency implementation gaps assessed regarding support for fisherfolk organisations and their role in stewardship” that will contribute to Outcome 1.2 “Fisheries-related state agencies have capacity to support fishing industry stewardship” of the StewardFish project. CANARI has already begun conducting desk studies, interviews and workshops to get information and engage a range of key stakeholders for the institutional analyses being conducted in each of the project countries.

While the institutional analyses look broadly at the fisheries institution¹⁰¹ in each country, the organisational assessments focus specifically on their national fisheries authorities as the primary unit of analysis. This survey therefore seeks to do a rapid organisational assessment of the national fisheries authority in your country to assess its internal capacity to support ecosystem stewardship of fisherfolk and their organisations.

The survey has 28 questions and is organised into the following four sections that will examine organisational motivation and capacity to support ecosystem stewardship by fisherfolk organisations:

1. Vision, mandate and culture (4 questions)
2. Practices (8 questions)
3. Knowledge and skills (11 questions)
4. Resources (5 questions)

¹⁰¹ CANARI defines an institution as the set of arrangements for making decisions about the development, management, and use of a natural resource, including the stakeholders, as well as, the laws, formal and informal policies, plans and structures that guide how these stakeholders interact with each other and with the resources.

Questions are a mix of both closed and open-ended questions.

A glossary of key terms is provided.

The results of the survey will be synthesised and included on the country institutional analysis and organisational assessment reports being prepared by CANARI under the StewardFish project.

CANARI values your contribution to this key activity under StewardFish and looks forward to your responses.

If you have any questions or concerns, please email Neema Ramlogan, Technical Officer, CANARI at neema@canari.org and for more information, please visit the project webpage: <https://canari.org/stewardfish-project>.

How to complete this survey:

It is recommended that this survey be completed as part of a small focus group including relevant and knowledgeable staff members in the national fisheries authority in your country.

Where applicable, website links, supporting documents and other relevant resources can be shared with CANARI to support responses provided.

CANARI may conduct a brief follow up interview with the lead respondent to clarify responses and get additional information as needed.

Glossary

Ecosystem Approach to Fisheries (EAF)	EAF strives to balance diverse societal objectives, by taking into account the knowledge and uncertainties about biotic, abiotic and human components of ecosystems and their interactions and applying an integrated approach to fisheries within ecologically meaningful boundaries. The core principles of EAF are human well-being, ecological well-being and good governance (FAO).
Ecosystem stewardship	The actions taken by individuals, groups or networks of actors, with various motivations and levels of capacity, to protect, care for or responsibly use the environment in pursuit of environmental and/or social outcomes in diverse social–ecological contexts (Bennett et. Al, 2018).
Institution	The set of arrangements for making decisions about the development, management, and use of a natural resource, including the stakeholders, as well as, the laws, formal and informal policies, plans and structures that guide how these stakeholders interact with each other and with the resources (CANARI).
Participatory approach	Participation in the context of natural resource management can be described as a process that: facilitates dialogue among all actors; mobilises and validates popular knowledge and skills; encourages communities and their institutions to manage and control resources; seeks to achieve sustainability, economic equity and social justice; and maintains cultural integrity (Renard and Valdés-Pizzini 1994).

Respondent information

Country:	Belize
Name of national fisheries authority:	Belize Fisheries Department
Name of lead respondent:	Isabel Martinez Gilberto Young
Position of lead respondent:	Fisheries Officer Assistant Fisheries Officer
Email address of lead respondent:	isabel.martinez@fisheries.gov.bz gilberto.young@fisheries.gov.bz
Contact number of lead respondent:	(501) -224-4552

Name and contact information of other persons who contributed to completing this survey

Name	Position in organisation	Email address
Rigoberto Quintana	Senior Fisheries Officer	seniorfisheriesofficer@fisheries.gov.bz

Section 1: Vision, Mandate and Culture

This section looks at the organisation's *motivation* to support ecosystem stewardship by fisherfolk and fisherfolk organisations. It is reflected in the organisation's vision, mandate and culture.

1. Does the organisation have a vision statement that is supportive of /promotes ecosystem stewardship by fisherfolk? Briefly explain your answer.

Yes, the Belize Fisheries Department's vision promotes ecosystem stewardship by fisherfolk.
Vision statement- A sustainable and resilient fisheries sector that effectively contributes to food security the socio-economic development of Belize. (pg13)
Mission Statement- To achieve sustainable fisheries management and development through improved governance, research, private sector and Civil Society participation, gender equality and equity, community stewardship and effective enforcement and compliance. (pg13)

2. Does the organisation's mandate support ecosystem stewardship by fisherfolk? Briefly explain your answer.

Yes, the Belize Fisheries Department's mandate supports ecosystem stewardship by fisherfolk. The Department is tasked with the management of the Belize's aquatic resources and so over time has continuously engaged fisherfolks to ensure that they become better stewards of these resources. As can be seen in the national policy and action plan, the department supports the development of communication and involvement between its stakeholders (fishers)(pg14)

3. Which of the following core values/beliefs reflect the culture of the organisation?
Check/highlight all that apply.

- The organisation believes that ecosystem stewardship by fisherfolk is important for sustainable use of fisheries and marine resources.
- The organisation believes that ecosystem stewardship by fisherfolk is not important for sustainable use of fisheries and marine resources.
- The organisation believes that fisherfolk can be effective ecosystem stewards.
- The organisation believes that fisherfolk are not effective ecosystem stewards.
- The organisation believes that fisherfolk should be included in decisions made about how fisheries and marine resources are managed.
- The organisation believes that fisherfolk input into decisions about how fisheries and marine resources are managed is not important.
- The organisation values local and/or traditional knowledge held by fisherfolk.
- The organisation believes in the ecosystem approach to fisheries (EAF).

4. Do you have any additional information to share about your organisation's vision, mandate and culture as it relates to supporting ecosystem stewardship by fisherfolk and their

organisations? You can also use this section to clarify any of the responses provided for question S1.3.

The Department's mandate calls for the integration of fisheries in all the decision-making process and supports the ecosystems stewardship by fishers.

Section 2: Practices

This section looks at the how the organisation's core values and beliefs are translated into actions (practices). It focuses in particular on the actions that support ecosystem stewardship by fisherfolk and fisherfolk organisations in the following areas: decision-making; collaboration and partnerships; and information collection and sharing.

Decision-making - Please provide answers to the following questions about your organisation's decision-making practices.

1. Does the organisation **have a clear process** for including the opinions of fisherfolk in decisions made about fisheries and marine resources? Briefly explain your answer

The Department uses consultation processes for including the opinions of fisherfolk in decisions made about fisheries and marine resources. Fishers opinions are taken into account via meetings and forums regarding different subjects of management. Fishers are also part of many committees and working groups that have an important advisory role in management of the fisheries resources. The new Fisheries Resources Act has a clear established process for consultation and even their participation on the Fisheries Council (4 representatives).

2. Does the organisation regularly and systematically include fisherfolk input in decisions about how fisheries and marine resources are managed? Briefly explain your answer.

Yes, the organisation regularly includes fisherfolks input in decisions about how fishers and marine resources are managed. In addition to meetings, workshops, forums and the committees that fishers participate in, the recently approved revised fisheries resources bill allows for the formation of a fisheries advisory board which will see the participation of fisherfolk and will see fisherfolks' direct input in fisheries management. The new Fisheries Resources Act has a clear established process for consultation and even their participation on the Fisheries Council (4 representatives).

Collaboration and partnerships - Please provide answers to the following questions about your organisation's collaboration and partnership practices

3. Select which of the following statements are true for the organisation. *Check/highlight all that apply.*
 - Fisherfolk generally view the organisation as a partner with whom they can collaborate on fisheries management (*participatory relationship*).
 - Fisherfolk generally view the organisation as an enforcer of fisheries management guidelines and regulations with whom they must comply (*top-down relationship*).
 - The organisation regularly highlights sustainable use practices undertaken by fisherfolk.

- The organisation regularly highlights unsustainable use practices undertaken by fisherfolk.
4. Does the organisation regularly partner/collaborate with fisherfolk and their organisations for fisheries management initiatives? If yes, please provide a recent of example.

Yes, the organisation regularly collaborates with fisherfolk and their organisations by supporting the work that fishers carry out with their associations (projects, meetings etc) and providing guidance where necessary. One key example is the collaborative efforts in and under the Managed Access program which went from an approach implemented at two pilot sites in 2011 to a National Program in 2016.

5. Does the organisation regularly facilitate collaboration/partnerships between fisherfolk and other fisheries and marine stakeholders? If, yes please provide a recent example.

Yes, the Belize Fisheries Department regularly facilitates collaboration between fisherfolk and other marine stakeholders like the co managers and conservation NGO's. An example is the participation of fishers and other stakeholders in advisory committees at the marine reserves.

Information collection and sharing – Please provide answers to the following question about your organisation's information collection and sharing practices.

6. Select which of the following statements are true for the organisation. *Check/highlight all that apply.*
- The organisation collects local/traditional knowledge held by fisherfolk about fisheries and marine resources.
 - The organisation does not collect local/traditional knowledge held by fisherfolk about fisheries and marine resources.
 - The organisation uses local/traditional knowledge held by fisherfolk to inform management decisions about fisheries and marine resources.
 - The organisation does not use local/traditional knowledge held by fisherfolk to inform management decisions about fisheries and marine resources.
 - The organisation records best practices related to sustainable use and management of marine resources and shares this information regularly.
 - The organisation provides information on sustainable fishing practices to fisherfolk in a manner that they can understand.
 - The organisation does not provide information on sustainable fishing practices in a manner they can understand to fisherfolk.
 - The organisation has a communication strategy to share the information with different stakeholders including fisherfolk.
 - The organisation does not have a communication strategy to share the information with different stakeholders including fisherfolk.
 - The organisation provides advice/guidance to fisherfolk for stewardship activities and initiatives.
 - The organisation does not provide advice/guidance to fisherfolk for stewardship activities and initiatives.

7. How does the organisation share information with fisherfolk about sustainable use practices for fisheries and marine resources?

The Belize Fisheries Department shares information with fisherfolk about sustainable use practices via traditional media like the radio, newspaper and television and also via social media (especially Facebook). The Department also has a website where information is shared for fishers and the general public to access. Many times outreach with fishers is also done in the fishing communities or out at sea (visiting fishers at their fishing grounds and through a “boat to boat” approach). The Department also has a communication strategy.

8. What has the organisation found to be the most effective way to share information with fisherfolk?

The organisation has found that the most effective way to share information with fishers is via the “boat to boat” approach as fishers spend most of their time at sea and are more approachable when visited in their fishing grounds. Social media (Facebook) has also shown to get the information out to a larger group as the younger generation has more access to technology (younger fishers have more access to this and also fishers’ kids pass on the information to them).

9. Do you have any additional information to share about your organisation’s decision-making; collaboration and partnerships; and information collection and sharing practices as it relates to supporting ecosystem stewardship by fisherfolk and their organisations? You can also use this section to clarify any of the responses provided for questions S2.3 and S2.6.

Resource documents like the Fisheries Resources Act, National Fisheries Policy Strategy & Action Plan, regulations for Marine Reserves and the Fisheries Department’s communication strategy show and highlight the participation and inclusion of fisher folk in collaborative efforts and in the decision making process.

Section 3: Knowledge and Skills

This section looks at the organisation’s capacity to support ecosystem stewardship by fisherfolk and fisherfolk organisations. It focuses in particular on the knowledge and skills held by technical staff (e.g. managers, researchers, policy development officers, field officers etc.).

1. Do technical staff have knowledge of the Ecosystem Approach to Fisheries (EAF)? Briefly explain your answer.

Most technical staff have knowledge of the EAF as they have been exposed to related trainings and workshops over time.

2. Do technical staff have specialist knowledge on ecosystems, their functions and ecosystem changes? Briefly explain your answer.

Different staff have been versed in different topics in the field of fisheries management and have had different levels of exposure to this knowledge.

3. Do technical staff understand the socio-economic context of fisheries and marine resource use by fisherfolk and other stakeholders? Briefly explain your answer.

Technical staff do understand the socio economic context of fisheries and marine resource use by fisherfolk and other stakeholders. Staff are often deployed for field work in both the communities and out at sea and have thus developed a good understanding of the context of resource use by fishers.

4. Do technical staff have the skills to conduct socio-economic assessments? Briefly explain your answer.

Yes, some technical staff have the skills to conduct socio economic assessments as this has been done in the past. Specifically during the roll out of a national rights based management program called Managed Access.

5. Do technical staff have knowledge of aquaculture and other alternative or complementary livelihood options for which fisherfolk may be well suited? Briefly explain your answer.

Technical staff do have knowledge on other alternative livelihood options as alternative livelihood projects have been carried out in the country over time. There is some knowledge on aquaculture, however the mandate and management of aquaculture has been separated from that of fisheries as there is a specific aquaculture unit within the Ministry of Agriculture.

6. Do technical staff have knowledge of how fisherfolk organisations function including key challenges that they may face and how they can be supported to resolve them? Briefly explain your answer.

The technical staff that works closely with stakeholders have knowledge of how fisherfolk organisations function. They are aware of the challenges that these organisations face as they have a close working relationship with fishers and the organizations that they are a part of. This allows them to identify ways that these organizations challenges can be resolved.

7. Does the organisation have the capacity to provide training for fisherfolk in different technical areas and organisational strengthening (these may include soft skills such as facilitation, development of training material, etc.)? Briefly explain your answer.

The Belize Fisheries Department does not currently have the capacity to provide training for fisherfolk in technical areas and organisational strengthening. It can however provide support for the execution of these types of training which would be highly beneficial to fishers.

8. Do technical staff have the skills to assist fisherfolk with mobilising funding for ecosystem stewardship activities and initiatives? Briefly explain your answer.

Some technical staff have the skills to assist fisherfolk with mobilising funding for ecosystem stewardship activities and initiatives, however many times the limiting factor is the time

available to help these fishers both in terms of developing proposal and finding the funding necessary for these activities and initiatives.

9. Do technical staff have skills in participatory approaches (e.g. participatory monitoring and evaluation, participatory planning, participatory management etc.)? Briefly explain your answer.

There are limited skills in this regard within the Department. Only one staff has training in this area. There is the need to build more in-house capacity in this area.

10. Do technical staff have communication skills needed to effectively communicate with a range of stakeholders including fisherfolk? Briefly explain your answer.

Yes, technical staff have good communication skills needed to effectively communicate with a range of stakeholders. This has developed over several years of engaging stakeholders, especially fishers in various approaches, projects and fora.

11. Does the organisation provide or access training and other kinds of capacity building for staff to regularly improve their technical knowledge and skills? Briefly explain your answer.

Yes, the Belize Fisheries Department staff continuously improves their technical knowledge and skills by attending workshops, seminars, conferences and meetings nationally and internationally and most recently mostly by online workshops and webinars.

12. Do you have any additional information to share about the knowledge and skills of your organisation's technical staff as it relates to supporting ecosystem stewardship by fisherfolk and their organisations?

Constant communication and engagement, continuous follow up and support, and an overall good relationship with fisherfolk has been integral in supporting ecosystem stewardship by fisherfolk and their organisations.

Section 4: Resources

This section looks at the organisation's capacity to support ecosystem stewardship by fisherfolk and fisherfolk organisations. It focuses in particular on the finance, equipment, materials, tools and methods that the organisation has access to for supporting fisherfolk with ecosystem stewardship activities and initiatives.

1. Does the organisation provide funding assistance to fisherfolk to support ecosystem stewardship activities or initiatives? Briefly explain your answer.

No, the Fisheries Department does not provide funding assistance to fisherfolk to support ecosystem stewardship activities or initiatives. Fisherfolk organizations usually get funding via donors through grants that they apply for. However, these grant applications are supported by the Fisheries Department and in some cases there is in-kind support.

2. Does the organisation provide materials, equipment or technology to fisherfolk to support ecosystem stewardship activities or initiatives? Briefly explain your answer.

The Belize Fisheries Department does not directly provide materials, equipment or technology to support ecosystem stewardship activities or initiatives. It does however do it sometimes via specific projects under the Department.

3. Does the organisation have access to tools, methods and good practices that can be used to support fisherfolk with ecosystem stewardship activities and initiatives? Briefly explain your answer.

The Department has very limited access to this. Resource tools/documents are mostly accessed from published material (i.e. FAO).

4. Does the organisation provide access to or assist fisherfolk organisation with accessing networks or resources outside of itself (such as technical experts, funding, projects, etc.)? Briefly explain your answer.

The Department assists fisherfolk organisations with accessing networks or resources via projects that these organisations apply for and by putting them in contact with technical experts.

5. Does the organisation have a dedicated website which can be used to share information and resources on ecosystem stewardship practices with fisherfolk? Briefly explain your answer.

The Belize Fisheries Department has a website which is used to share information with fisherfolk and the general public: www.fisheries.gov.bz

6. Do you have any additional information to share about your organisation's resources as it relates to supporting ecosystem stewardship by fisherfolk and their organisations?

No, probably only the budgetary allocations by program activities.



Caribbean Natural Resources Institute

INSTITUTIONAL ANALYSIS AND ORGANISATIONAL ASSESSMENT OF FISHERIES-RELATED STATE AGENCIES FOR ENABLING ECOSYSTEM STEWARDSHIP IN THE FISHERIES SECTOR OF GUYANA

September 2020



Cover photograph: Fishers retrieving net (centre); fishers on boat in Meadow Bank (left); and fisher holding a ray caught as bycatch (right) 2020. ©Department of Fisheries Guyana

CARIBBEAN NATURAL RESOURCES INSTITUTE

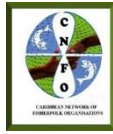
INSTITUTIONAL ANALYSIS AND ORGANISATIONAL ASSESSMENT OF FISHERIES-RELATED STATE AGENCIES FOR ENABLING ECOSYSTEM STEWARDSHIP IN THE FISHERIES SECTOR OF GUYANA

September 2020

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Disclaimer:

This publication has been produced by CANARI as an output of the StewardFish project. However, the views expressed herein are those of the authors, and can therefore in no way be taken to reflect the official opinions of the Department of Fisheries of the Ministry of Fisheries, Crops and Livestock, Guyana, the Global Environmental Facility, the Food and Agriculture Organization of the United Nations or other co-executing partners of the StewardFish project.

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List of acronyms and abbreviations

AFIP	Artisanal Fisheries Infrastructural Programme
ARIA	WRI's Adaptation: Rapid Institutional Analysis
BRD	Bycatch reduction device
BTEAF	Basic Training & Emergency Awareness for Fishermen
CANARI	Caribbean Natural Resources Institute
CARICOM	Caribbean Community
CCRIF	Caribbean Catastrophe Risk Insurance Facility
CEPF	Critical Ecosystem Partnership Fund
UWI- CERMES	Centre for Resource Management and Environmental Studies of the University of the West Indies
CI	Conservation International
UWI-CIRP	Caribbean ICT Research Programme of the University of the West Indies
CITES	Convention on International Trade in Endangered Species of Wild Flora and Fauna
CLME + SAP	Strategic Action Programme for the Sustainable Management of the Shared Living Marine Resources of the Caribbean and North Brazil Shelf Large Marine Ecosystems
CMMC	Coastal and Marine Management Committee
CNFO	Caribbean Network Fisherfolk Organisation
CRFM	Caribbean Regional Fisheries Mechanism
CSO	Civil Society Organisation
EAF	Ecosystem Approach to Fisheries
EBM	Ecosystem-based management
EEZ	Exclusive economic zone
EIA	Environmental impact assessment
EPA	Environmental Protection Agency
ETP	Endangered, Threatened and Protected
FAC	Fisheries Advisory Committee
FAD	Fish aggregating device
FAO	Food and Agricultural Organisation
FDI	Foreign direct investment
FFO	Fisherfolk organisations
FIP	Fishery Improvement Project
FJIO	Fujian Institute of Oceanography
GATOSP	Guyana Association of Trawler Owners and Seafood Processors
GDP	Gross domestic product
GEF	Global Environment Facility
GMCS	Guyana Marine Conservation Society
GNFO	Guyana National Fisherfolk Organisation
GPS	Global positioning system
GRIF	Guyana REDD ++ Investment Fund
GSA	Guyana School of Agriculture
ICCAT	International Commission for the Conservation of Atlantic Tunas
ICT	Information and communication technology
ILO	International Labour Organisation
IOI	International Ocean Institute

IUU	Illegal, unreported and unregulated fishing
MAC	Mangrove Action Committee
MARAD	Maritime Administration
MOU	Memoranda of Understanding
MPA	Marine protected area
MSC	Marine Stewardship Council
NBAC	National Biodiversity Advisory Committee
NCC	National Climate Committee
NFO	National fisherfolk organisation
NGO	non-governmental organisation
NIC	National Intersectoral Committee/Coordinating Mechanism
NREAC	National Resources and Environment Advisory Committee
OGC	Ocean Governance Committee
OLDEPESCA	Latin American Organization for Fishery Development
OSPESCA	Organisation of the Central American Fisheries and Aquaculture Sector
PFO	Primary fisherfolk organisations
REDD	Reducing emissions from deforestation and forest degradation
RFB	Regional fisheries bodies
SDG	Sustainable Development Goals
SGP	Small Grants Programme
SNC	Second National Communication
SWG	Seabob Working Group
TCPF	Technical Cooperation Programme
TED	Turtle excluder device
UCFCS	Upper Corentyne Fisherfolk Co-operative Society
UG	University of Guyana
UNCLOS	United Nations Convention on the Law of the Sea
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
US	United States of America
USD	United States Dollar
UWI	University of the West Indies
WECAFC	FAO Western Central Atlantic Fisheries Commission
WRI	World Resources Institute
WWF- Guianas	World Wildlife Fund- Guianas

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Executive Summary

The Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in the Caribbean Small-Scale Fisheries (StewardFish) project is aimed at implementing the 10-year 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) within seven Caribbean Regional Fisheries Mechanism (CRFM) member states (Antigua and Barbuda, Barbados, Belize, Guyana, Jamaica, Saint Lucia, St. Vincent and the Grenadines). The project aims to deliver enhanced stewardship of fisheries resources and livelihood benefits.

CANARI conducted an Institutional Analysis and Organisational Assessment in Guyana to contribute to Outcome 1.2 “Fisheries-related state agencies have capacity to support fishing industry stewardship” and Output 1.2.1 “state agency implementation gaps are assessed regarding support for fisherfolk organisations and their role in stewardship” of the project. The aim of the analysis was to identify current strengths, as well as opportunities for improvement in Guyana’s fisheries-related state agencies, in order to improve their capacity to support ecosystem stewardship by fisherfolk and their organisations as it related to the following areas (i) policies, laws and plans (ii) advisory and/or decision making mechanism (iii) fisheries related organisations (iv) processes and practices. The methods utilised included desk studies, interviews and a validation webinar.

Guyana, belonging to the South American continent, has diverse landscapes and ecosystems with rich terrestrial and marine biodiversity. The country is also rich in natural resources such as gold, bauxite, timber, sugar, rice, fisheries and now oil and gas, and diverse cultures and ethnicities that access and utilise these natural resources, including indigenous communities. Fisheries in Guyana is mainly divided into industrial trawl, deep slope and small-scale artisanal. The industry has, over the years, directed most of its management interventions and resources to the industrial trawl fishery, however, in recent times it has been shifting focus to the small-scale artisanal fishery. With the newly developed Artisanal Fisheries Strategic Framework and Management Plan (2019-2024), the Government of Guyana, through the lead fisheries management agency, the Department of Fisheries, hopes to gradually improve and addresses issues in the sector. This institutional analysis and organisational assessment looks at the fisheries institution of Guyana given this context and delves deeper into the institution’s ability to support and enable fisherfolk to be stewards for coastal and marine ecosystems and for sustainable fisheries. Key findings of the report include:

- There are several key stakeholders identified for the fisheries institution of Guyana, some more directly related than others. Some of the key organisations include the Department of Fisheries, the Guyana National Fisherfolk Organisation (GNFO), the Department of Co-operatives, the Environmental Protection Agency (EPA), among others. Although the national fisherfolk organisation worked together with the Department of Fisheries for addressing fisherfolk issues, it was seen that the relationship needs to be strengthened. The lack of inter-agency cooperation also deters further development in the sector, and more collaboration among key stakeholders is pivotal to progressing the industry.
- The legislative and policy frameworks which guide the fisheries institution of Guyana reflects key tenets of the ecosystem approach to fisheries (EAF), that is ecosystem well-being, socio-economic well-being and good governance, particularly collaborative management/co-management to various degrees. Laws, policies and plans were especially good at addressing ecological well-being, like the Artisanal Fisheries Strategic Framework and Action Plan (2019-2024) identifying the need for a more ecosystem-based approach to management of the industry. However, less attention was given to socio-economic well-being and good governance.
- With the establishment of the Fisheries Advisory Committee, fisherfolk, through the GNFO, are able to voice their concerns and needs for the development of the small-scale fishery sector. However, fisherfolk or small-scale fishers, are not included in other decision-making

mechanisms or arrangements which are involved in coastal and marine resource management.

- There are many initiatives and projects which allow training of fisherfolk, mainly in areas of GPS use, sea turtle monitoring and data collection, however there is limited access to materials, equipment, technology and financial aid. There is limited to no training mentioned in areas like alternative livelihood training, information and communication technologies, safety at sea and other important areas. There are also limited opportunities for fisherfolk to access direct financing.
- Communication needs to be improved within the fisheries institution. The Department of Fisheries, the core agency responsible for communicating with fisherfolk, does not have a communication strategy and plan. The Guyana National Fisherfolk Organisation (GNFO), a national fisherfolk organisation, also does not have a communication plan. Both the department and the GNFO communicate with fisherfolk primarily through face-to-face interaction and phone calls. They both also have inactive or no social media platforms, to share information with their stakeholders and the public.
- Although partnerships were identified in the fisheries institution, they need to be strengthened, particularly between the Department of Fisheries and the GNFO and primary fisherfolk organisations. The GNFO also needs to strengthen its partnership with its members and other civil society organisations working in resource conservation in Guyana. Stronger inter-agency collaboration and partnership is also required for the industry to move forward. These partnerships can benefit from more formal agreements and support from the government/ministries. Partnership and collaboration among government agencies can be addressed by institutionalisation of inter-agency committees to coordinate work and avoid duplication of efforts.
- The ability the Department of Fisheries, the key fisheries management organisation, to promote and support ecosystem stewardship is fair. The Department, though having the technical capacity and training to assist fisherfolk and manage the industry, lack the resources, human and otherwise to carry out its mandate throughout Guyana. The Department can still support stewardship activity by fisherfolk by providing technical guidance and assistance to access funding, training and other resources, but is also handicapped by the lack of resources to effectively support fisherfolk. The work of the department also needs to be reinforced by a clear vision and mission for the organisation and should internally cultivate a culture for EAF and ecosystem stewardship. The department also needs to be strengthened in communication and its extension services, to ensure all staff has a diverse range of technical expertise and can develop fisheries management interventions that are holistic and inclusive.

Guyana is taking steps to sustainably develop its fisheries sector and in doing so supporting ecosystem stewardship of small-scale fishers. The legislative framework and mechanisms for participative governance play an important role in ensuring that small-scale fisherfolk are included in shaping the development the fishing industry. However, this can only be successful if fisherfolk are organised, with a collective voice to represent and advocate for their needs and their resources and are supported with the tools and knowledge to do so. The analysis identifies key recommendations, from the legislative and policy to implementation level, to create a fisheries institution that enables stronger ecosystem stewardship and sustainable mobilisation of resources by fisherfolk.

1 Introduction

In 2013, countries bordering and/or located within the Caribbean and North Brazil Shelf Large Marine Ecosystems (CLME+ region) adopted a 10-year 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)¹. The 10-year CLME+ SAP aims to contribute to the achievement of the regionally adopted long-term vision of “a healthy marine environment in the CLME+ that provides benefits and livelihoods for the well-being of the people of the region.” The CLME+ SAP consists of 6 Strategies and 4 Sub-strategies. SAP strategies 1-3, with a focus on governance, are cross-cutting, while strategies 4-6 tackle the three main marine ecosystems (reef, pelagic and continental shelf) in the CLME+ region. One of the key strategies of the CLME+ SAP is to achieve sustainable fisheries, including of small-scale fisheries which are important economic drivers for the sustainability of coastal communities and rural livelihoods and a vital source of employment, food and income for Caribbean people.

The *Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in the Caribbean Small-Scale Fisheries (StewardFish)* project is therefore aimed at implementing the CLME+ SAP within seven Caribbean Regional Fisheries Mechanism (CRFM) member states (Antigua and Barbuda, Barbados, Belize, Guyana, Jamaica, Saint Lucia, St. Vincent and the Grenadines) that have politically endorsed the CLME+ SAP by empowering small-scale fisherfolk throughout fisheries value-chains to engage in resource management, decision-making processes and sustainable livelihoods with strengthened institutional support at all levels.² The project aims to deliver enhanced stewardship of fisheries resources and livelihood benefits through implementation of the four core project components (See Figure 1).

StewardFish recognises that there are several challenges that hinder the engagement of fisherfolk and their organisations in the sustainable use and management of fisheries in the region including fisheries-related state agencies not having adequate capacity to support fisherfolk and their organisations with ecosystem stewardship initiatives. Because state agencies, including fisheries authorities, vary widely in their support of fisherfolk organisations for different reasons, some within their control and others beyond, a situation specific analysis is required.

In support of this, CANARI conducted an Institutional Analysis and Organisational Assessment in each of the project countries to contribute to Outcome 1.2 “*Fisheries-related state agencies have capacity to support fishing industry stewardship*” and Output 1.2.1 “*state agency implementation gaps are assessed regarding support for fisherfolk organisations and their role in stewardship*” of the project.

The aim of the analysis was to identify current strengths, as well as opportunities for improvement in each project country’s fisheries-related state agencies, in order to improve their capacity to support ecosystem stewardship by fisherfolk and their organisations.

The analysis included:

- Designing an institutional analysis tool adapted from the Adaptation: Rapid Institutional Assessment (ARIA) methodology, including an organisational assessment survey targeted at the fisheries authorities

¹ CLME+ Strategic Action Programme <https://www.clmeproject.org/sap-overview/>

² CANARI. 2019. StewardFish – Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-Scale Fisheries (StewardFish) project. [March 2020]

- Conducting desk studies, surveys, virtual and in-country interviews and focus groups with fisherfolk, fisheries authorities and other key state agencies in the project countries
- Facilitating national workshops³ to present, validate, refine and receive input on the preliminary findings and identify priorities for improvement, in each project country
- Producing country reports of findings, including recommended priorities for improvement

This report provides the findings and recommendations from the institutional analysis and organisational assessment conducted for Guyana, between April to July 2020.

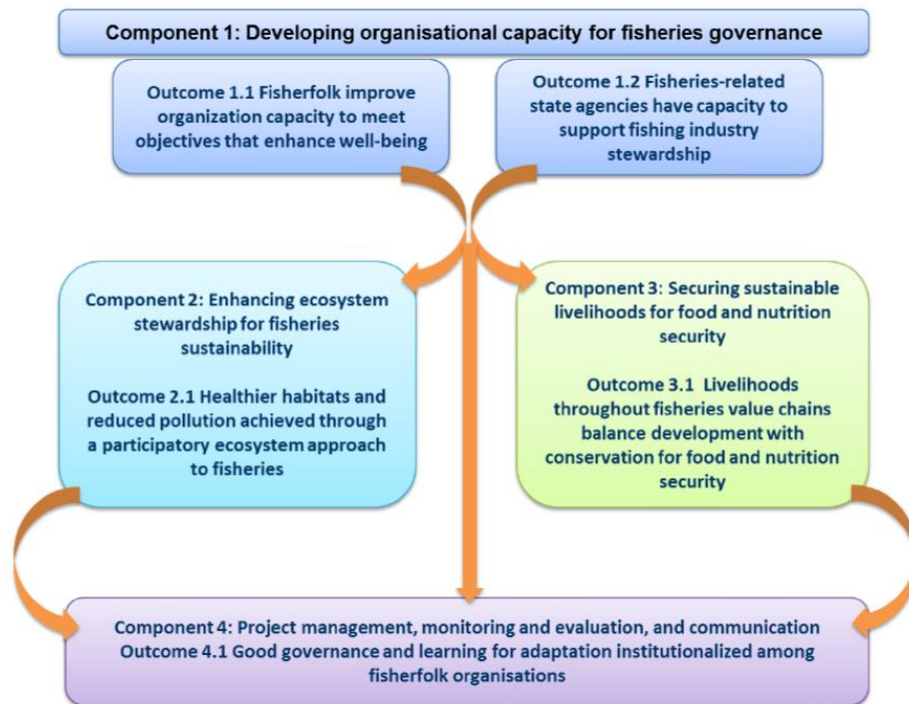


Figure 1.1: StewardFish Project Framework. Credit: FAO

1.1 How strong institutions can support ecosystem stewardship by fisherfolk

Stewardship is a terminology related to rights and responsibilities in governance processes. Application in natural resource management has expanded the understanding of stewardship to relay that “stewards” are stakeholders with responsibility for proper resource use, who will “take care” of a resource under communal or public property rights.⁴ The term also importantly encompasses responsibility not only for proper use of resources but also right to life of other species



Figure 1.2: Members of the Caribbean Network of Fisherfolk Organisations (CNFO), a regional fisherfolk organisation, at the StewardFish project Regional Fisherfolk Mentors training workshop Oct 28-Nov 1, 2019. Credit: CANARI 2019

³ National workshops were initially carded to be conducted in-country for all project countries, however, due to the COVID-19 pandemic as declared by the World Health Organisation on March 11, 2020, and subsequent restrictions on air travel, all workshops following the declaration date were conducted virtually through webinars.

⁴ Medeiros, R. P., Serafini, T. Z., McConney, P. 2014. Enhancing Ecosystem Stewardship in Small-Scale Fisheries: Prospects for Latin America and the Caribbean. *Desenvolv. Meio Ambiente*, n. 32, 181-191.

and for future generations.⁵ The concept of ecosystem stewardship, particularly in the fisheries sector; includes reducing the vulnerability of the sector by promoting resilience and making use of opportunities to transform undesirable paths.

A fundamental concern of stewardship is capacity – i.e. whether individuals or groups are able to steward their resources. Capacity, which is in part determined by broader governance -including systems of institutions (i.e. laws and policies, formal and informal organisations, and decision-making processes and structural processes related to power and politics (i.e. economic inequality, discrimination, exclusion from decision-

“Local environmental stewardship is the actions taken by individuals, groups or networks of actors, with various motivations and levels of capacity, to protect, care for or responsibly use the environment in pursuit of environmental and/or social outcomes in diverse social-ecological contexts.”

(Bennet et al. 2018)

making)—can either empower or constrain the sense of agency, available options and capacity of would-be stewards⁶. From the paper “Environmental Stewardship: A Conceptual Review and Analytical Framework” Bennet *et. al* note for the small-scale fisheries sector that stewardship efforts can be supported by national laws or policy frameworks that protect local fisher’s rights and tenure, formalise local fishers’ stewardship responsibilities, or that provide resources to support local community efforts to steward their own resources. Conversely, the paper notes that even when local small-scale fishers want to take action, the broader policy landscape may undermine their efforts by creating bureaucratic challenges.

Ensuring that the fisheries institution adequately enables ecosystem stewardship by fisherfolk, and their organisations will not only contribute to sustainable fisheries but will also help to ease the burden of already under-resourced fisheries state agencies to monitor and enforce fisheries regulations.

2 Institutional Analysis Framework

An institution is the set of arrangements for making decisions about the development, management, and use of a natural resource, including the stakeholders, as well as, the laws, formal and informal policies, plans and structures that guide how these stakeholders interact with each other and with the resources.

To conduct the rapid analysis CANARI developed and piloted an institutional analysis tool which was adapted from the World Resources Institute’s (WRI) Adaptation: Rapid Institutional Assessment (ARIA)⁷ methodology, including an organisational assessment survey targeted at national fisheries authorities. The tool analyses the institutional and organisational capacity of fisheries-related state agencies to support stewardship in the small-scale fisheries sector. The tool was used to conduct a baseline assessment and can subsequently be used for monitoring and evaluation as part of an institutional strengthening process.

The tool examines four conceptual components- fisheries-related policies, laws and plans, advisory and/or decision-making mechanisms, fisheries-related organisations and processes and practises to

⁵ Medeiros, R. P., Serafini, T. Z., McConney, P. 2014. Enhancing Ecosystem Stewardship in Small-Scale Fisheries: Prospects for Latin America and the Caribbean. *Desenvolv. Meio Ambiente*, n. 32, 181-191.

⁶ Bennett, N.J., Whitty, T.S, Finkbeiner, E., *et. al.* 2018. *Environmental Stewardship: A Conceptual Review and Analytical Framework*.

⁷ WRI’s Rapid Institutional Analysis for Adaptation Tool. <https://accessinitiative.org/resources/adaptation-rapid-institutional-analysis-phase-1-workbook>

determine the capacity of the fisheries institution- to support the role of fisherfolk and their organisations in ecosystem stewardship. Refer to Table 2.1 for a description of each conceptual component. Appendix 13.1 includes more detailed definitions of conceptual components.

Table 2.1 The four conceptual components assessed in the rapid institutional analysis

Conceptual component	Description of component
Policies, laws and plans	Examined fisheries and fisheries-related policies, plans and legislation (including rules and regulations) to determine how they may be empowering or constraining the ability to integrate ecosystem stewardship practices within the country’s small-scale fisheries sector.
Advisory and/or decision-making mechanisms	Examined the presence, composition and functioning of existing multi-stakeholder mechanisms (e.g. Fisheries Advisory Committee) established for advising or making decisions for fisheries management.
Fisheries-related organisations	Examined the roles and responsibilities of fisheries-related state agencies, as well as other fisheries-related organisations [e.g. FFOs, civil society organisation (CSOs), private sector organisations and academia] which play a key role in the fisheries-related institutional arrangements of the project country. Additionally, an organisational capacity assessment was carried out to examine the national fisheries authority’s current ability to support ecosystem stewardship by small-scale fisherfolk and included an examination of the authority’s: <ul style="list-style-type: none"> ○ Vision, mandate, culture ○ Knowledge and skills ○ Resources ○ Partnerships
Processes and practices	Examined the various processes and practices in the country’s fisheries institution related to: <ul style="list-style-type: none"> ○ Good governance- assessed the application of good governance practices, particularly fisherfolk inclusion, in decision-making processes in the fisheries sector. ○ Collaborative management- assessed the extent to which cooperative management exists in practice between fisheries-related state agencies and small-scale fisherfolk and their organisations. The degree of stakeholder collaboration in management practices was also assessed. ○ Effective communication- assessed the extent to which providers of fisheries information in the project country were using defined communication strategies, tools and channels to communicate with fisherfolk, as well as their capacity to use the tools and channels effectively; including the structures and systems in place for clear communication.

The tool was implemented using a variety of data collection methods (See Section 3 on Methodology) in order to capture a broad range of stakeholder perceptions and input; as well as to gather perspectives on the realised benefit of existing laws, rules, regulations, processes, practices and procedures of the fisheries institutions.

Based on the information collected the institutional analysis and organisational assessment report will discuss the following key aspects in regard to the capacity of the fisheries institution to support the role of fisherfolk and their organisations in ecosystem stewardship:

- Policy, legal and planning context for ecosystem stewardship

- Mechanisms for fisherfolk participation in decision-making
- Support and resources available to fisherfolk and their organisations for ecosystem stewardship
- Partnerships and networks for ecosystem stewardship
- Communication of information on sustainable practices for fisheries resources use
- Organisational capacity of the fisheries authority to support fisherfolk and their organisations with ecosystem stewardship

3 Methodology

A rapid analysis of the institutional and organisational capacity of fisheries-related state agencies to enable stewardship in the fisheries sector was conducted for Guyana during the period April – July 2020. The analysis piloted an institutional and organisational capacity assessment tool developed by CANARI (Refer to Section 2). The rapid analysis included the following key research methods:

- **Desk study:** CANARI collated and reviewed information readily available (e.g. through online sources and those referenced at workshops) on the project country's small-scale fisheries sector and its institutional environment; particularly as it relates to capacities to support ecosystem stewardship by small scale fisherfolk and their organisations. This was carried out at an early stage of the analysis to inform and guide the subsequent methods.
- **Validation webinar⁸:** Following the initial desk study; a validation webinar was held on June 30th, 2020 which included participants from government (e.g. Department of Fisheries), and civil society (Guyana National Fisherfolk Organisation). The full participants list is attached at Appendix 13.2.1. The purpose of the webinar was to validate information collated during the desk study phase as well as acquire additional information from in-country sources.
- **Interviews:** Virtual interviews were conducted during the month of June and July with government, and civil society stakeholders. A list of interviewees' associated organisations is attached at Appendix 13.2.2.
- **Survey:** An online organisational capacity assessment survey was administered to Guyana Department of Fisheries to collect information on the organisation's current ability to support ecosystem stewardship by small-scale fisherfolk. Online surveys were also sent to validation webinar participants before the webinar, to collect information on relevant policies, plans, laws and national decision making mechanisms relevant to the fisheries sector and after the webinar, to acquire information on support available to fisherfolk through various projects, programmes or initiatives as well as get input into recommendations for institutional strengthening.

4 Background

4.1 Geography

Guyana, though part of the Caribbean Community (CARICOM), is situated in the South American continent. The country has an area of 215, 000 km², bounded by the Atlantic Ocean to the north, Brazil to the south, Suriname to the east and Venezuela to the west. The country has a coastline of 432 km and exclusive economic zone of 138,240 km². The continental shelf of Guyana extends on average 112.6 km seaward and has an average area of 48,665 km².⁹

⁸ National Institutional Analysis and Organisational Assessment Validation workshops were initially carded to be conducted in-country for all project countries, however, due to the Covid-19 pandemic as declared by the World Health Organisation on March 11, 2020, and subsequent restrictions on air travel and in-person gatherings, all workshops following the declaration date were conducted virtually through webinars.

⁹ FAO. 2005. FAO Country Profile: The Republic of Guyana. Rome, Food and Agriculture Organization of the United Nations. http://www.fao.org/fishery/docs/DOCUMENT/fcp/en/FI_CP_GY.pdf. Accessed 20 July 2020.

Guyana's landscape is diverse, including plains at the coast and swamps in the interior. The Zanderij Region is covered in white sands for over 130 km. There are also savannah regions 100 km from the coast, forming sand belts, which covers a plateau that makes up most of the interior's base. Further inland is the Kaieteurian Plateau, which is 490 m above sea level. The famous Kaieteur Falls stand at 226 m and the region is characteristically made up of shale and sandstone, which extends southward to the Rupununi Savanna region containing the Kanuka Mountains. Other mountainous regions include the Acaraí Mountains (600 m) to the south and the Pakaraima Mountains to the west with its tallest point, Mount Roraima, reaching 2,772 m. Guyana is also home to large freshwater systems, including four rivers- the Berbice River, Demerara River, Corentyne River and Essequibo River. These rivers form part of the Amazon and Orinoco watershed, which due to poor drainage, is prone to flooding (Richardson & Menke, 2020).

Guyana's climate is characterised by substantial rainfall and high temperatures. Temperatures range in the mid to high 20s °C, with some variability near the coast due to the trade winds. There is little difference in these temperatures through seasons, with generally high humidity and cloud cover giving the climate of equatorial lowland. Rainfall is variable and is controlled by the intertropical front (doldrums) which brings an average of 1,800 – 2,290 mm of rainfall, with the lower value in the interior and the higher end at the coast. Guyana also has two wet seasons; a longer wet season occurs between April to August and a shorter wet season occurs from December to February. This is more predominant at the coast and does not occur in the savanna to the south. The variable rainfall and overall climatic conditions affect agricultural production and planning in Guyana (Richardson & Menke, 2020).

The rainfall patterns in Guyana also affect the nearshore marine environment. The Amazon to the south and Orinoco to the north bounds the maritime area of Guyana and inundates the area with sediment and freshwater during the wet season. This, coupled with runoff from its own rivers, decreases the salinity of the nearshore marine environment and causes the formation of sand bars and mudflats around the shelf area. Beyond this is sand and then coral found at about 100 m depths. The muddy sediment is ideal for healthy benthic life which in turn supports a thriving demersal fishery (Food and Agriculture Organisation, 2005).

4.2 Governance

Guyana became an independent colony in 1966, after the then British government introduced a new system of elections based on proportional representation. In 1970, the country was declared a republic in the British Commonwealth. A new constitution was introduced in the year 1980, which established the unicameral National Assembly system of government and the position of the Executive President. The Assembly is comprised of 65 elected representatives who hold their position for five years, three non-elected members and the speaker. There are also local government structures, namely, the Regional Democratic Councils based in each of the 10 administrative regions¹⁰ and led by elected chairs for a period of five years and four months. Guyana's justice system has a Supreme Court, made up of a High Court and a Court of Appeal. The Caribbean Court of Justice became the countries final court of appeal in 2009 (Richardson & Menke, 2020).

Guyana has a population of 787,399, with a growth rate of 0.48% and a population density of 4 persons per km². Most settlement occurs in Georgetown (235, 017) with other areas such as Linden

¹⁰ The 10 administrative regions of Guyana include: Region 1 – Barima-Waini; Region 2 – Pomeroon-Supenaam; Region 3 – Essequibo Islands-West Demerara; Region 4 – Demerara-Mahaica; Region 5 – Mahaica-Berbice; Region 6 – East Berbice; Corentyne; Region 7 – Cuyuni-Mazaruni; Region 8 – Potaro-Siparuni; Region 9 – Upper Takutu-Upper Essequibo; and Region 10 – Upper Demerara-Upper Berbice (Guyana Land and Surveys Commission, n.d.)

and New Amsterdam also having higher settlement. The country is diverse in race and ethnicity, having a population with descendants from Africa, India, Europe, China, as well as, many indigenous communities. The indigenous groups make up around nine per cent of the population and include Akawaio, Arecuna, Arawaks, Caribs and Wai Wai (World Population Review, 2020).

4.3 *Economy*

The Guyanese economy is based largely on mining and agriculture. Resources such as bauxite and gold contribute significantly, along with commercial crops like rice and sugar cane. There has been economic restructuring after extreme low for the economy in 1982, which led to the privatisation of large state-owned corporations such as Guyana Airways and the Sugar Corporation. The increased investment and privatisation led to job creation in these sectors (The Commonwealth, 2020).

Since then, the economy has had several phases of growth and decline, but in recent times has become one of the fastest growing economies of the world. This is due to major oil finds (approximately eight billion barrels of crude oil) in recent years and exploration by large energy companies such as Exxon Mobil among others (Bristow, 2020). Despite the impact of the global COVID-19 pandemic, the fall in price of oil and the prolonged election and political unrest, it is still projected to grow quickly, as it estimates a production of 750,000 barrels of oil per day by the year 2025. The current gross domestic product (GDP) is 6.7 billion USD, around 60 per cent of which comes from the export of mining and agriculture, including bauxite, gold, timber, sugar, rice and shrimp (The Heritage Foundation, 2020).

4.4 *Overview of fisheries sector*

According to Guyana's Second National Communication (SNC) to the United Nations Framework Convention on Climate Change (UNFCCC), the fishing industry has significant socio-economic value for the country. Fish is also an important source of protein for citizens with an estimated annual consumption rate of 88.4 kg per capita, and data from 2006 shows it contributed to around seven per cent to the GDP (Government of Guyana, 2012) but decreased to around 2.3 per cent in 2012 (FAO/Global Environment Facility, 2016).

According to the 2012 SNC, the entire industry, harvest and post-harvest, employed 13,000 people (Government of Guyana, 2012). The harvest sector consists primarily of the fishers and fishing crews of boats, while the post-harvest sector includes persons in processing, vending, boat building and repair, gear making and repair, and other associated business. The more recent Artisanal Fisheries Strategic Framework and Management Plan (2019), stated that there are currently around 5,000 small-scale fishers, 1,000 of which are boat owners. The small-scale sector has an estimated 1,315 fishing vessels, which are between 6 – 18 metres long, with sails, inboard or outboard engines (Poupponeau, et al., 2019).

Guyana's fishery is divided into three main groupings:

- Marine fishery- this fishery includes small-scale artisanal fishery, industrial trawl fishery and deep slope/ semi-industrial red snapper fishery.
- Inland fishery- this takes place in rivers, lakes, flood plains and swamps and includes the harvesting of ornamental fish and subsistence.
- Aquaculture- these farms are found at the coast in freshwater and brackish water found in low-lying swamp or marshland areas, and ponds (Government of Guyana, 2012; Food and Agriculture Organisation, 2005).

Small-scale fisheries usually use various types of gear including pin/beach seine, Chinese seine or fyke net, circle seine, drift seine, cadell lines, handlines and the most common gear type, gillnets.

Gear like the gillnet, pin and Chinese seine however, can be unsustainable, harvesting crustaceans and juvenile fish (Food and Agriculture Organisation, 2005). The industrial fishery in Guyana, based around the shrimp fishery usually operate within the continental shelf (in water less than 34 m isobath for seabob and 34 m or more for prawn) using “double outrigger shrimp trawl nets” (Food and Agriculture Organisation, 2005).

The main seafood exported is shrimp which includes three types, namely seabob (*Xiphopenaeus kroyeri*), prawn (*Penaeus sp.*) and whitebelly (*Nematopalaemon schmitti*). Finfish of commercial importance include red snapper, grey snapper, bangamary, trout, butterflyfish and gillbacker. Guyana also has crab and shark fisheries (Government of Guyana, 2012).

For aquaculture the main commercial species include tilapia (*Oreochromis sp.*), freshwater pacu (*Colossoma macropomum*), hassar (*Hoplosternum littorale*) and swamp shrimp (*Mesopenaeus tropicalis*) (Government of Guyana, 2012). The sub-sector produced a value of 1.2 million USD in 2006 in products, growing at a rate of 14.4 per cent since 1995. Aquaculture is seen as an opportunity for strengthening and diversification of the fisheries industry and an important source of employment. Other inland fishery occurring are subsistence fishery, usually carried in lakes, rivers and other freshwater sources by indigenous communities; and ornamental fishery carried out mainly for export to the US and Europe (Food and Agriculture Organisation, 2005).

For artisanal fisheries, there are eight main fish landing facilities built along the coast. These were built by the Government of Canada through the Canadian International Development Agency (seven) and the European Union (one). Each site is equipped for docking, ice-making, accessing fuel and market areas for the selling of seafood and fishing necessities (Food and Agriculture Organisation, 2005; Pouponneau, et al., 2019).

International agreements to which the Government of Guyana is signatory include:

- United Nations Convention on Law of the Sea (UNCLOS) 1994;
- Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing 2016;
- Agreement to promote compliance with international conservation and management measures by fishing vessels on the high seas 1995; and
- Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), 1975.

Guyana is also a member state to the Caribbean Regional Fisheries Mechanism (CRFM) the Western Central Atlantic Fishery Commission (WECAFC), Latin American Organization for Fishery Development (OLDEPESCA) and is a cooperating non-contracting party of the International Commission for the Conservation of Atlantic Tunas (ICCAT) (Terje Løbach, et al., 2020).

Guyana’s marine capture and inland fisheries are vulnerable to climate change. With changes in rainfall, changes in water circulatory patterns, flooding, saltwater intrusion, and sea level rise, the industry is affected ecologically and socio-economically. These climatic changes will affect species abundance and distribution, ecosystems and also affect operation of fishers in coastal areas (Government of Guyana, 2012). Apart from climate change, the industry faces other challenges including, but not limited to lack of coordination and collaboration among stakeholders, lack of attention and resources focussed on the small-scale fisheries sector, lack of research and scientific data, overexploitation/overfishing of important commercial species, unsustainable fishing practices, lack of quality assurance and control, increasing prices of fish and operations, limited resources available to the fishing industry, piracy and safety of fisherfolk at sea (Food and Agriculture Organisation, 2005). There has been an effort to increase resources placed into the fishing industry,

with attention given to the small-scale fisheries sector, and efforts of international organisations and intergovernmental organisations are providing opportunities for moving towards sustainable management of Guyana's fishing industry.

4.5 *Stakeholder identification and analysis*

Guyana's fisheries institution includes a range of stakeholders including government, civil society organisations, academia, private sector and intergovernmental organisations with various roles, mandates and responsibilities that influence the development and management of the fisheries industry. As part of the institutional analysis, key stakeholders were identified and analysed to understand the range of actors involved in the industry (refer to Table 4.1). The stakeholder identification and analysis were informed by the desk study, information provided by the Department of Fisheries and the stakeholders who participated in the validation webinar.

The list provided in Table 4.1 is not exhaustive but identifies some of the key stakeholders/groups in the fisheries institution that are likely to benefit from improved ecosystem stewardship by fisherfolk, including national fisherfolk organisations and fishing co-operatives. Of those listed in the table, the Department of Fisheries, the Guyana National Fisherfolk Organisation (GNFO), primary fisherfolk organisations (such as the Upper Corentyne Fishermen's Co-operative), the Department of Co-operatives and the Fisheries Advisory Committee (FAC) are some of the main players in the artisanal fishery sector.

There are currently four active, primary fisherfolk organisations in Guyana, namely, the Upper Corentyne Fishermen Co-operative Society Limited, the Demerara Fishermen Co-operative Society Limited, the Rosignol Fishermen Co-operative Society Limited and the Greater Georgetown Fishermen's Cooperative Society (Parsram & McConney, 2008). There is also an active group for industrial fishing, the Guyana Association of Trawler Owners and Seafood Processors (GATOSP), which represents the needs of stakeholders in and the sustainability of the seabob fishery (Government of Guyana, 2015). The GNFO was created as an umbrella or national fisherfolk organisation, seeking to represent the concerns and well-being of all small-scale fishers in Guyana and the fisheries resources they utilise.¹¹ The GNFO however, has had low engagement, with a few attempts to re-energise the group over the years. Currently there is still little participation from the membership, but for two primary fisherfolk organisations. The organisation is still involved at the level of the FAC and in national and regional projects, through the efforts of the chairman of the organisation. However, as was stated in the validation webinar and in key informant interviews, members have lost interest or have dropped out of the group contending they are not seeing any changes to the sector and benefits to remaining in the group. According to one interviewee, they are also disenchanted and frustrated by promises made by the Department of Fisheries that remain unfulfilled.

The Department of Co-operatives also has a very important role, as they assist groups of fisherfolk to formalise and register and co-operatives under the Co-operative Society Act. The Department of Co-operatives also has responsibilities for ensuring that all co-operatives, including fishing co-operatives, subscribe and adhere to decent work requirements such as social security and insurance. However, it was stated in a key informant interview that the Department of Co-operatives does not regularly interact with the Department of Fisheries, even though their role in establishing fishing co-operatives is significant. There is a lack of inter-agency collaboration, extended even beyond these main actors. The Environmental Protection Agency (EPA) whose role is important for the promotion

¹¹ Information gathered through the organisational capacity assessment done by organisation and their mentor.

of conservation and resource management, including ecosystem stewardship of resource users, has limited interaction and collaboration with the Department of Fisheries. The exception to this is the FAC, where the EPA sits as member along with the Department of Fisheries, the GNFO and other fisheries stakeholders. For the EPA and other key stakeholders, the relationship and collaboration between and among the key stakeholders in the fisheries sector extend to interaction on the FAC or operational, day to day tasks of the agencies.

There is a clear need for strengthening relationships among organisations in the fisheries institution of Guyana. The GNFO needs to strengthen engagement with its membership and fisherfolk in general in the small-scale fisheries sector. The Department of Fisheries needs to build and strengthen relationships with the national fisherfolk organisation and the primary fisherfolk organisations. There also needs to be greater inter-agency collaboration among government entities. Fisherfolk are more likely, to collaborate or participate in projects/programmes being implemented by local and international non-governmental organisations (like WWF- Guianas or Conservation International), or intergovernmental organisations (like the FAO and UNDP). Even so, their role is usually as participants in the training or project and not necessarily as a project partner. The Caribbean Network of Fisherfolk Organisations (CNFO) has also been a useful platform for the GNFO to partner on regional projects, input and participate in regional policies and network with other Caribbean fisherfolk organisations.

Admittedly, as said in the validation webinar¹², there has been more of a focus on industrial fisheries in the past, but with the development of the Artisanal Fisheries Strategic Framework and Management Plan, there will be increased focus on the small-scale fisheries sector. This shift may bring about greater collaboration among actors in the fisheries institution, however, as it stands, there is limited interaction and partnership between the fisherfolk organisations and the government agencies, as well as limited inter-agency collaboration.

¹² Institutional analysis and organisational assessment validation webinar held on 30 June 2020.

Table 4.1: Analysis of key stakeholders in the fisheries institution in Guyana

Type of/Stakeholder	Role/Interests	How will they be affected by improved ecosystem stewardship by fisherfolk/fisherfolk organisations?
Government		
Department of Fisheries, Ministry of Agriculture ¹³	<ul style="list-style-type: none"> Responsible for the management, regulation and promotion of sustainable development of the fisheries resources of Guyana for the benefit of fisheries stakeholders and the economy of the country. Responsible for marine capture fisheries, inland fisheries and aquaculture; carries out tasks related to administration and support services for the management of activities and programmes; the collection and analysing of data for informing policy decisions, planning and sustainable manage of fisheries resources; management and regulation of registration, licensing, enforcement, surveillance, monitoring compliance and the collection of revenue as outlined in the Fisheries Act of 2002 and the Maritime Act of 1977. Responsible for the development of the aquaculture sector in a sustainable manner. 	<ul style="list-style-type: none"> Ecosystem stewardship encourages inclusivity in resource management of fisheries governance. Co-management initiatives, including participatory implementation and monitoring of resource management measures, improve partnership and collaboration between the Department of Fisheries and resource users, deters unsustainable use of resources and allows the, sometimes limited, resources available to Department of Fisheries to be more effectively utilised by 'sharing the burden' of management. Stewardship action can also help the Department to understand how fisherfolk and fishing communities respond to ecological change, their values and motivations for engaging in stewardship activity, and their decision-making systems. This can allow the Department and the Ministry of Agriculture as a whole, to respond with effective and appropriate interventions, which ensure sustainable use, ecosystem health and equitable social and economic benefits to users.
Fisheries Advisory Committee (FAC)	<ul style="list-style-type: none"> Established under the Fisheries Bill of 1986 and responsible for advising on the management and development of the fisheries resources management and development of fisheries, with the objective of ensuring the optimum utilisation of the fisheries resources of the fisheries waters of Guyana for the benefit of the people of Guyana. 	<ul style="list-style-type: none"> The participation of fisherfolk or FFOs on the FAC is itself an example of ecosystem stewardship. The FAC can benefit from fisherfolk participation through their sharing of local knowledge and understanding challenges in the sector from the perspective of fisherfolk. This can improve the ability of the FAC to advise the Minister on matters arising/affecting fisherfolk and promotes good governance.

¹³ <http://agriculture.gov.gy/fisheries/>

<p>Department of Cooperatives, Ministry of Social Security</p>	<ul style="list-style-type: none"> Responsible for guiding, supporting, regulating and monitoring the development of the co-operative sector in all the ten administrative divisions of Guyana. This includes co-operatives and friendly societies established in the fishing industry and are governed under provisions set out by the Co-operative Societies Act, Chapter 88:01¹⁴. 	<ul style="list-style-type: none"> Improved ecosystem stewardship by fisherfolk can benefit the Department through increased willingness of fisherfolk to form co-operatives, follow guidelines and regulations, participate in training and improve record keeping, reporting and administrative functions. They will also be more willing to ensure fishers and/or employees are registered for national insurance, thereby improving the Department's work on decent work. There may also be improved participation and support for capacity building initiatives by fisherfolk, their families and communities.
<p>Environmental Protection Agency (EPA)¹⁵, Department of the Environment</p>	<ul style="list-style-type: none"> Responsible for the management, conservation, protection and improvement of Guyana's natural environment. This includes ensuring sustainable resource use, preventing and controlling pollution and assessing environmental and social impacts on economic activity and associated development. Responsible for coordinating activity to meet commitments under the Cartagena Convention- the Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region.¹⁶ 	<ul style="list-style-type: none"> With fisherfolk/FFOs participating and leading in ecosystem stewardship, there will be greater understanding and buy-in to management measures implemented by the EPA. The EPA can gain a better understanding of issues that are affecting fisherfolk and co-operatives, how they problem solve and make decisions surrounding the issue, and what solutions work best. Fisherfolk will have a greater "voice" within the fisheries institution and marine and coastal resource management and can contribute to solutions, leading to more successful interventions, more informed policy, improved ecosystem health and sustainable livelihoods. This can also lead to greater partnership between the EPA and fisherfolk/FFOs and the Department of Fisheries.

¹⁴ <http://www.guyaneselawyer.com/lawsoguyana/Laws/cap8801.pdf>

¹⁵ <http://www.epaguyana.org/epa/>

¹⁶ <https://www.informea.org/en/treaties/cartagena-convention>

Ministry of Indigenous Peoples' Affairs	<ul style="list-style-type: none"> • Responsible for the ensuring and enhancing the “social, economic and environmental well-being of Indigenous Peoples and their lands” through the development of suitable policy and legal frameworks and collaboration with indigenous peoples for sustainable development while ensuring the preservation of their traditional knowledge and culture. • Operates within the context of the Amerindian Act 2006¹⁷ which includes provisions which speak to environmental protection for sustainable use of the natural resources used by Amerindian communities. 	<ul style="list-style-type: none"> • The Ministry can benefit, like the EPA, from a greater understanding of the needs and priorities of fisherfolk in indigenous communities; their relationship with resources, their priorities and their decision-making/problem solving processes. In this regard, it can also highlight valuable local knowledge and cultural norms of indigenous communities, so that the Ministry can better represent and address their needs.
Veterinary Public Health Unit, Ministry of Public Health	<ul style="list-style-type: none"> • Responsible for the enforcement of Regulation No. 7 of the Fisheries Act 2003, pertinent to the Fishery Products Regulations. This deals specifically with quality control, inspection, and certification of products. The Unit operates under the Ministry of Health and works very closely with the Ministry of Agriculture, Department of Fisheries. 	<ul style="list-style-type: none"> • The Unit can benefit from greater organisation and capacity of fisherfolk/FFOs and other stakeholders within the fishery value chain, such as vendors, processors and other fish handlers to adhere to standards set out by the Unit and certification process. They will be more aware and receptive to the environmental health issues and quality control and quality assurance measures.
Guyana Coast Guard Guyana Defence Force	<ul style="list-style-type: none"> • Responsible for the monitoring and surveillance of the Exclusive Economic Zone (EEZ) which includes the nation’s fisheries and marine resources; deterrence and interception of illegal maritime activities; enforcement of the maritime laws of the high seas and territorial waters of Guyana; and to support units on land. • They conduct fisheries protection patrols, monitor pollution in the marine environment and manage safety at sea, among other roles. • The coast guard was created under the Defence (Amendment) Act 1990, also called the Coast Guard Act. ¹⁸ 	<ul style="list-style-type: none"> • The Coast Guard will benefit from improved relations with fisherfolk stakeholders, improved and continued compliance to regulations, with greater representation from fisherfolk. Improved stewardship can decrease illegal activities and strengthen the partnership between the Coast Guard and fisherfolk/FFOs to report illegal maritime activities and comply with safety at sea regulations.

¹⁷ <https://moaa.gov.gy/legislation-the-amerindian-act/>

¹⁸ <https://www.globalsecurity.org/military/world/caribbean/gy-coast-guard.htm#:~:text=The%20role%20of%20the%20Coast,in%20support%20of%20land%20forces.&text=Fisheries%20Protection%20Patrols.&text=Harbour%20Patrols.>

<https://www.globalsecurity.org/military/world/caribbean/gy-coast-guard.htm#:~:text=The%20role%20of%20the%20Coast,in%20support%20of%20land%20forces.&text=Fisheries%20Protection%20Patrols.&text=Harbour%20Patrols.>

<p>Marine Police Guyana Police Force</p>	<ul style="list-style-type: none"> • Works closely with the Coast Guard for the monitoring, control and surveillance of the coastal and marine environment of Guyana, which extends to the fisheries sector to enforce compliance of fisheries laws and regulations. • Supports activities to reduce unreported, unregulated and illegal (IUU) fishing, prevent and control piracy and to ensure compliance by industrial fleets operating in Guyana’s territorial waters. They may also visit landing sites, with officers from the Department of Fisheries and the Coast Guard to conduct inspections, but this can also take place at sea ((Department of Public Information, 2016). 	<ul style="list-style-type: none"> • The Marine Police, like the Coast Guard, will benefit from improved relations and cooperation with fisherfolk stakeholders and FFOs, improved and continued compliance to regulations, with greater representation from fisherfolk. • There will be decreased IUU fishing and stronger partnership with fisherfolk to address issues of piracy. Improved ecosystem stewardship can also encourage fisherfolk/FFOs to discourage and report unlawful activity taking place at landing sites.
<p>Maritime Administration (MARAD)</p>	<ul style="list-style-type: none"> • Overall role of managing vessels along the rivers in Guyana, the licensing of ships, including the issuance of the Harbour License for fishermen, along with other licenses for seafarers. The agency also works closing with the Guyana Police Service and the Environmental Protection agency (EPA). • Role in search and rescue at sea, prevention of marine pollution, ensuring that safety measures are adhered to, and ensuring the welfare of seafarers. • This agency was established under Section 4 of the Shipping Act 1998.¹⁹ 	<ul style="list-style-type: none"> • MARAD can benefit by improved collaboration and compliance by fisherfolk and FFOs, particularly with licensing and management measures at ports. • They can also benefit from fisherfolks increased awareness of marine pollution and participation in interventions to decrease this and other safety measures instituted by the administration.
<p>Civil Society</p>		

¹⁹ <https://marad.gov.gy/maritime-administration/>

<p>Guyana National Fisherfolk Organisation (GNFO)</p>	<ul style="list-style-type: none"> • The core functions of the GNFO is to share information with primary fisherfolk organisations and advocating for the concerns of fisherfolk, particularly with regard to piracy and licensing issues. Seven primary organisations should constitute the membership of the organisation²⁰ but at present only two are active within the GNFO. ²¹ • Interest in long-term sustainability of fish stocks to support fisherfolk livelihoods, including sustainable business enterprises/cooperatives 	<ul style="list-style-type: none"> • Fisherfolk and FFOs that adopt and promote more sustainable fishing practices among their membership are likely to have more sustainable and viable business enterprises/cooperatives. Their improved ecosystem stewardship will strengthen the GNFO, strengthening collective action and advocacy on behalf of its membership. • A positive reputation and increased capacity for sustainable practices can potentially create opportunities for FFOs to form new partnerships with other organisations with similar values willing to provide capacity building and other resources to support their development. • Member organisations would be motivated to engage on issues related to management of fisheries resources leading to greater participation / collaboration at cooperatives meetings, and various consultations.
<p>Primary Fisherfolk organisations (PFOs) such as:</p> <ul style="list-style-type: none"> ○ Upper Corentyne Fishermen’s Cooperative Society ○ Essequibo Island/West Demerara Fishermen’s Cooperative Society Ltd. ○ Greater Georgetown Fishermen’s Co-operative Society ○ Rosignol Fishermen’s Cooperative Society Ltd. 	<ul style="list-style-type: none"> • Represent and advocate for the wellbeing and issues of members and local fishing community, including licensing issues and documentation for fishing in Surinamese waters, as is done by the Upper Corentyne Fisherfolk Co-operative Society (UCFCS)²². • Seek the economic development of the sector on-behalf of their members/shareholders, including ensuring access to markets and sale of products, access to cold storage and fuel. They also assist with monitoring fisheries resources. • Medium through which fishers learn and engage in stewardship type activity. • Interest in long-term sustainability of fish stocks to support fisherfolk livelihoods, including sustainable business enterprises/cooperatives 	<ul style="list-style-type: none"> • PFOs that adopt and promote more sustainable fishing practices among their membership are likely to have more sustainable and viable business enterprises and contribute to a stronger collective voice to advocate for issues they face. • Improved stewardship can potentially create opportunities for these organisations to form new partnerships with other organisations with similar values willing to provide capacity building and other resources to support development of these cooperatives. • Fisherfolk would be motivated to engage on issues related to management of fisheries resources leading to greater participation / collaboration at cooperatives meetings, and various consultations.

Conservation International (CI) Guyana	<ul style="list-style-type: none"> • Role/interest in conservation and sustainable management of Guyana’s natural resources, including fisheries resources, for a sustainable green economy. 	<ul style="list-style-type: none"> • Empowered FFOs would be more motivated to access grant funding to support conservation activities and sustainable livelihoods projects. • This can also lead to increased interest by fisherfolk to attending meetings, training and consultations, and share local knowledge to inform the development of projects. • It can lead to increased partnerships with fisherfolk organisations for conservation projects.
Guyana Wildlife Conservation and Management Commission	<ul style="list-style-type: none"> • Main role in protecting Guyana’s wildlife for the future by sustainable management and conservation. • The Commission was established under the Wildlife Conservation and Management Act (2016) and helps to meet Guyana’s commitments to international agreements and conventions like Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). 	<ul style="list-style-type: none"> • Empowered FFOs would be more inclined to supporting conservation activities and sustainable resource management interventions, particularly those in which they have been involved in formulating as ecosystem stewards. • There will be increased interest by fisherfolk in attending meetings, training and consultations, and sharing local knowledge to inform the development of conservation projects. • Increased partnerships with fisherfolk organisations for conservation projects.
Guyana Marine Conservation Society (GMCS)	<ul style="list-style-type: none"> • Role/interest in promoting and supporting stewardship and advocacy for the conservation of the marine environment of Guyana marine and coastal resources. 	<ul style="list-style-type: none"> • Empowered FFOs would be more inclined to supporting conservation activities and sustainable resource management interventions. • There will be increased interest by fisherfolk in attending meetings, training and consultations, and share local knowledge to inform the development of projects. • It can lead to increased partnerships with fisherfolk organisations for conservation projects and reduce the strain on limited resources available to projects or environmental non-governmental organisations, through shared responsibility.
Private sector		

<p>Private sectors including seafood processors and exporters, for example</p> <ul style="list-style-type: none"> ○ BEV Processors Incorporated ○ Coldingen Cold Storage ○ Georgetown Seafoods & Company Ltd. ○ Gopie Fishing Enterprise ○ Guyana Association of Trawler Owners and Seafood Processors ○ International Fishing Investment Limited ○ New Guyana Marketing Corporation ○ Pritipaul Singh Investment ○ R & S Fishing Enterprise ○ Single Seafood's Exports ○ Tropical Product Guyana Limited²³ 	<ul style="list-style-type: none"> ● Responsible for providing processing, storage and marketing facilities for fisherfolk and responsible for processing and marketing of fish and fish products. ● Interest in sustainable supply of seafood for business sustainability and profit generation. 	<ul style="list-style-type: none"> ● Sustainable catch and reduced overexploitation of fishery resources by fisherfolk could contribute to improved quality of seafood available to the private sector, which in turn can increase revenue generated from higher value products. ● It can also lead to increased ability of fisherfolk/FFOs to meet demands locally and/or for export, in a sustainable level so that the market is regulated, and gluts and shortages reduced. ● Increased collaboration with private sector entities as it relates to alternative livelihoods and value-added products and support for aquaculture as a viable alternative livelihood.
<p>Aquaculture sector, for example</p> <ul style="list-style-type: none"> ○ Aquaculture Association of Guyana ○ Research and Development Unit of the Department of Fisheries 	<ul style="list-style-type: none"> ● Responsible for the development of aquaculture and promoting diversification of the fisheries sector. ● Interest in improving national food and nutritional security. ● Interest in for fisheries products from marine sources. ● Interest in sustainable supply of seafood for business sustainability and profit generation. 	

²³ List referenced from http://www.crfm.net/~uwohxjxf/images/directory_of_fisheries_stakeholders__in_the_caribbean_fish.pdf

5 Policy and legal context for ecosystem stewardship

National policies, laws or plans can either encourage ecosystem stewardship by fisherfolk or undermine it.²⁴ To determine whether existing fisheries and coastal and marine related policies, laws and plans in Guyana were supporting or constraining ecosystem stewardship selected priority policies, laws and plans were assessed to determine whether they were adequately in line with the principles of the ecosystem-approach to fisheries (EAF), namely whether they considered:

- human well-being: a condition in which all members of society are able to determine and meet their needs and have a large range of choices to meet their potential; and
- ecosystem well-being: a condition in which the ecosystem maintains its diversity and quality — and thus its capacity to support people and the rest of life — and its potential to adapt to change and provide a viable range of choices and opportunities for the future.
- good governance: governance arrangements that enable broad stakeholder participation are similarly expected to confer support for management and foster stewardship among fisherfolk and other resource users.²⁵

EAF recognises the need to maintain the productivity of ecosystems for present and future generations, conserving critical habitats, reducing pollution and degradation, minimising waste and protecting endangered species. It also recognises that this will not be achieved without the cooperation of people, i.e. unless the ecosystem contributes to human well-being, providing sustainable goods and services and sources of livelihood.²⁶ Consideration of the latter is likely to encourage fisherfolk and other resource users to sustainably use, protect and conserve the resources they depend on for livelihoods. A holistic governance framework which considers importance of not only the ecological well-being of fisheries resources – but equally considers socio-economic well-being of fishery resource users and collaborative management mechanisms in the approach to fishery resources management – will increase the likelihood of ecosystem stewardship from fisherfolk in the small-scale fisheries industry.

5.1 Findings for policy, legal and planning context for ecosystem stewardship in Guyana

Table 5.1 identifies some of the national fisheries and coastal and marine related policies, laws and plans within the fisheries institution in Guyana. Policies, plans and laws identified are either directly related to the fisheries sector, for example the Fisheries Act (2002) which regulates the fisheries industry in Guyana or indirectly related to the fisheries sector, for example the Green State Development Strategy: Vision 2040 which was developed to inform the sustainable management of Guyana’s natural resources through a green economy approach for the benefit of present and future generations.

Table 5.1 List of policies, laws and plans relevant to the fisheries sector in Guyana

Policies
<ul style="list-style-type: none"> • National Fisheries Policy (1995) • Government of Guyana Co-operative Policy (n.d.)
Laws
<ul style="list-style-type: none"> • Fisheries Act (2003) (Cap 71:08) • Maritime Zones Act (2010)

²⁴ Bennett, N.J. et al. 2018. Environmental stewardship: a conceptual review and analytical framework. *Environmental Management*, 61(4), pp.597-614.

²⁵ Turner, R. et al. 2019. Viability and Sustainability of Small-Scale Fisheries in Latin America and The Caribbean. *MARE Publication Series* 19. p475

²⁶ FAO. 2002. The ecosystem approach to fisheries. <http://www.fao.org/3/a-y4773e.pdf>

- Marine Boundaries Act (1977)
- Fisheries (Exemption from Registration and Licensing) Order (2018)
- Fisheries Regulations (Reg. 13/1957, 1/1959, 31/1969, 20/1970, 5/1993)
- Fisheries (Pin Seine) Regulations (Reg. 8/1962)
- Fisheries (Aquatic Wildlife Control) Regulations (Reg. 3/1996A)
- Maritime Zones (Internal Waters and River Closing Baselines) Regulations (2015)
- Exclusive Economic Zone (Designation of Area) Order (1991)
- Maritime Boundaries (Turtle Excluder Device) Order (1994)
- Fisheries (Turtle Excluder Devices) Regulations (Reg. 5/2006)
- Cooperative Societies Act (Ch.88:01)
- Environmental Protection Act (1996)
- Wildlife Conservation and Management Bill (2016)
- Defence Act (Ch.15:01)
- Animal Health Act Regulations (2011)
- Fisheries Regulations (2018)
- Fisheries Product Regulation 2003 under Fisheries Act 2002
- Food and Drugs Act (1971)²⁷

Plans

- National Development Strategy
- National Fisheries Management and Development Plan (1995)
- Fisheries Management Plan (2013-2017)
- Artisanal Fisheries Guyana's Strategic Framework and Management Plan (2019-2024)
- Guyana Seabob Management Plan (2015-2020)
- National Biodiversity Action Plan
- Green State Development Strategy: Vision 2040

Key national policies, laws and/or plans were selected from the above list for deeper analysis. Instruments were selected based on their direct relevance to the fisheries sector (i.e. Fisheries policy, law or plan) as well as through feedback provided during the validation webinar where participants were asked to identify key policies, laws and/or plans that they felt were most relevant to the sustainable development of the fisheries sector in Guyana. Some of the policies, laws and/or plans identified are also broad and cross-cutting and may not be entirely focussed on fisheries. The instruments chosen for further analysis include:

- Artisanal Fisheries Guyana's Strategic Framework and Management Plan (2019-2024)
- Fisheries Regulations 2018
- Fisheries Act 2002
- Guyana Seabob Management Plan 2015-2020
- Green State Development Strategy: Vision 2040
- Environmental Protection Act 1996 and Amendment 2005
- Wildlife Conservation and Management Bill (2016)
- Maritime Zones Act 2010 (No. 18 of 2010)

These instruments were analysed based on the EAF principles identified earlier – ecosystem well-being, socio-economic well-being and evidence of collaborative management/co-management and fisherfolk inclusion in decision-making processes.

²⁷ This Act is important for the regulation of the aquaculture industry

Table 5.2 Analysis of key fisheries-related policies, laws and plans of Guyana

Name of Policy, Law, Plan	Description	The policy/law/plan considers the ecological well-being of fisheries resources	The policy/law/plan considers socio-economic well-being of resource users including fisherfolk	The policy/law/plan considers collaborative management and inclusion of stakeholders in decision-making
Artisanal Fisheries Guyana’s Strategic Framework and Management Plan (2019-2024)	<p>This phased plan was developed to address gaps or weaknesses identified in the Marine Fisheries Management Plan (2013-2020), with activities developed to focus on core areas, namely, “licensing and registration, the marine environment, safety and order at sea, dialogue and corporation, and coordination and finance”.²⁸</p>	<p>Objective 2 of the Plan considers ecological well-being of fisheries resources.</p> <p>The objective states – <i>“To maintain and protect the marine environment with sustainability as a central pillar by ensuring a healthy stock of the species exploited by artisanal fisheries and reducing by-catch.”</i></p> <p>It sets out activities for tackling this objective in several areas including fishing gear, traceability, research and development, education and outreach (or fisherfolk and policy makers) and climate change.</p>	<p>Socio-economic well-being of fisherfolk are addressed in this plan to some degree in Objectives 1, 3 and 5.</p> <p>Objective 1 looks specifically at licensing and registration of fishers. Activities are directed at improving data collection systems and the traceability of fish harvested. It also introduces innovative ways in which fishers can be involved such as the use of a mobile app for data collection called “ABALOB”.</p> <p>Objective 3 deals with safety at sea for fisherfolk, addressing social issues of piracy and unlawful activities occurring in Guyana’s marine space.</p> <p>Objective 5 addresses funding and investment in the fisheries sector to improve management. It does not directly address economic benefits to fishers,</p>	<p>The fourth objective of the plan speaks to “Dialogue, Cooperation and Coordination” which addresses the relationship between the Department of Fisheries and fisherfolks to support collaboration.</p> <p>The objective looks at “entrusting” fisherfolk with roles in data collection, collaboration and the establishment of working groups. Activities include the strengthening of fisherfolk groups and the establishment of a fisherfolk forum. However, there is no mention of co-management structures and local ownership of fisherfolk or co-operatives.</p>

²⁸ WWF-Guianas. 2019. Artisanal Fisheries- Guyana’s Strategic Framework & Management Plan 2019-2024. Prepared by World Wildlife Fun Guianas under the Shared Resources Joint Solutions (SRJS) programme. Georgetown: Ministry of Agriculture, Department of Fisheries.

			<p>but through the sustainable management of fisheries resources and the funding for the necessary research, tools and other resources to improve management, fisherfolk livelihoods can also benefit.</p> <p>Objective 4- “Dialogue, Cooperation and Coordination” also has some activities which address socio-economic issues such as support for exportation and value- addition of fish products, improving security of landing sites and improving security at landing sites and education and training on safety at sea for fishers.</p>	
<p>Fisheries Regulations (2018)</p>	<p>These regulations were made under The Fisheries Act (Cap. 71:08) and can be cited to as the Fisheries (Exemption from Registration and Licensing) Order 2018. It primarily addresses foreign and local fishing vessels, high seas fishing, fishing gear and equipment, fish aggregating devices (FADs), protection of turtles, vessel monitoring systems, controlled areas and training and research.</p>	<p>Though terms such as ecosystem approach to fisheries, ecosystem-based management and conservation are not mentioned in the Order, there are specific Part and sections which highlight consideration for ecosystem well-being. Examples of this include:</p> <ul style="list-style-type: none"> • Part V which addresses fishing gear, equipment and device states that pots and traps cannot be left unattended for more than 48 hours, which can help mitigate against loss of gear and any likely ghost-fishing. Section 41 also speaks to bycatch reduction devices 	<p>The Order speaks to, in a large part, licensing, registration and compliance for vessels, fishing permits and the regulations and conditions for awarding these. Examples of this includes”</p> <ul style="list-style-type: none"> • Part III, the licensing of local fishing vessels, registration of the vessel, and applications for local and commercial fishing licenses. Section 29 of this also addresses license to operate fish processing businesses. • Part VIII addresses the Vessel Monitoring System, 	<p>There is little reference to fisherfolk involvement in decision-making systems or collaborative management of resources or any aspects on the sector. Some notable points from the Order are:</p> <ul style="list-style-type: none"> • There is reference to the Fisheries Advisory Committee in this Order and their role in providing recommendations for on controlled areas as outlined in Part IX. • Part IX looks at “<i>Training and Research</i>” but does not mention the training of fisherfolk/ fishing co-operatives.

		<p>(BRDs), where all trawlers are required to have BRDs operational when fishing as per specification set out by law.</p> <ul style="list-style-type: none"> • Part VI speaks to the establishment, use and management of FADs, which is sustainably utilised, can decrease pressure on Guyana’s marine ecosystems and allow fish stock to replenish. • Part VII involves the protection deterrence of catching four marine turtles found in Guyana waters, through the use of turtle excluder devices (TEDs). • Part IX establishes controlled areas. These controlled areas maybe declared by the Minister as no-take zones. These can be established to mitigate against diseased or invasive marine life, the vulnerability of a species through depletion or other threats, and on the recommendation of the FAC. 	<p>through the Vessel Monitoring Centre, where it is ordered that <i>“Every owner of a fishing vessel licensed or permitted to fish in fisheries waters or related activities shall ensure that the vessel is fitted with a vessel monitoring device...”</i>. This is important for improving management of fishing fleets and vessels, improving surveillance and safety at sea and deterring and minimising illegal activity.</p> <p>Socio-economic well-being is not explicitly mentioned however, no focus on livelihood of fisherfolk, beyond recommendation and regulations for licensing and compliance.</p>	
Fisheries Act (2002)	<p>The Fisheries Act (Chapter 71:08) is one of the primary legislative instruments regulating the fisheries sector of Guyana. It makes provisions for fisheries management and development, registration of vessels, local and foreign fishing licenses, fees and</p>	<p>The Act does not mention key terms like ecosystem approach to fisheries or ecosystem-based approach, however it does address ecosystem well-being, mostly through the establishment of marine or fisheries reserves.</p> <p>Some examples of where ecosystem well-being is considered are:</p>	<p>The extent to which socio-economic well-being is addressed in the Act extends to management of the sector, with emphasis on compliance and enforcement. The Act outlines the process for licensing and permits for foreign and local fishing vessels. This is seen in Parts III to VII.</p>	<p>The Act outlines the establishment of the Fisheries Advisory Committee (FAC) and the roles the Committee. This is one instance where fisherfolk representatives can be included in the decision-making systems of the industry.</p> <p>There is no mention however, of co-management arrangements involving fisherfolk or fishing co-operatives or</p>

	<p>royalties, marine reserves and fishing priority areas, prohibited fishing gear, methods and stowage, high seas fishing, fish processing, import and export of fish, enforcement and judicial proceedings and the accompanying regulations.</p>	<ul style="list-style-type: none"> • <i>Part VIII- “Marine reserves and fishing priority areas.”</i> These are established by the discretion of the Minister for protection of flora and fauna, protection or breeding grounds, and habitat for aquatic life, particularly with threat of extinction. • <i>Part IX- “Prohibited fishing methods, possession of prohibited fishing gear, and stowage of fishing gear.”</i> This part of the legislation prohibits the use of unsustainable fishing practices such as explosives, poisons and unsustainable fishing gear. • <i>Part X- “High seas fishing.”</i> This provides for compliance to and promotion of the International Conservation and Management Measures by Fishing Vessels on the High Seas (1993) and the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (1995) as it relates to the United Nations Convention on the Law of the Sea (UNCLOS) (1992) <p>The Regulation under this law also highlight the management and protection of marine reserves, protection of turtles and defines</p>	<p>Also noting, other parts of the fishery value chain are also addressed in Part XI- <i>“Fish processing establishments”</i> and Part XII- <i>“Import and export of fish.”</i></p> <p>The Regulations outlines measures for the safety of local fishers and vessels.</p> <p>Although that Act has clear provisions for the management for the management, enforcement and compliance of rules for the sector, it does not integrate fisherfolk sustainable livelihood directly. It does not address issues like decent work and equity of socio-economic benefits of the sector.</p>	<p>partnerships with fisherfolk for management of any aspects of the sector.</p>
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		restrictions and prohibitions on gear type.		
Guyana Seabob Management Plan 2015-2020	The Plan was developed to sustainably manage the seabob fishery, the most developed commercial fishery in Guyana. The intention is to ensure that the fishery meets the requirements for certification from the Marine Stewardship Council (MSC) and to incorporate this into the overall marine fisheries management plan.	<p>The Plan is guided by Department of Fisheries policy and goals for the development of the fisheries sector, which prioritises the management of fish populations and the protection of unique and significant ecosystems.</p> <p>Examples of these this is incorporated into the plan include:</p> <ul style="list-style-type: none"> • General objective of the plan states that the fishery should be sustainable and “ecologically responsible” with minimal impact on the fished species (seabob shrimp, the ecosystems and habitats in which the shrimp exist, bycatch species and breeding and nursery areas. • One specific objective of the plan states that “To preserve rare or fragile ecosystems, as well as habitats and other ecologically sensitive areas, especially estuaries, mangroves, sea grass beds and other spawning and nursery areas.” <p>The plan, through the operational policy of the Department of Fisheries, also aligns with the FAO Code of Conduct for Responsible</p>	<p>Socio-economic well-being was considered in this plan through the alignment with the policy and guiding principles which guide the work of the Department of Fisheries and through the objectives set out by the plan itself. Examples of these include:</p> <ul style="list-style-type: none"> • It is highlighted in the major goals for sustainable fisheries management as a whole and speaks to optimal development of the industry to create employment, sustainable income generation for fishers and fishing communities. • The provision of fish as an important source of protein for the country and export through responsible manage of the resources. • It suggests ensuring that profits are maximised throughout the fishery value chain, by value addition and diversified markets. <p>The general objective of the plan states: “An economically</p>	<p>The Guyana Seabob Management Plan does not mention collaborative or co-management but does indicate the inclusion of traditional knowledge on ecosystems, economic and social issues of fisherfolk in conservation and sustainable management decisions as it is highlighted in the FAO Code of Conduct for Responsible Fisheries. It also highlights the need for decision-making processes to be transparent, awareness, training and protection of fishers’ rights.</p> <p>The Plan however speaks more specifically to the establishment of the Seabob Working Group (SWG) which will ensure a participative process for decision-making and manage and maintain standards set out by the MSC. Furthermore, the SWG supports the FAC in advising on the seabob fishery and larger fisheries issues.</p>

		<p>Fisheries and the Precautionary Approach.</p> <p>The importance of ecological well-being is sufficiently addressed in the objectives and guiding principles of this plan.</p>	<p>responsible and sustainable fishery, that</p> <ol style="list-style-type: none"> 1. Is economically viable; 2. maintains and improves the economic position of the fishermen by coordinated self-regulation of the fishery; 3. increases the effectiveness of the fishery; 4. is cost efficient; 5. ensures inter and intra generational equity”. 	
<p>Green State Development Strategy: Vision 2040 (Government of Guyana, 2019)</p>	<p>This is a 20-year national policy for the development of Guyana as guided by the “green agenda”.²⁹ The Strategy was developed on principles of the green economy which is defined as “sustainable, low-carbon and resilient development”. The development of the strategy was consultative, including a wide range of stakeholders across the country and through a series of public events called “green Conversations”.</p> <p>The strategy has three key messages: “manage natural</p>	<p>The plan addresses ecological well-being throughout the document but is more thoroughly addressed in <i>Development Objective B: Sustainable Management of Natural Resources</i>.</p> <p>Under this objective, outcomes to be achieved by the year 2040 highlighted:</p> <ul style="list-style-type: none"> • the preservation of Guyana’s natural capital, including its forests, water, minerals and land, to meet targets under Sustainable Development Goal (SDG) 15³⁰ 	<p>Socio-economic well-being is highlighted under <i>Development Objective C: Green and Inclusive Economic Diversification</i>.</p> <ul style="list-style-type: none"> • Objective C1.4 which focusses on fishing and aquaculture identifies actions for the sector including “C1.4.1 Support both artisanal and commercial producers to shift to more sustainable practices.” This speaks to the sustainable increase of production while improving fishing practices, livelihood and welfare of fisherfolk. It also speaks to obtaining the MSC certification and the 	<p>Throughout the strategy there is reference to participatory governance and decision-making, even stating that the development of this strategy is a “bottom-up, participatory effort.”</p> <p>One outcome of the document, states that there should be a reduction in inequalities and empowerment of people, with improved social dialogue, representation, participation and inclusion of vulnerable groups.</p> <p>Again, the document speaks to transparency and involvement of stakeholders, particularly from extractive industries, particularly in decisions impacting their livelihoods.</p>

²⁹ Green agenda states “An inclusive and prosperous Guyana that provides a good quality of life for all its citizens based on sound education and social protection, low carbon and resilient development, providing new economic opportunities, justice and political empowerment”- Green State Development Strategy: Vision 2040.

³⁰ SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss. <https://sdgcompass.org/sdgs/sdg-15/>

	<i>resource wealth; support economic resilience; and build human capital and institutional capacity”.</i>	<ul style="list-style-type: none"> increased awareness of the importance and value of Guyana’s natural heritage Effective conservation of the country’s biodiversity, natural capital, ecosystems and the services they provide to ensure safeguarding of livelihood, traditional knowledge and food security. <p>This strategy focuses on all-natural resources though, and is not specific to fisheries, marine and coastal resources. It is explicitly addressed under the theory of change for the strategy, under the outcome <i>“Achieving sustainable and soundly-governed management of natural resources for effective conservation and restoration and use by future generations.”</i></p>	<p>support it provides, such as stock assessments, data collections, technical assistance and innovation of new alternative production techniques.</p> <ul style="list-style-type: none"> Objectives C1.4.3 and C1.4.4 both address the development of the aquaculture sector to support foreign direct investment (FDI) and technical support for farmers. <p>The Green State Development Strategy is also aligned with the eight impact areas of the Green Climate Fund, which targets livelihoods of vulnerable communities, improved well-being and health of citizens, food security and water security.</p> <p>Though addressed more generally here, socio-economic well-being is well incorporated into this strategy.</p>	There is no clear mention of co-management structures or specific decision-making mechanisms which would involve fisherfolk or FFOs, but the document in a large part, makes reference to good governance and the inclusion of the citizenry in the sustainable development of Guyana.
Environmental Protection Act 1996 and amendment 2005 (Government of Guyana, 1996)	The Act was passed in June 1996, after identifying the need for creating a legal framework for environmental management in the country and for the establishment of the Environmental Protection	This Act is primarily comprised of provisions to ensure conservation, management and restoration of the environment. It sets out guidelines for pollution control, determining the impacts of development on the natural environment and	The Act does not strongly address socio-economic well-being and livelihoods, given its nature. It does, however, identify the EPA’s role in including this type of information and due considerations in environmental	The Act does not mention co-management/collaborative management as well as participatory decision-making systems. It establishes an Environmental Assessment Board tasked with hearing and advising on environmental issues brought before it. The Board comprises of three to five members, appointed by

	<p>Agency (EPA) (United Nations , n.d.).</p> <p>The Act makes provisions for the functions of the EPA, environmental impact assessments (EIAs), prevention and control of pollution, financial assurance, civil proceedings and investigations, environmental tribunal and environmental trust fund.</p>	<p>sustainable mobilisation of resources.</p> <p>The Act also establishes entities, like the EPA, and other mechanisms, like the tribunal, for ensuring ecosystem well-being and compliance with environmental regulations outlined.</p> <p>Although this does not speak to fisherfolk or fisheries specifically, it is worth noting as the law applies to resources used by fisheries stakeholders who are expected to comply with the rules set out by the Act.</p>	<p>decision-making. More specifically, under the functions of the Agency, Section 4 (1)(j) states <i>“to promote and encourage a better understanding and appreciation of the natural environment and its role in social and economic development.”</i></p>	<p>the Minister. The Act, however, does not indicate whether fisherfolk or other civil society representatives sit on the board.</p>
<p>Wildlife Conservation and Management Bill (2016) (Government of Guyana, 2016)</p>	<p>This Act was developed to protect, conserve and sustainably manage Guyana’s wildlife trade. Under this Act, the Guyana Wildlife Conservation and Management Commission was established.</p>	<p>Ecosystem well-being is the basis of this Act, as it establishes a framework for wildlife protection and conservation, including marine life cetaceans (dolphins, whales, porpoises, river dolphins), marine and freshwater turtles, sharks, and marine and freshwater fishes.</p> <p>The Act also has provisions for captive breeding and wildlife ranching.</p>	<p>Aside from guiding the management of the wildlife trade and the necessary licenses to help manage it, there are no direct references to socio-economic well-being for livelihoods in the sector.</p> <p>It establishes the system for licensing and the Commission, which in the long-term contributes to the responsible management and conservation of wildlife and associated livelihoods.</p>	<p>The is Act does not indicate any provisions for co-management/collaborative management and participatory processes. It does establish a Wildlife Scientific Committee. This committee provides technical advice conservation and sustainable management of wildlife and is consulted by the Commission on decisions pertaining to wildlife, import, export, transportation of specimen and other similar activity.</p> <p>The Committee is comprised of five to seven persons appointed by the Minister, but there is no indication of fisherfolk, or other resources users and civil society representatives are appointed to the Committee.</p>

<p>Maritime Zones Act 2010 (No. 18 of 2010) (Government of Guyana, 2010)</p>	<p>The Act, established in 2010, establishes the maritime areas under the jurisdiction of Guyana including the <i>“internal water, territorial sea, contiguous zone, exclusive economic zone and continental shelf of Guyana”</i> (International Labour Organization, 2010).</p> <p>The act also includes research on the marine protection and conservation and mariculture.</p> <p>This Act repeals the Maritime Boundaries Act of 1977.</p>	<p>The Act addresses ecological well-being, particularly under Part XIII- the Protection and Preservation of the Marine Environment. This Part of the Act specifically addresses protection of the marine environment through the prevention and control of pollution, safeguarding maritime zones, environmental assessments, monitoring and control, and protection and preservation of ecotourism areas, mariculture areas, marine parks and other marine protected areas.</p> <p>It is referenced in the context of the exclusive economic zone, where Guyana has sovereign rights to carry out activities, including, <i>“conservation and management of natural resources, both living and non-living...”</i>.</p> <p>Also, worth noting, is that the Act aligns with particular guidelines set by the United Nations Convention on the Law of the Sea (UNCLOS) and the UNESCO Convention on the Protection of the Underwater Cultural Heritage 2001. This makes provisions for preservation of marine life and the environment, ecotourism, marine protected areas (MPAs) and scientific research and exploration of the marine areas.</p>	<p>There is limited inclusion of socio-economic well-being. The Fisheries Act of 2002 is mentioned, highlighting the definition of “fishing areas” as it aligns to the Maritime Zones Act, but little reference is made to livelihoods.</p> <p>However, that Act does make provisions for maritime safety and security, under Part XIV, particularly addressing the maintenance of security within the maritime boundaries. This has implications on fishing vessels and operations, and national security issues such as piracy.</p>	<p>There are no provisions for co-management/collaborative management in this Act nor mention of decision-making mechanisms and the role of fisherfolk or fishing co-operatives.</p>
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Guyana has several related laws, policies and plans which support management of the fisheries sector. In Table 5.1, eight of these were chosen for further analysis as they represent some of the most recent and/or relevant instruments and plans identified from the desk study and through the validation webinar. From the analysis, the more direct fisheries management instruments, like the Artisanal Fisheries Strategic Framework and Management Plan, the Fisheries Regulations (2018), the Fisheries Act 2002 and the Guyana Seabob Management Plan (2015-2020), collectively include and addresses the three EAF principles: ecosystem well-being, socio-economic well-being and good governance. This is evidenced by the inclusion of provisions for the protection of species or ecologically important areas; regard for safety at sea for fisherfolk and monitoring of vessels operating in Guyanese waters; and through the establishment of decision-making and advisory arrangements which include fisherfolk.

Looking at all the reviewed frameworks, ecosystem well-being is well addressed and there is an overall understanding of the need to conserve and sustainably use natural resources. The Green State Development Strategy: Vision 2040 particularly looks at all natural resources as natural capital and seeks to guide the development of the country through development of a circular economy. The Fishery Advisory Committee (FAC) and the Seabob Working Group (SWG) are also strong examples of participatory governance where fisherfolk sit in a position to influence the decisions which affect the industry and their livelihoods. Socio-economic well-being and collaborative management, though addressed to some degree, are less explicit. Although human and livelihood aspects are addressed in laws, it is in most cases restricted to safety and managing operations within the sector. The Guyana Seabob Management Plan (2015-2020) most clearly addresses economic viability of the sector and the importance of the fishery for food security and livelihoods. The Green State Development Strategy also directly identified objectives for improving socio-economic benefits for those in the sector. There is limited reference to the fisheries value-chain and decent work.³¹ There is also no clear indication of fisherfolk being involved in co-management or collaborative management of any fishery resource, system, fishing area/zone or any projects/programmes. The one exception to this is the issuance of fishermen identification cards by the Upper Corentyne Fishermen' Co-operative Society Ltd. This system is managed by the co-operative and can be accessed by fishers wishing to work/fish in Suriname. None of the instruments reviewed mentioned local ownership and/or co-management.

Looking at the entire fisheries institution legal framework, these EAF principles are addressed to some degree or another, through fisheries-related law and through national plans, however, more direct reference to fisherfolk, and more so artisanal/small-scale fishers, may help to ensure they are actively involved in decision-making and co-management, that they have more active roles in natural resource conservation and that their socio-economic needs are addressed, so that they are enabled to be better ecosystem stewards.

6 Mechanisms for fisherfolk participation in decision-making

Taking action is a fundamental part of ecosystem stewardship. Stewardship actions include the range of approaches, activities, behaviours, and technologies that are applied to protect, restore or sustainably use the environment. In the case of small-scale fisheries, stewardship actions by fisherfolk and/or their organisations are influenced by formal or informal decision-making processes about the use of fisheries resources that may or may not involve fisherfolk. Participation and

³¹ Decent work as identified by Sustainable Development Goal 8 which is to "Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all." <https://sdgcompass.org/sdgs/sdg-8/>

involvement of stakeholders in the fisheries management decision-making process is advantageous as it facilitates common understanding, establishes trust, manages conflict, increases stakeholder responsibility and accountability and enhances the legitimacy and acceptance of management policies and decisions thereby contributing to more effective enforcement of rules and regulations and increasing likelihood of compliance. To determine the extent to which fisherfolk were being included in decision-making processes related to the management of fisheries and other coastal and marine resources the institutional analysis examined the existence, composition and functioning of current National Intersectoral Coordinating Mechanisms (NICs).

The CLME+ SAP identified interactive governance arrangements such as NICs essential to successfully implementing and achieving ecosystem-based management and an ecosystem approach to fisheries (EAF). In the CLME+ region NICs can be broad or narrow based on the scope and ecosystem approach being used. Examples of NICs include: Fisheries Advisory Committees or Councils (FAC), Ocean Governance Committees (OGC), sustainable development commissions, integrated coastal management institutions and climate change bodies.

NICs operate within the policy cycle and involve interactions across multiple scales, stakeholders, sectors and levels of governance (local, national, regional and international). A NIC can be considered as the operational arm of good and effective governance or policy processes.

Inclusion of fisherfolk and FFOs within NICs will encourage and support ecosystem stewardship by increasing the stakeholder inclusion of these resource users in the governance aspect of fisheries management, contribute to building and establishing trust and provide an avenue for including their perspectives among other advantages.

6.1 Findings for mechanisms for fisherfolk participation in decision-making in Guyana

During the webinar, participants were asked to validate current NICs identified during the desk study and identify others not presented, which may be related to the coastal and marine sector in Guyana. Participants were also asked to share information on the composition of the NIC, especially whether it included fisherfolk or not, or if this information was unknown to share where additional information could be sourced for further analysis. NICs identified through desk research and at the validation workshop include:

- Fisheries Advisory Committee (FAC)
- Coastal and Marine Management Committee (CMMC)
- Seabob Working Group (SWG)
- Wildlife Scientific Committee
- Guyana National Fisherfolk Organisation (GNFO)
- Piracy Working Group
- National Resources and Environment Advisory Committee (NREAC)
- National Biodiversity Advisory Committee (NBAC)
- National Climate Committee (NCC)
- Integrated Coastal Zone Management Committee
- Mangrove Action Committee (MAC)
- Sea Defence Board

Some of these NICs were identified through various legislation and reports, however, evidence of whether they were established and/or are active, is limited. Table 6.1 shows the NICs and FAC discussed at the validation webinar, who were identified as important to the fisheries industry and,

by extension the fisheries institution, of Guyana. These NICs were also selected given their present or likely role in supporting ecosystem stewardship by fisherfolk.

Table 6.1 Relevant national intersectoral coordinating mechanisms (NICs) relevant to the fisheries sector of Guyana

NIC	Purpose	Composition	Are fisherfolk members of the NIC?	Functioning (Active/Inactive)
Fisheries Advisory Committee	<p>The role of the Fisheries Advisory Committee, according to the Fisheries Act of 1986 and Fisheries Bill of 2002, through which it was established, is to <i>“advise on the management and development of fisheries, with the objective of ensuring the optimum utilisation of the fisheries resources of the fisheries water of Guyana for the benefit of the people of Guyana.”</i></p> <p>Specific roles identified from the Fisheries Bill 2002 are to advise on:</p> <ul style="list-style-type: none"> • the management and development of the fisheries industry • fisheries management plans • regional and sub regional plan and agreements involving fisheries and initiatives in the sector • any other issues referred by the Minister. 	<p>The Act (1986) states that the FAC should consist of the Chief Fisheries Officer and other persons deemed capable and qualified to advise on the development and management on fisheries in Guyana. These persons are appointed by the Minister of Agriculture. These include at least two representatives of the fisher co-operatives and the industry.</p> <p>There are currently 13 members³² which include representatives from:</p> <ul style="list-style-type: none"> • Department of Fisheries • Guyana National Fisherfolk Organisation (GNFO) • Marine Police • Coast Guard • Aquaculture Unit • Environmental Protection Agency (EPA) • Veterinary Public Health Unit • Inland fisheries representative 	<p>Yes</p> <p>The President of the GNFO sits on the FAC and these is also a representative of the industrial fishers</p>	<p>Active</p> <p>The FAC meets monthly- the second Tuesday of every month, but the last meeting was virtually due to COVID-19 restrictions.</p> <p>The FAC term was coming to an end, within two weeks of the webinar.³⁴</p>

³² Stated in key informant interview with representative of the FAC.

³⁴ The FAC was active at the time the webinar was hosted (30 June 2020), however, it was stated in the webinar that the term of the FAC members would come to an end two weeks preceding the webinar and will be need to be reappointed by the Minister/cabinet.

		<ul style="list-style-type: none"> • Seabob working group representative • Representative of the industrial fishers³³ 		
Coastal and Marine Management Committee (CMMC)	<p>This committee was established in 2019 (Compton, 2020) through the EPA to manage a coordinated approach to coastal and marine management.</p> <p>The committee does not implement projects but sees its role more as coordination of efforts and projects involving marine and coastal resources. The work of the CMMC does not directly address fisheries but considers interventions on marine and coastal sector as a whole.</p>	<p>There are currently 17 different agencies represented on the CMMC, however these are all governmental agencies who are involved in the marine and coastal management.</p> <p>Some of the other agencies involved are the Department of Fisheries and Maritime Administration. The committee is still in the initial stages of establishment and is currently developing its workplan. It is also planned to invite non-governmental organisations to a part of the committee.</p>	<p>No</p> <p>The fisheries sector/fisherfolk are indirectly represented through the Department of Fisheries.</p>	<p>Active</p> <p>As mentioned before, the CMMC is still in the initial stages of development and work planning, but has been active, meeting once every two months pre-COVID-19 and currently meeting once monthly virtually.</p>
Seabob Working Group (SWG)	<p>The role of the Seabob Working Group was outlined in the Seabob Management Plan 2015-2020 (Government of Guyana, 2015).</p> <p>The group was formed to:</p> <ul style="list-style-type: none"> • oversee the management system for the fishery and evaluate the performance 	<p>The SWG is comprised of representatives from:</p> <ul style="list-style-type: none"> • the Department of Fisheries • the Guyana Association of Trawler Owners and Seafood Processors (GATOSP) • private companies, processors and investors in the fishery • the artisanal sub-sector • Non-government organisation 	<p>Yes</p> <p>There are industrial fishers in the group, primarily from the GATOSP and a representative from the artisanal fishers.</p>	<p>Active</p> <p>The group seems to be active, but it is unclear how activity has been affected by COVID-19 disruptions.</p>

³³ List of organisations generated from webinar and key informant interview with FAC representative.

	<p>based on the objectives set out by the management plan</p> <ul style="list-style-type: none"> • review issues/challenges in the sub-sector and provide recommendations to address them; and • address the MSC certification process of the fishery and its maintenance. 	<p>There were 15 members in the group from 2018-2019.³⁵</p>		
<p>Guyana National Fisherfolk Organisation (GNFO)³⁶</p>	<p>The GNFO was formally established in 2008 under the Friendly Societies Act (Chapter 36:04) 1998 (Government of Guyana, 1998).</p> <p>The GNFO is an umbrella organisation for primary fisherfolk organisations and fishing co-operatives of Guyana. The main roles of the GNFO are to:</p> <ul style="list-style-type: none"> • facilitate capacity building of members • advocate for the interests and issues faced by the members and the small-scale fisheries sector 	<p>The GNFO membership is open to all fishing organisations/groups in Guyana, including fish processors. The constitution also establishes honorary membership for government agency representatives.</p> <p>The group was relatively inactive between 2009 and 2017, when it was revived. The Executive Committee of the GNFO then, was comprised of representatives of:</p> <ul style="list-style-type: none"> • Upper Corentyne Fishermen’s Co-operative • Charity and Lima Fishermen’s Co-operative • Meadowbank Fishermen’s Co-operative • Rosignol Fishermen’s Co-op, 	<p>Yes</p> <p>This is a national umbrella fisherfolk organisation, and thus the majority of the membership, including the Executive Committee, are all fisherfolk. These fisherfolk are mainly from the small-scale or artisanal fishery sector.</p>	<p>Active</p> <p>Although the organisation is active, participating in projects and interventions nationally and regionally, most of the representation comes for the chairman of the GNFO. Many of the members have left or are not engaging in the group because they believe it is ineffective.</p>

³⁵ Information gathered from research done for publication Compton, S. 2020.

³⁶ Information for this section was compiled through the validation webinar, a key informant interview with a representative of the GNFO and the Organisational Capacity Assessment done for the GNFO under Outcome 1.1 of the StewardFish project.

	<ul style="list-style-type: none"> • promote conservation and sustainable management of fisheries resources • create access to resources for members • provide resources and facilities for processing of members' products and access to markets • network and create partnerships with other fisherfolk organisations within the region, including the Caribbean Network of Fisherfolk Organisations (CNFO). 	<ul style="list-style-type: none"> • 3-Door Fishermen's Co-operative 		
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The four NICs analysed in Table 6.1, were the key NICs identified in the research process and evidenced as active. The Fisheries Advisory Committee (FAC), the Seabob Working Group (SWG) and the Guyana Network of Fisherfolk Organisations (GNFO) are NICs where fisherfolk are represented to some degree. Of these three, the FAC, and the fisherfolk on the FAC, have the greatest ability to influence and advise decision-making systems in the fishing industry. From information gathered through the webinar and key informant interviews, the FAC has been effective in bringing attention to the issues faced by fisherfolk and fishing co-operatives, through representation by the chairman of the GNFO sitting on the committee. Importantly, the chairman is also the president of one of the stronger primary fisherfolk organisations in Guyana, and can act as a liaison and channel for voicing concerns and challenges faced by members of that primary fisherfolk organisation as well as the GNFO, in the FAC. The FAC members period of appointment came to an end in July 2020 and reappointment to the FAC is at the discretion of the Minister of Agriculture. Given the delay in the appointment of a government, there may also be a delay in the reappointment of the FAC members.

The GNFO is an umbrella fisherfolk organisation and identified as important advisory and decision-making body for small-scale fisheries in Guyana. Though it is mostly comprised of fisherfolk, the constitution does establish the roles of corporate members, which include private investors and processors, and honorary members, namely government representatives. The GNFO has, however, had several periods of activity and inactivity, and currently is facing challenges with engagement of membership. Members do not feel that they are benefitting from being a part of the GNFO, and the level of participation has dwindled as a result. The leadership of the GNFO however, is still representing the organisation at the level of the FAC and in other projects, programmes and interventions carried out by the Government of Guyana, intergovernmental organisations and national, regional and international non-governmental organisations. The chair of the GNFO, also sits as the president of the Upper Corentyne Fisherfolk Co-operative, one of the stronger FFOs with a large membership. It should be noted that the GNFO, under the StewardFish project, is attempting to re-engage their membership to strengthen the sector and the collective voice of fisherfolk.

The SWG, represents the concerns of the seabob fishery specifically and has representation from the Guyana Association of Trawler Owners and Seafood Processors (GATOSP). Artisanal fisheries are not as well represented in this group, which involves more industrial fishery stakeholders; fishers, processors and investors in the sub-sector. It was expressed in the webinar, that a representative of the artisanal fishery sub-sector was a member of the group, namely the chairman of the GNFO, but due to the distance to Georgetown and the associated cost for commuting, eventually discontinued involvement. Another artisanal fisherfolk representative, closer to Georgetown was asked to attend, but also stopped after a few meetings. This was primarily because they did not think the mandate and role of the SWG was relevant to their issues and livelihood.

The Coastal and Marine Management Committee (CMMC), still in the preliminary stages of work, is only comprised of government agencies, but because the Department of Fisheries is on the committee, there is the opportunity for the concerns and interests of fisherfolk and the fishing industry to be well represented. It was expressed in the webinar and in an interview, that there is intention to include non-governmental organisations in the committee, but there is currently no FFOs represented.

The FAC and the GNFO are key to ensuring fisherfolk involvement in decision-making processes, and also important for the promotion of ecosystem stewardship. There are some significant challenges that need to be addressed however, like the disinterest and low participation of fishing co-operatives and associations in the GNFO, magnified by the geographical size of Guyana. Access to

more isolated fishing landing sites, like the Essequibo fishers, and the distance from the GNFO's office to areas is a significant challenge, not just for fisherfolk engagement, but management of the industry and promotion of ecosystem stewardship as well. This decreases engagement and networking between fisherfolk, and the benefits that can be realised by fisherfolk and their communities.

Although the GNFO is attempting to increase engagement of membership in their new project, this initiative can be further bolstered by the Department of Fisheries and other key governmental and non-governmental actors, who may have better access to the distant landing sites and fishing communities. In the webinar, it was suggested that a comprehensive stakeholder analysis be done to ensure appropriate selection of non-governmental organisations to be a part of the CMMC. Similarly, a stakeholder analysis of the fishing industry might be useful to ensure all fisherfolk are engaged and represented at the national level. It was also recommended that fisherfolk from the artisanal sub-sector re-engage in working groups or committees, managing industrial fishing, as decisions made and activity within that sub-sector will have impacts on the entire sector and the fishery resources of Guyana in its entirety. The strengthening of primary fisherfolk organisation is also important, and in discussions was identified as a significant challenge in the sector. Local organisation needs to be empowered and organised to participate and represent the concerns of their membership more effectively. This can improve their ability to have a collective voice and participate in decision-making processes and be better stewards for their resources.

7 Support and resources for ecosystem stewardship by fisherfolk and their organisations

To undertake ecosystem stewardship, would-be stewards must have the support and resources to do so. In this case "support and resources" refer to the finances, technology and equipment and education, skills and knowledge needed to effectively undertake ecosystem stewardship actions. In addition to directly supporting ecosystem stewardship actions, access to these resources may also ensure that aspects of fisherfolk's human well-being (e.g. access to training to ensure safety at sea) are considered by support agencies and may provide motivation for stewardship actions.

To determine whether fisherfolk have adequate support and resources to undertake ecosystem stewardship actions the institutional analysis examined some of the projects, programmes and initiatives in Guyana that have provided or are providing finances, technology and equipment and capacity building (e.g. education, skills and knowledge) to fisherfolk and their organisations.

7.1 Findings for support and resources for ecosystem stewardship by fisherfolk and their organisations

Through the desk review and key informant interviews, resources made available to fisherfolk through project, programmes and agency mandates were identified and discussed. Table 7.1 summarises what was found. The resources are divided into three main categories: (1) Materials, equipment and technology, (2) Finance and (3) Skills and knowledge.

Table 7.1 Projects, programmes and initiatives providing support and resources to fisherfolk and fisherfolk organisations in Guyana

Name of project/programme/initiative	Description of project/programme/initiative	Organisation delivering project/programme/initiative	Organisation type
Materials, equipment and technology			
Artisanal Fisheries Infrastructural Programme (AFIP) Implemented in 1984 to 1993 (Maison, 2007)	During this programme, fish landing facilities were built in eight coastal areas with six of them leased to fishing co-operatives.	Canadian International Agency	International development agency
Provision of fisherman identification cards ³⁷	Through the Ministry of Foreign Affairs, the Upper Corentyne Fishermen's Co-operative Society can provide fishers with identification cards, which they can use for fishing in Suriname. This system is run by the co-operative and the identification cards are accepted by the Surinamese Authorities.	Upper Corentyne Fishermen's Co-operative Society	Civil society- FFO
Regular work programme/mandate of fishing co-operatives ³⁸	Primary fishing co-operatives assist in managing and providing fishing gear like nets and other equipment needed for operations.	Fishing co-operatives	Civil society- FFO
Finance			
Regular work programme of the Government of Guyana	Removal of value-added tax on fisheries inputs. This was declared in the 2020 budget by the Minister of Agriculture (Ministry of Agriculture, 2020).	Government of Guyana- Ministry of Agriculture	Government
The GEF Small Grants Programme	As the name indicates, the GEF- SGP provides funding opportunities through a small grants facility to support work within its focal areas. These can and have been accessed by fisherfolk organisations in Guyana. Some	Global Environment Facility	Inter-governmental

³⁷ Information provided through key informant interview with representative of the co-operative.

³⁸ Information provided through key informant interview with representative of the Department of Co-operative.

	<p>projects funded in Guyana, which involved or impacted fisherfolk and fisheries resources include:</p> <ul style="list-style-type: none"> • Improving livelihoods through community-based sustainable fisheries management (2015- 2019) • Strengthening capacity to support local implementation of fisheries monitoring and management in the North Rupununi Wetlands (2013-2015) • Community-led mangrove restoration: Towards sustainable management of Guyana’s Mangrove Forest (2014- 2015) 		
Regular work programme of the Department of Co-operatives ³⁹	Funding is provided along with training to fisherfolk.	Department of Co-operatives	Government
Regular work programme of fishing co-operatives	Cash or credit for materials and equipment are provided to the fishing cooperative membership	Fishing co-operatives	Civil society- FFO
Caribbean Catastrophe Risk Insurance Facility (CCRIF) Small Grants Programme ⁴⁰	Funds projects on climate change adaptation, capacity building and training, and environmental management which addresses vulnerability of communities. All registered non-governmental organisations, community-based organisations, charity or non-profit organisations are eligible (this would include fisherfolk organisations).	CCRIF	Regional intergovernmental
Skills and knowledge			
Regular work programme of the Department of Co-operatives	<p>The Department has full supervisory authority for co-operatives and friendly societies. Services and training provided by the department to fisherfolk organisations include:</p> <ul style="list-style-type: none"> • Setting up of the co-operative 	Department of Co-operatives	Government

³⁹ Information provided through interview with representative of the Department of Co-operatives.

⁴⁰ <https://www.ccrif.org/en/ccrif-small-grants-programme>

	<ul style="list-style-type: none"> • Preparation of financial statements for annual audits inspection of boats • Dispute management and arbitration • Oversight of election of executive • Organisational management • Hosting of National Co-operatives Week in which fishing co-operatives participate <p>The department is also attempting to build capacity in understanding the benefits of registering for the national insurance scheme, paying income tax etc.</p>		
Regular work programme of Coast Guard	<p>Training is provided in:</p> <ul style="list-style-type: none"> • Use of GPS • Updating logbooks at sea 	Coast Guard, Guyana Defence Force	Government
Guyana Harbour Licence – Basic Training and Emergency Awareness for Fishermen (BTEAF) (MatPal Marine Institute, 2018)	This is an introductory course available to fishers on safety, emergency response, distress signalling, search and rescue, use of the radio and piracy.	MatPal Marine Institute	Academia
Certificate in Fisheries Programme (The Fish Site, 2007)	This is a one-year, practical course for the fishing industry and business management. It also includes training in aquaculture and marine and freshwater biodiversity.	Guyana School of Agriculture	Academia
Improving Livelihoods through Community-based Sustainable Fisheries Management Project (2015-2019) (The GEF Small Grants Programme, 2012)	<p>The project focussed on building capacity of the Upper Corentyne Fisherman's Cooperative Society membership for community-based adaptation and included training in:</p> <ul style="list-style-type: none"> • Use of GPS and fish-finding equipment for capturing time series data in collaboration with the Department of Fisheries • Completion of logbooks 	Upper Corentyne Fisherman's Cooperative Society	Civil society- FFO
Fishery Improvement Project (FIP) (Drugan, et al., 2019)	In a scoping document published for the (FIP), recommendations were made improving the artisanal	Strategic Action Programme for the Sustainable Management of	Inter-governmental-regional project

	<p>finfish fishery in Guyana, including training and awareness development of stakeholders. This involves training in data collection and investments in infrastructure and training in the fisheries value chain (fishers, processors, buyers).</p> <p>It is unclear if training was done /is being done.</p>	<p>shared Living Marine Resources in the Caribbean and the North Brazil Shelf Large Marine Ecosystems (CLME+) as activity under the FAO-implemented CLME+ Shrimp and Groundfish Sub-Project</p>	
Code of Practice for Captains Training programme (World Wildlife Fund- Guianas, 2016)	<p>During this training programme, fishers benefitted from information shared on “Managing the interaction with Endangered, Threatened and Protected Species within the Guyana Seabob Trawl Fisheries.</p> <p>This included the protection of marine turtles and the use of the Turtle Excluder Devices (TEDs) and Bycatch Reduction Device (BRD), and the collection of data on ETP species onboard vessels.</p>	World Wildlife Fund Guianas (WWF-Guianas)	Civil society- International NGO
Oil spill response (Department of Public Information , 2018)	<p>Fisherfolk were to receive training in oil spill response as part of the draft oil spill response plan.</p> <p>It is unclear if the training was conducted.</p>	ExxonMobil	Private sector- multinational oil and gas corporation
Ocean Practices	<p>Training was provided fisherfolk in turtle protections including sensitisation on the four species turtles found in Guyanese waters, how to assist entangled or caught turtles, and data collection through photos taken on disposable cameras.</p>	WWF- Guianas	Civil society- international NGO
Pilot project on data collection for the value of the fisheries sector	<p>The Upper Corentyne Fishermen’s Co-operative Society is one of the organisations in the pilot. In this pilot a fisher was trained and paid to collect data. The fisher was provided with a GPS and notepad for recording weight of fish, depth, colour of water, day and other conditions.</p>	ExxonMobil	Private sector- multinational oil and gas corporation

Data collection training	Training was provided for 30 fishers from the Upper Corentyne Fishermen's Co-operative on the use of GPS for data collection.	United Nations Development Programme	Inter-governmental organisation
Regular Work Programme of Conservation International	Capacity building of stakeholders impacted by the expansion of the Guyana National Protected Areas System, in development of a sustainable economy, mangrove conservation and mapping; and the development of Sustainable Villages to address targets set by the United Nations Sustainable Development Goals (SDGs) (Conservation International Guyana, 2020).	Conservation International	Civil society-international non-governmental organisation
Aquaculture training	Basic training in aquaculture is provided at the Mon Repos Freshwater Aquaculture Farm and Training Centre	Department of Fisheries-Aquaculture Unit	Government
Overseas Training Course on Aquaculture Technology for Guyana (2018)	Fifty-seven persons were trained in aquaculture technology, including staff at the Department of Fisheries, fish farmers, staff from the University of Guyana and teachers. Another course with 30 participants was carried out in 2017.	Fujian Institute of Oceanography (FJIO); the Ministry of Commerce of the People's Republic of China; and the Ministry of Agriculture, Department of Fisheries, Guyana	Government- foreign and national

From the list presented in Table 7.1 above, there are some key trends arising which can help identify areas where the fisheries institution is strong in providing support to fisherfolk for ecosystem stewardship and their overall development, and gaps where more work can be done. These trends are summarised in the sub-sections below.

- **Technology, equipment and materials:**

Civil society has played and is playing an important role in the provision and access of materials for fisherfolk and FFOs. More so, fishing co-operatives provide access to materials and equipment for their membership, as part of the mandate of the co-operative- at a cost. The management and provision of fishermen's identification to the its membership, is an important achievement for the Upper Corentyne Fishermen's Co-operative Society. The Co-operative takes the lead in ensuring that the process is transparent and that its members can safely fish in Surinamese waters, with proper documentation, and relieves fishers of going through the lengthy process of obtaining a passport or a national identification. The latter of which usually only occurs around a general election. This is a clear example of fisherfolk leading in fisheries management and an opportunity for the co-operative to encourage its membership to fish legally in Suriname.

There was little mention of fisherfolk access to technology and the development of technology in the sector. Although, in recent times this input into the sector may have increased, particularly with the use of ICT for communication between and within fishing co-operatives and with other stakeholders in the industry. There have been a few instances of GPS training by various organisations, but little detail on the uptake of this in fishing practices.

There is limited record of projects and programmes providing material, equipment and technology resources to fisherfolk and thus the summary of these is likely not adequately captured in the table. Guyana has been involved in several large projects involving international and regional governments, inter-governmental organisations, international and national non-governmental organisations who may have implemented projects that provided these types of inputs into the fishery sector.

- **Finance:**

Large pots of funding are usually made available through regional projects implemented by inter-governmental organisations and the Government of Guyana. For example, funding availed through the FAO Technical Cooperation Programme, the CLME+ project and FAO-implemented CLME+ Shrimp and Groundfish Sub-Project and currently the StewardFish project. This type of funding is often channelled towards policy and management development of the country and may not necessarily make funds available for use by fisherfolk and fishing co-operatives themselves. Recent projects like StewardFish, however, have made small or micro grants available for fisherfolk organisations to manage and implement projects.

Financial resources are also available through the regular work programmes of government agencies and through the fishing co-operatives themselves. This is in the form of loans or credit for materials and equipment. As with the compilation of material, technology and equipment, there is limited information available on financial resources made available and accessible to fisherfolk. From the webinar discussion and the key informant interviews, it was clear that the immediate needs of the fishing co-operatives are known, but there is inadequate availability of financial aid for fisherfolk to address these. From the limited information online, access to information on these resources may also be limited. This

limited access to financial resources extends beyond the fisherfolk, to government agencies, like the Department of Fisheries.

In the recent budget presentation, it was declared that \$243 million Guyanese dollars will be made available to the Department of Fisheries to address gaps in the industry. This was also accompanied by the immediate removal of VAT on fisheries inputs. The new government has also committed to address, through the Ministry of Foreign Affairs, a United States ban on catfish and operationalising the sea monitoring vessel (Ministry of Agriculture, 2020).

- **Skills and knowledge:**

Skills and knowledge, through training and capacity building initiatives, are where most resources are available to fisherfolk, provided largely through projects or regular work programmes of government agencies, national academic institutions and through projects implemented by civil society and the private sector.

Several project and organisations provided training in the use of GPS technology, data collection and turtle monitoring. The involvement of fisherfolk in the data collection process was identified in numerous projects, and further recommended in others. This is important in, not just for the collection of up-to-date data, through limited resources and staff at the Department of Fisheries and other organisations but involves fisherfolk in the management process. It may allow them to connect easily with issues such as overfishing and depleted fish stocks- understanding that will make them better fisheries stewards.

There are also several instances for fisherfolk, or younger persons interested in becoming involved in the fishery sector, to get formal training and certification. This can improve how the livelihood is approached, where new fishers, are educated in business management and can understand the importance of social security and sustainable fishing practices. There has also been training opportunities for aquaculture farmers, and continued training and support through the Aquaculture Unit of the Department of Fisheries. In the desk research, there appeared to be limited resources available to the inland fisheries industry, where interventions here are normally associated with building capacity of indigenous communities.

There are gaps however, in organisational development for FFOs and training and other resources for the development of the fishery value-chain. The Department of Co-operatives, thus far, is the only resource for capacity development of fishing co-operatives. Interestingly, the disorganisation of co-operatives and subsequent lack of collective action is one of the main challenges identified through the webinar and interviews. Fisherfolk can find a unified voice through local fishing co-operatives and the GNFO, however, there are little resources and limited projects addressing this.

This summary of resources is not extensive and would primarily cover information collected through the desk review and key informant interviews. However, the general trends are that most resources are placed on training and raising awareness of fisherfolk in data collection, use of GPS technology and turtle conservation. Access to knowledge is important for being effective ecosystem stewards, but even so, there are still gaps in skills and knowledge of fisherfolk and new interventions should be tailored to address these. There are limited financial, material, equipment and technology resources available to fisherfolk which should also be addressed through consultation with the various groups, as a “one-size-fits-all” approach will be ineffective given the size and differences among fishing communities and the heterogeneity within the industry as whole.

8 Partnerships and networks for ecosystem stewardship

Partnerships and networks connect institutions and organisations across levels and scales. For fisherfolk organisations seeking to engage in ecosystem stewardship, partnerships and networks are important as these arrangements help facilitate information flows, fill knowledge gaps, and strengthen expertise for ecosystem management, including stewardship. This section discusses a few current or past partnerships or networks in Guyana, formal and informal, that included fisherfolk organisations and fisheries resources.

8.1 Findings for partnerships and networks for ecosystem stewardship

Fisherfolk organisations in Guyana work with various stakeholders in government, intergovernmental organisations, civil society and private sector through projects or through the regular work programmes of organisations as discussed in Section 7 above. However, in most instances they are involved as beneficiaries or participants for the activity or intervention and may not necessarily be considered a partner. Despite this, the GNFO has partnered on several projects nationally and regionally, representing the interests of fishing co-operatives in Guyana. Some of these partnerships with fisherfolk organisations, and in the fishing industry as a whole are discussed in this section.

Partnerships with government agencies: As mentioned under the stakeholder analysis, fisherfolk organisations, and more particularly, the Guyana National Fisherfolk Organisation (GNFO) have a relationship with the Department of Fisheries, as the lead fisheries management agency, but it is not a strong partnership. An example of collaboration between the Department of Fisheries and fisherfolk is in the collection of specimens for Endangered, Threatened and Protected Species (ETP) training.⁴¹ Collaboration and partnership may also occur in the implementation of projects like StewardFish, which specifically targets the small-scale fisheries sector of Guyana. There are few recorded instances of partnership beyond data collection, as evidenced through the data collection process.

For the Upper Corentyne Fishermen's Co-operative Society Ltd., their role in issuing fishermen identification cards, for persons who do not have valid passports for working in Surinamese waters, was brokered through the Ministry of Foreign Affairs. The Ministry would have held several discussions with the Government of Suriname to ensure this form of identification was accepted and to collectively address the issue of piracy affecting fisherfolk of both countries.⁴²

The Guyana Association of Trawler Owners and Seafood Processors, though representing industrial seabob fishers, partnered with the Department of Fisheries for the development of the Guyana Seabob Management Plans (2015-2020) and the establishment of the Marine Stewardship Council (MSC) certification (Government of Guyana, 2015). The MSC certification was awarded in 2019.

The Department of Fisheries collaborates with other government agencies in the implementation of its mandate. One example of an agency with which it collaborates is the Maritime Administration (MARAD) for managing the training of boat captains. Although there is some degree of interaction/collaboration among agencies, it is still limited communication and coordination among the relevant agencies (Guyana Inc., 2018). The FAC thus plays an important role for agencies to meet and keep up to date of developments in the sector.

⁴¹ Stated in the Organisational Capacity Assessment Survey completed by the Department of Fisheries.

⁴² Information gathered through key informant interview.

Partnerships with civil society and intergovernmental organisations: The GNFO and primary fisherfolk organisations have collaborated with environmental non-governmental organisations like the World Wildlife Fund (WWF)- Guianas, Conservation International. Examples of these are highlighted in Table 7.1.

Many of the initiatives with which the GNFO have been involved, have also been through projects funded and implemented by intergovernmental organisations (see Table 7.1). Although the formal partnership is usually between the organisation (for example FAO, European Union, United Nations Development Programme etc.) and the Government of Guyana or larger non-governmental organisations (e.g. WWF-Guianas), fisherfolk groups are often involved in implementation or other capacities.

Partnerships through Memoranda of Understanding (MOUs): There are no MOUs between the GNFO and other organisations. There are however a few MOUs relevant to the small-scale fishery sector and marine resource management, worth mentioning.

Recently a two-year MOU was signed between the Guyana Marine Conservation Society and the Global Fishing Watch. This MOU covers capacity building in marine spatial planning, ocean monitoring, and impacts of vessels and oil and gas activity on coastal habitats. It also creates the opportunity for collaboration on development of new management and monitoring tools and identifying conservation areas (Guyana Standard, 2020).

There are also MOUs signed for regional management of fisheries resources. One such MOU was signed in 2016 by three regional fisheries bodies, namely, FAO- Western Central Atlantic Fisheries Commission (FAO-WECAFC), CRFM, and the Organisation of the Central American Fisheries and Aquaculture Sector (OSPESCA). Guyana is a member state of the CRFM. Through this arrangement the bodies will collectively support management of several important commercial species, fish aggregating devices (FADs) and other general issues faced in the region (Caribbean Community , 2016).

There were also MOUs involving the Department of Fisheries Guyana, such as one signed in 2015, between the CRFM and the International Ocean Institute for professional training and development of staff at the department (Caribbean Regional Fisheries Mechanism , 2015).

Networks: The GNFO is actively involved with and is a member of the Caribbean Network of Fisherfolk Organisations (CNFO). Through the CNFO, the executive of the GNFO have been able to access support in developing the organisation, training, capacity building and build its network among other Caribbean fisherfolk organisations.

The GNFO itself also acts as a network for its members and is the medium through which primary fisherfolk organisations and fisherfolk not belonging to an organisation, can raise issues affecting their livelihood. The GNFO is also able to provide access to information from local authorities and regional organisations about developments in the sector and conservation and resource management. However, as mentioned previously, the organisation's ability to effectively create a network among fisherfolk organisations in Guyana and funnel opportunities for capacity building and resources to fisherfolk is handicapped by the disinterest of members and the unwillingness to join by others.

Deliberate attempts to formalise partnerships in the industry may enable fisherfolk to collaborate in the development of the sector. With a shifting focus on artisanal fisheries, there should be more opportunities to have fisherfolk, through the GNFO, participate and partner on initiatives, as co-designers, co-managers and implementors. Attention must also be placed on strengthening the

GNFO so they can fulfil these roles efficiently and have the capacity to seek out new partnerships locally, regionally and internationally. At core of the industry, the partnerships between and among key agencies such as the Department of Fisheries, the Environmental Protection Agency (EPA), the GNFO, the Department of Co-operative and other should be reinforced and institutionalised.

9 Communication of information on sustainable practices for fisheries resources use

Communication is the means to share information on best practices, lessons learnt, available support/resources, training, networking, and opportunities for participatory decision-making that can support effective ecosystem stewardship. The institutional analysis examined the extent to which providers of fisheries information in the project country were using defined communication strategies, tools and channels to communicate with fisherfolk, as well as their capacity to use the tools and channels effectively; including the structures and systems in place for clear communication.

Highlighted in the organisational assessment (detailed in Section 10), the Department of Fisheries does not have a communication strategy for sharing information and engaging with fisherfolk. It does share information on sustainable fishing practices and coastal and marine resources however, usually through trainings, workshops and data collection activities. The Department also collects information from fisherfolk and utilises the data for decision-making. It also documents and shares best practices with stakeholders regularly and provide technical and operational advice and guidance as needed. The GNFO does not have a communication strategy as well, but there are plans to develop one through a microgrant facility under another StewardFish component.

Current practice for sharing information with fisherfolk is through phones, WhatsApp and prior to COVID-19, face-to-face meetings and updates at landing sites and villages. This has been the modes by which the GNFO, Department of Fisheries and the Department of Co-operatives communicate regularly with fisherfolk. In the past, monthly meetings of the FAC and other NICs and groups would have been in-person, but given the COVID-19 restrictions, phone calls, WhatsApp and other virtual conferencing technology like Zoom and Skype are used.

The Department of Fisheries does not have a dedicated website for sharing information with fisherfolk. There is an existing webpage within the Ministry of Agriculture’s website, which is outdated and has little information on programmes and projects being carried out by the Department or useful information on access to resources for fisherfolk. The Department does have a



Figure 9.1: Ministry of Agriculture Facebook page

Facebook page, which has been inactive since early last year. The Ministry of Agriculture however, does have active social media platforms (Facebook 10,175 followers and Instagram 922 followers), through which it shares updates on activities, but it is mainly focussed on land agriculture, with little information on fisheries. The EPA also has very active social media platforms (Facebook 6,214

followers; Instagram 1,172 followers) and is constantly engaging in information sharing through posts and through webinars. Their website is also fairly up to date, with a lot more information accessible, like communication products, reports, legislation and other resources. The EPA also has a publication called the *Green Note Magazine* in which it shares information on their work, projects and initiatives and events to note. It is a great resource to learn about conservation and ecosystem stewardship actions taking place in Guyana. It should be noted as well that the EPA has staff dedicated to education and awareness, including the development of communication products like the magazine, television programmes and advertisements, radio programmes and management of social media channels.⁴³ The GNFO does not have social media platforms which members can follow for updates and relevant information. Fisherfolk usually call or go into organisations to get information. Other environmental civil society organisations have up to date websites and/or social media platforms, which fisherfolk, their families and the public can access information on projects and programmes relevant to the sector.

Phone calls, face-to-face interaction and WhatsApp were said to be the most effective ways of communicating with fisherfolk. These media for communication can be enhanced by creating user-friendly websites and social media sites, particularly for younger fishers. It is also a useful platform for fisherfolk and fishing co-operatives to share the work they have been doing and promote ecosystem stewardship. This may be difficult for some fishers to use depending on their access to the internet and their level of ICT competency, but it can enhance efforts made through more traditional methods of communication. Public service announcements, television shows and advertisements on radio and television can also be effective and print media through newspapers and billboards and posters at landing sites are good tools for sharing important and concise bits of information with fisherfolk.

Fishing co-operatives also participate in National Co-operatives Week, run by the Department of Co-operatives yearly. Every year one fishing group is showcased. Here, fisherfolk can display and sell seafood products and educate the public on their industry and livelihoods.⁴⁴ Other activities are also done on Fisherfolk Day every year, which is celebrated by the Department of Fisheries and the GNFO.⁴⁵

The development of a communication strategy for the Department of Fisheries and the GNFO, along with capacity building in the use of communication tools will be useful for both organisations. Training in advocacy will also be very useful to the GNFO and primary fisherfolk organisations to enable them to lobby for issues affecting their livelihoods and share their vision and voice as ecosystem stewards.

10 Organisational assessment of the fisheries authority in Guyana

While fisheries authorities have adopted EAF principles as an approach; evidenced by their inclusion in policies and plans (see Table 5.1), many have not yet adopted these principles within their administrative procedures and/or do not currently possess the capacities to facilitate effective collaborative management procedures.

As part of the institutional analysis, an organisational assessment of the state agency with direct responsibility for fisheries management was conducted in each country to identify gaps and develop recommendations to better adopt the EAF approach and subsequently support fisherfolk

⁴³ Information provided through the EPA website (<http://www.epaguyana.org/epa/green-note-magazine/category/28-green-note>) and key informant interview with representatives of the EPA.

⁴⁴ Information provided through the key informant interview with a representative of the Department of Co-operatives

⁴⁵ <https://dpi.gov.gy/message-from-the-minister-of-agriculture-hon-noel-holder-for-fisherfolk-day-2020/>

and their organisations in actioning ecosystem stewardship. The assessment was conducted via survey to provide a rapid assessment of the state agency's internal capacity to support ecosystem stewardship by fisherfolk and their organisations. The questions in the survey examined the following four capacity areas to explore the organisational motivation and capacity for supporting ecosystem stewardship by fisherfolk:

1. Vision, mandate, culture- the organisation's visions and goals, its operational culture and its internal governance mechanisms and how they promote ecosystem stewardship.
2. Practices – the translation of the organisation core beliefs into actions that support ecosystem stewardship by fisherfolk organisations as it relates to decision making, collaboration and information sharing.
3. Knowledge and skills- the organisation's capacity to provide fisherfolk and fisherfolk organisations with the relevant knowledge and skills support required for improved stewardship actions.
4. Resources- focuses on the finance, equipment, materials, tools and methods that the organisation has access to for supporting fisherfolk with ecosystem stewardship activities and initiatives.

The assessment was conducted as an organisational self-assessment – where the selected agency, either through a small focus group (including relevant and knowledgeable staff members) or via an elected representative, completed the survey. In the case of Guyana, the organisational assessment focused on the Department of Fisheries.

10.1 Findings from organisational assessment of the fisheries authority in Barbados

The Department of Fisheries of Guyana is the primary fisheries management authority in Guyana with the responsibility for *“managing, regulating and promoting the sustainable development of the nation's fishery resources for the benefit of the participants in the sector and the national economy”* (Ministry of Agriculture, n.d.)

The Department has four divisions through which it carries out its mandate, namely:

- Administration- provides carries out services as needed for the management and development of fisheries programmes and work.
- Statistical Unit- is responsible for data collection and management, including scientific and socio-economic data, for policy formulation and management of fisheries resources and the industry.
- Legal and Inspectorate Unit- ensures compliance to administrative and legal requirements by all entities in the fishing industry. Th unit also provides recommendations for improving existing frameworks and are responsible for all licensing and inspecting activity of vessels and processing plants. The unit reconciles disputes arising, manages export licenses and collects revenue.
- Aquaculture- supports the sustainable development of the aquaculture sub-sector that aquaculture.

Table 10.1 provides a synthesis of the organisational assessment survey findings for the Department of Fisheries of Guyana, found in Appendix 13.4 and recommendations for addressing gaps related in the four capacity areas evaluated. It gives a closer look at the operations of the Department of Fisheries and the capability of staff and the resources they have to carry out the mandate of the agency.

Each capacity area is also given an overall ranking based on the findings using a traffic light rating system, where:



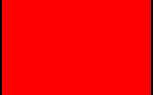
	Indicates that the agency is effectively supporting ecosystem stewardship by fisherfolk and their organisations in the capacity area, with non-critical gaps to be addressed
	Indicates that the agency is adequately supporting ecosystem stewardship by fisherfolk and their organisations in the capacity area, but there are some critical gaps to be addressed
	Indicates that the agency factor is not adequately supporting ecosystem stewardship by fisherfolk and their organisations in the capacity area and there are critical gaps to be addressed

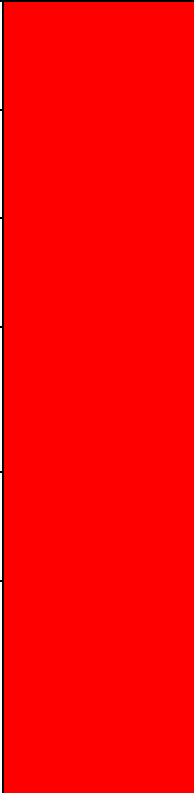
Table 10.1 Organisational assessment for the national fisheries authority of Guyana

Section	Evaluation statement	Response provided by agency	Overall ranking for section based on responses	Gaps/Areas for strengthening
Vision, Mandate and Culture	Organisation has a vision statement that is supportive of /promotes ecosystem stewardship by fisherfolk	[No response]		<ul style="list-style-type: none"> • It is not clear if the organisation has a vision statement that promotes ecosystem stewardship as there was no response. • The organisation, though having core values that support ecosystem stewardship, do not have the resources available to enable it and effectively carry out their mandate.
	Organisation’s mandate support ecosystem stewardship by fisherfolk	Yes		
	<p>Explanatory Notes provided by agency:</p> <ul style="list-style-type: none"> • The organisation’s mandate supports ecosystem stewardship by fisherfolk because the Department of Fisheries believes that it is important that Guyana’s fisheries sustainably utilises its resources. This requires that fisherfolk are more diligent in their efforts to ensure that they have minimal impacts negative on the marine ecosystem. • Core values/beliefs that the organisation identifies as its culture are: <ul style="list-style-type: none"> ○ ecosystem stewardship by fisherfolk is important for sustainable use of fisheries and marine resources ○ fisherfolk can be effective ecosystem stewards ○ fisherfolk should be included in decisions made about how fisheries and marine resources are managed values local and/or traditional knowledge held by fisherfolk ○ the organisation values local and/or traditional knowledge held by fisherfolk ○ the organisation believes in the ecosystem approach to fisheries (EAF) 			

Practices	Organisation has a clear process for including opinions of fisherfolk in decisions made about fisheries and marine resources	No		<ul style="list-style-type: none"> Although the FAC exists, with representatives of the different types of fishery present, the organisation itself, that is, the Department of Fisheries, does not have a clear process for including fisherfolk. The regularity and systematisation of interaction between the department and fisherfolk is unclear, as is the process for how they are consulted on artisanal fisheries management. The fisherfolk, particularly in the artisanal fishery, seem to collaborate with the department and non-governmental organisations specifically about Endangered, Threatened and Protected Species (ETP) and training to support data collection, there is limited mention of other areas for partnership and collaboration. The Department of Fisheries does not have a dedicated website to share, store and access information, documents or data. There is a webpage as part of the ministry's website, but this contains little information on resources available to fishers, projects and developments in fisheries. Although the department shares information through in other ways (face-to-face, phone calls etc.), there is no communication and engagement strategy for the organisation. Staff do not have the skills necessary for effective communication with fisherfolk and cannot build capacity of fisherfolk for advocacy.
	Organisation regularly and systematically includes fisherfolk's input in decisions about how fisheries and marine resources are managed	No response		
	Organisation regularly partners/collaborates with fisherfolk and their organisations for fisheries management initiatives	Yes		
	Organisation regularly facilitates collaboration/partnerships between fisherfolk and other fisheries and marine stakeholders	Yes		
	Explanatory notes provided by agency: <ul style="list-style-type: none"> Fisherfolk view Department of Fisheries as the enforcer of fisheries management guidelines and regulations, with which they must comply, the Department regularly highlights sustainable use practices undertaken by fisherfolk. An example of instances where the Department of Fisheries collaborates with fisherfolk is in the collection of specimens for Endangered, Threatened and Protected Species (ETP) training. The Department of Fisheries collaborates with the Maritime Administration (MARAD) for the training of captains. The Department of Fisheries encourages fisherfolk to become members of established fishing co-operatives or from a new co-operative or friendly society which will allow them to participate in various capacity building and other activity. In 2015, the department played an integral role in the formation of the Guyana National Fisherfolk Organisation (GNFO). The chairperson of the GNFO, from 			

	the #66 Inshore Fishport complex serves as a member of the Fishery Advisory Council (FAC).			<ul style="list-style-type: none"> The size of Guyana and accessibility to landing sites may make it difficult for the Department of Fisheries to be able to reach and regularly communicate and work with artisanal fisherfolk.
Knowledge and Skills	Technical staff have knowledge of EAF	Yes		<ul style="list-style-type: none"> Although the staff at the Department of Fisheries has the capacity to support fisherfolk in technical and organisational development, there are still gaps in specialist knowledge in ecosystems and communications. Even though staff is technically efficient and can train and build capacity of fisherfolk, limited resources available to the department may affect their ability carry out these types of activities. The constraints of effectively engaging with fisherfolk in less accessible areas means that some fisherfolk are unable to access the Department's expertise and knowledge. In the same way, Fisheries staff are unable to engage with these fisherfolk regularly enough to develop a strong relationship and learn from their local knowledge and fishing culture. There are select staff trained in EAF, however, all technical staff should have EAF training and understanding. This is important to developing the culture of the organisation. There should be continuous and equal opportunities for improving their skillsets.
	Technical staff have specialist knowledge on ecosystems, their functions and ecosystem changes	No		
	Technical staff understand socio-economic context of fisheries and marine resource use by fisherfolk and other stakeholders	Yes		
	Technical staff has the skills to conduct socio-economic assessments	Yes		
	Technical staff have knowledge of aquaculture and other alternative or complementary livelihood options for which fisherfolk may be well suited	Yes		
	Technical staff have knowledge of how fisherfolk organisations function including key challenges that they may face and how they can be supported to resolve them	Yes		
	Organisation has the capacity to provide training for fisherfolk in different technical areas and organisational strengthening (these may include soft skills such as facilitation, development of training material, etc.)	Yes		
	Technical staff has the skills to assist fisherfolk with mobilising funding for ecosystem stewardship activities and initiatives	Yes		
	Technical staff has skills in participatory approaches (e.g. participatory monitoring and evaluation, participatory planning, participatory management etc.)	Yes		

	Technical staff has communication skills needed to effectively communicate with a range of stakeholders including fisherfolk	No		
	Organisation provides or accesses training and other kinds of capacity building for staff to regularly improve their technical knowledge and skills	Yes		
	<p>Explanatory notes provided by agency:</p> <ul style="list-style-type: none"> • Selected staff at the Department of Fisheries were exposed to a short EAF training in 2019 by UWI-CERMES. • About two staff members understand the socio-economic context of fisheries and marine resource use by fisherfolk and other stakeholders. • Staff have tertiary level qualifications, Bachelor of Science and Master of Business Administration and Management degrees and have the skills necessary to conduct socio-economic assessments. • Regional staff, that is, Extension Officers from the department located in the various Regions, interact with fisherfolk, assist with the management of co-operatives and attend co-operative meetings. • The department has a complement of technical staff trained at different levels that can provide training to fisherfolk in different technical areas and organisational strengthening. The training of fishers is a priority of the department. • Staff are also trained in proposal development and can assist fisherfolk in mobilising funding for ecosystem stewardship activity and initiatives. • Technical staff and extension services do not have the communication skills needed to effectively communication with the range of stakeholders in the sector, including fisherfolk. 			

Resources	Organisation provides funding assistance to fisherfolk to support ecosystem stewardship activities or initiatives	No		<ul style="list-style-type: none"> • Although the Department of Fisheries has partnerships with other national regional and international organisations, through which it is able to access projects, programmes and funding for the development of the sector, it lacks its own resources to assist fisherfolk and support their involvement in ecosystem stewardship. • The inadequate resources available to the department will decrease their ability to effectively carry out their mandate and support fisherfolk. This inability will affect how fisherfolk and fishing co-operatives interact with and view the department. This can weaken the relationship between the department and fisheries stakeholders. • As mentioned previously, the Department of Fisheries does not have a dedicated website, and there is limited access to information, services and other useful information for fisherfolk or other stakeholders.
	Organisation provides materials, equipment or technology to fisherfolk to support ecosystem stewardship activities or initiatives	No		
	Organisation has access to tools, methods and good practices that can be used to support fisherfolk with ecosystem stewardship activities and initiatives	No		
	Organisation provides access to or assists fisherfolk organisation with accessing networks or resources outside of itself (such as technical experts, funding, projects, etc.)	Yes		
	Organisation has a dedicated website which can be used to share information and resources on ecosystem stewardship practices with fisherfolk	No		
	Explanatory notes provided by agency: <ul style="list-style-type: none"> • The Department of Fisheries provides access to or assists fisherfolk organisations with accessing networks or resources outside of itself through partnership with various organisations such as CRFM, WWF, Conservation International- Guyana and other government agencies. 			

11 Stewardship current enabling factors and gap analysis and recommendations for strengthening fisheries institution to support ecosystem stewardship by fisherfolk

Table 11.1 set out some of the key enabling and constraining factors based on the findings from the institutional analysis and organisational assessment, it also provides recommendations to improve strengthening of the fisheries institution in Guyana to better support fisheries ecosystem stewardship by fisherfolk and their organisations. Enabling and constraining factors and recommendations are presented below under the categories of:

- Policy, legal and planning context for ecosystem stewardship
- Mechanisms for fisherfolk participation in decision-making
- Support and resources available to fisherfolk and their organisations for ecosystem stewardship
- Partnerships and networks for ecosystem stewardship
- Communication of information on sustainable practices for fisheries resources use

Gaps and areas for strengthening the organisational capacity of the Department of Fisheries to support ecosystem stewardship by fisherfolk are presented in Table 10.1.

Table 11.1 Summary of enabling and constraining factors and recommendations for strengthening the fisheries institution to support ecosystem stewardship by fisherfolk in Guyana

Area	Enabling factors	Constraining factors	Recommendations
<p>Policy, legal and planning context for ecosystem stewardship</p>	<ul style="list-style-type: none"> • There are instruments like the Artisanal Fisheries Strategic Framework and Management Plan, Fisheries Regulations (2018), Fisheries Act (2020) are comprehensive and incorporates well aspects of ecosystem well-being. • These are supported by other fisheries-related laws, plans and policies, which also, to some extent or another, address sustainable fisheries management and recognise the importance of inclusion of fisherfolk. • Thee legislation makes provisions for fisherfolk input, through the Fisheries Advisory Committee (FAC), the establishment of protected areas. • The legislation identifies the formation of the FAC and the inclusion of fishers on the committee. 	<ul style="list-style-type: none"> • There was limited knowledge of the laws, plan and polices by stakeholders and how they overlap with mandates of other agencies. • There were limited references to the collaboration and partnership with fisherfolk, aside from the FAC and Seabob Working Group. Although the desk research identified several committees and working groups it is unclear which were active. Small-scale fisheries representatives sit on the FAC only. • While ecosystem well-being is well addressed, socio-economic well-being and local ownership had far less focus. • Although the legal frameworks and plans are in place, it is uncertain the level at which plans and provisions are implemented, if they are being enforced or what monitoring and evaluation mechanisms are in place. • There was little mention of the value-chain development and the role of women and youth in the sustainable development of fisheries in Guyana. 	<ul style="list-style-type: none"> • There should be knowledge sharing and effective communication of laws, policies and plans to staff at the Department of Fisheries, other key agencies and fisherfolk in appropriate formats. This can be done through the development of a communication strategy which can provide recommendations for targeted information packets for the various stakeholders. • There should be further focus and development of the small-scale/artisanal fisheries sector through comprehensive legal frameworks and plans to ensure fisherfolk and fishing co-operatives in the sector are included. • Future laws, policies and plans should have equal focus on ecosystem well-being, socio-economic well-being and good governance. This can be ensured through input from multi-disciplinary experts/teams, which may include persons with economic/circular economy, health and humanities backgrounds. The transdisciplinary approach can be used to analyse issues and develop solutions.

			<ul style="list-style-type: none"> • Develop a monitoring and evaluation framework for continuous review of the implementation process and outputs.
<p>Mechanisms for fisherfolk participation in decision-making</p>	<ul style="list-style-type: none"> • There are at least four NICs in which fisherfolk can potentially be members, to advise on fisheries management and development decision and to actively participate in resource co-management. • The FAC has been very effective in bringing small-scale fisheries issues to the fore, through the involvement of the chair of the Guyana National Fisherfolk Organisation. • Although one identified is a national fisherfolk organisation, it is a useful medium/platform for participating in management of the sector through collective action. • These NICS are formalised through supporting legislation and/or strategic plans. 	<ul style="list-style-type: none"> • The GNFO currently represents only two primary organisations. Many other organisations and fisherfolk have dropped out having lost interest in the organisation due to inactivity. • Artisanal fisherfolk no longer attend meetings of the Seabob Working Group (SWG) because of the distance and cost associated with attending, and they feel that it is not applicable to their livelihood. • Fisherfolk organisations in Guyana are generally said to be disorganised and inactive, and as such will have little capacity to influence decision making. • There is no organisation to represent the interests of aquaculture or mariculture farmers and limited focus on inland fisheries as well. • There are no organisations and/or representatives of the post-harvest small-scale sector on the FAC. • The CMMC does not include fisherfolk organisations in its membership. 	<ul style="list-style-type: none"> • There should be more efforts to improve the management and development of the GNFO through capacity building of the executive and the membership on leadership, organisational development, communication, advocacy and other areas that can strengthen their ability to foster community with its members and represent the needs of the artisanal fishing community nationally and regionally. • There should be initiatives, support and resources to develop and strengthen primary fisherfolk organisations throughout the country. Programmes can be developed through the Department of Fisheries to support the participation of fisherfolk organisations from more remote areas. • There should be organisational development and formalisation of fisherfolk groups through partnership with the Department of Co-operatives and Friendly Societies. These groups should receive training and capacity development in advocacy, communication, networking and collaboration to enable them to collectively come together with a unified voice. More organised a successful group

			<p>have a greater chance of influencing the fisheries institutions and having their issues brought to the national agenda.</p> <ul style="list-style-type: none"> • The scope of the GNFO can be expanded to include an arm for aquaculture and mariculture farmers, and persons involved in the post-harvest sector in small-scale fisheries. This can also be expanded to include artisanal inland fishers. They can be supported by the Aquaculture Unit of the Department of Fisheries. Alternatively, separate organisations can be formed to represent the interests of the aquaculture sub-sector, post-harvest sector and inland fisherfolk. • The GNFO or fisherfolk representatives should be included in the CMMC as they are active coastal and marine resource users and can play an integral role in the committee.
<p>Support and resources available to fisherfolk and their organisations for ecosystem stewardship</p>	<ul style="list-style-type: none"> • Civil society, particularly environmental non-governmental organisations, plays a significant role in training and capacity building for fisherfolk, particularly in data collection. • The Aquaculture Unit provides training and support for aquaculture farmers. • Large pots of funding are made available to countries 	<ul style="list-style-type: none"> • The Department of Fisheries has little to no material, equipment or technology resources available to support fisherfolk. Their current inability to meet promises through lack of resources has damaged their relationship with fisherfolk and the confidence by stakeholder in its ability to carry out its mandate. • There is little mention of technology use and development in the sector and access for fisherfolk. 	<ul style="list-style-type: none"> • The Department of Fisheries should be provided with the necessary resources to effectively support fisherfolk and promote the sustainable development of the sector. This can also improve the relation and partnership between the department and fisherfolk and restore confidence in their ability to manage the industry. • There should be more emphasis on the use technology in the sector and the further innovation, to increase efficiency,

	<p>through partnerships with international donors and intergovernmental organisations, but fisherfolk can also access direct funding through small grant programmes.</p> <ul style="list-style-type: none"> • Fisherfolk receiving training through some government agencies like the Coast Guard or Maritime Association in use of GPS and safety at sea. 	<ul style="list-style-type: none"> • There was no mention of training and development of the post-harvest sector. • Training is often received by one or two active and well-organised groups, like the Upper Corentyne Fishermen’s Co-operative Society Limited. Weaker organisations and fisherfolk not in groups are less likely to be involved in training and capacity building and is also less likely to access support and resources. • There is limited capacity of fisherfolk to develop proposals to go after funding themselves and lack of internal organisation and systems, required for accessing funds- like a board, banks accounts etc. • Fisherfolk groups may be facing challenges that require large investment and funding, which they cannot access, such as infrastructure, equipment and facilities, which also limit their ability to advocate for their issues and needs, as their focus is on their livelihoods. • There is little mention of resources available for development of the post-harvest sector and value addition of fisheries products. • There is not mention of training on alternative livelihoods, and projects focussed on the small-scale fisheries sector. 	<p>quality and encourage development of the industry.</p> <ul style="list-style-type: none"> • There should be more training and development in the post-harvest sector for value added products. This can drive “buy local initiatives” which is particularly important current context of COVID-19. • There should be organisational development and formalisation of fisherfolk groups which are not currently active. These groups should receive training and capacity development in advocacy, communication, networking and collaboration to enable them to collectively come together with a unified voice. • A situation analysis and needs assessment should be carried out for the industry, to understand the context in which different groups (formal and informal) operate in and development more informed interventions. It is important to understand that groups or communities may face similar problems but the solution may need to fit their particular circumstances, that is, a “one-size-fits all” approach would not work because of various level of capacity, knowledge, interest, social capital etc.
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		<ul style="list-style-type: none"> • FFOs need training in organisational development, administration and fundraising and ecosystem stewardship. 	<ul style="list-style-type: none"> • SocMon⁴⁶ methodology can be used to collect more socio-economic data on the industry and actors in the fishery value chain. • Projects and initiatives exploring alternative livelihoods for fisherfolk and/or their families should be developed.
Partnerships and networks for ecosystem stewardship	<ul style="list-style-type: none"> • The Department of Fisheries has an existing relationship with the GNFO and more active fishing co-operatives. • The FAC allows key stakeholders to meet and be a part of the decision-making arrangements for the sector. • Leading CSOs, like environmental non-governmental organisations, partner or work with other CSOs, particularly smaller community groups and fisherfolk groups. • Non-governmental organisations have also fostered partnerships with larger international bodies or intergovernmental organisations for the implementation of projects. 	<ul style="list-style-type: none"> • The partnership between the Department of Fisheries and the GNFO needs strengthening. The same can be said for the department and the primary fisherfolk organisations. • There appears to be limited inter-organisation collaboration among co-operatives due to the lack of organisation and activity of individual groups. • The network and social capital of the GNFO does not extend or is not shared with all fisherfolk groups, because limited membership/engagement of members. • Due to the lack of organisation in primary fisherfolk organisations or some groups being informal, they are unable to collaborate with other groups, build their network with other fishing groups around Guyana and are unaware of how to leverage these relationships. • There is limited collaboration between fisherfolk and other government 	<ul style="list-style-type: none"> • Further exploration and analysis of the fisheries institution to identify strategic partnerships within and outside of the government sector can be useful for holistic development of the sector and for the Department of Fisheries to carry out their mandate more effectively and efficiently. • Development of extension services for each region, to facilitate improved relationship between extension officers and local fishing co-operatives and other groups. This can be done in collaboration with parish councils and should also be aligned to the national development agenda such as the Green State Development Strategy. • Improved organisational capacity of the GNFO and primary fisherfolk organisations along with training in networking and fostering of partnerships.

⁴⁶ SocMon or socioeconomic monitoring is an initiative aimed at helping coastal managers better understand and incorporate the socioeconomic context into coastal management programs. <https://www.socmon.org/>

	<ul style="list-style-type: none"> • There is an active regional network (CNFO) which the GNFO is involved in, through which there are opportunities for collaboration and participation of projects. 	<p>agencies, including those which are capable of building capacity in ecosystem stewardship.</p> <ul style="list-style-type: none"> • There is limited engagement of the private sector, though they have influence on decision-making and interact with the same resources (like oil and gas companies). • There is limited collaboration between the Department of Fisheries and other government agencies such as the Department of Cooperatives, the Environmental Protection Agency (EPA), the Ministry of Indigenous Peoples Affairs, and others. • There is limited information on the relationship with the Department of Fisheries and relationship with indigenous communities and how they interact with and manage fisheries resources. 	<ul style="list-style-type: none"> • Campaigns or recruitment drives to get more fisherfolk involved in organisations and to improve the GNFO’s membership. • The creation of fisherfolk events, virtual and in person post COVID-19, to facilitate fellowship and camaraderie among fisherfolk, to facilitate learning exchanges and to do capacity development and training. • Fisherfolk should have a more active role in monitoring and enforcement, IUU fishing prevention and public education, which can be facilitated by the Department of Fisheries through special programmes developed in collaboration with Marine Police, Coast Guard, EPA and national or international CSOs involved in education and awareness campaigns. • There more engagement of the private sector by CSOs and government agencies, to advocate for their involvement as part of their corporate social responsibility. Organisations like the GNFO can play an important role in broaching possible corporate partners, on behalf of fisherfolk. • There should be greater collaboration of the Department of Cooperatives and Friendly Societies, the EPA and the Ministry of Indigenous People’s Affairs and other key ministries through projects and formal arrangements like MOUs and
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			<p>through their inclusion in multi-sectoral committees or NICs addressing fisheries management.</p> <ul style="list-style-type: none"> • The partnerships with the GNFO and government agencies can also be formalised and propelled by MOUs or similar arrangements. • There should be improved efforts to learn from and understand how indigenous communities utilise resources and involve them in decision-making processes and in partnerships in the fisheries sector.
<p>Communication of information on sustainable practices for fisheries resources use</p>	<ul style="list-style-type: none"> • The Department of Fisheries communicates often with fisherfolk through more traditional media, like telephone and in-person meetings. • The Ministry of Agriculture has dedicated website and active social media platforms for sharing information with stakeholders. • The GNFO also shares information from members and communities through phone calls, in person meetings and WhatsApp. • Fisherfolk participate in events like the National Co-operatives week and Fisherfolk Day, where they 	<ul style="list-style-type: none"> • The Department of Fisheries does not have dedicated website for information and data sharing and social media platforms they do have are inactive. • There is no formal communication strategy for the Department of Fisheries. • Fisherfolk rely on phone calls or going into the office to get information. Some may have limited access to internet or lack the skills to use it to retrieve information online. • The GNFO also does not have a dedicated website or social media platforms to share information. • Low capacity to engage through social media platforms also limits the GNFOs ability to share about their livelihood, their stewardships activities and projects they may be undertaking and limits their ability to advocate. 	<ul style="list-style-type: none"> • Development of a website for the Department of Fisheries to share information covering all aspects of the industry, including artisanal/small-scale fisheries. • Develop through consultations with key stakeholders a communication strategy and plan for the Department. This can be facilitated by an environmental/science communication expert. • Fisherfolk and fisherfolk organisations should be made aware of the steps involved in accessing information, who they should go to and what they need to have (in the instance of permits, licenses etc.). This can be done through television announcements, radio, posters which can be posted at landing sites or shared on WhatsApp and social media. Information packs can also be created for

	<p>can display their products, more so processed seafood products and share about their livelihoods.</p>	<ul style="list-style-type: none"> • This may be similar for primary fisherfolk organisations who also may not have any social media pages for engaging with their members, other fisherfolk or the wider public. 	<p>fisherfolk and fishing groups, which they can share among their membership.</p> <ul style="list-style-type: none"> • Information packs can be developed for other topics and initiatives as well and can be distributed to fisherfolk leaders to share with their membership and their families and can include topics like ecosystem stewardship and conservation. • Training in communications, research and use of ICT tools for the Department of Fisheries and the GNFO and its members. Fisherfolk families can also be trained in the use of ICT and accessing information online, as children and/or spouses of fisherfolk may be more inclined to using it. • Development of a communications plan for the GNFO and development of social media pages for wider reach and sharing of information on projects, ecosystem stewardship and sustainable use of fisheries resources.
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13 Appendices

13.1 Definitions of conceptual components for the institutional analysis framework

Conceptual component	Worksheet
A. Policies, Laws and plans	<p>This component focuses on the existing legal framework within the target country to address and guide fisheries management and planning. It involves the formal governance of a nation's fisheries management which can either empower or constrain the ability to integrate <i>ecosystem stewardship</i>⁴⁷ practises within small-scale fisheries. The assessment of this component also involves regulations, rules and management plans that resulted from the policies and legislation identified. This can be used as an indicator of fisheries-related state agencies capacity to support fishing industry stewardship. For example, to determine whether legislation is adequate as Stewardship is an evolving concept for management of natural resources such as fisheries. Policy and legislation need to be assessed in order to identify the barriers at the institutional level that may hinder the promotion of ecosystem stewardship. This component is divided into:</p> <p>A.1 Fisheries Policy A.2 Fisheries Management Plan A.3 Fisheries Legislation</p>
B. Advisory and/or decision-making mechanisms	<p>Institutional arrangements - examine the institutional frameworks and mechanisms established for governing fisheries management and fostering ecosystem stewardship. This includes the establishment of multi-stakeholder committees or similar structures, which play an advisory or decision-making role in resource management. The relationship between these mechanisms and the agencies/stakeholders involved will also be analysed.</p>
C. Fisheries-related Organisations	<p>This conceptual component will map the fisheries-related state agencies as well as other fisheries-related organisations which play a key role in the fishery-related institutional arrangements of each country. This includes the core fisheries management organisations such as Department of Fisheries/Departments/Authorities/Agencies and other associated departments, such as Environment, Coastal Management, Agriculture, Cooperatives, Markets and others. It will also include non-state organisations such as fisherfolk organisations (FFOs), civil society organisation (CSOs), private sector and academia, where relevant. Given that the level of involvement in the fisheries sector will differ within and among project countries. This section will investigate agencies roles and particularly their mandated role in fisheries management. Furthermore, an organisational capacity assessment will be carried out to examine the core fisheries state agencies' current ability to support stewardship activity.</p> <p>Organisational Capacity Assessment:</p>

Under this key conceptual component, core capacitiesⁱ of fisheries-related state agencies capacity to support and enable ecosystem stewardship will be assessed. The capacities to be examined are:

- I. **Vision, mandate, culture-** this section looks at the organisation’s visions and goals, its operational culture and its internal governance mechanisms and how they promote ecosystem stewardship. It is reflected in the everyday organisational culture, how they communicate with fisherfolk and their organisations and the relationships they build.
- II. **Knowledge and skills-** this focuses on assessing the fisheries-related state agency’s capacity to provide fisherfolk and fisherfolk organisations (FFOs) with the relevant knowledge and skills support required for improved stewardship actions. This section assesses the capacity in technical knowledge, skills and ability related to ecosystem stewardship.
- III. **Resources-** assesses the capacity, availability, and efficient access to resources related to organisations– in particular the resource support made available to FFOs from the state agency, as well as resources provided for execution of any ecosystem stewardship actions and practices.
- IV. **Partnerships** - is an assessment of the organisations capacity to foster partnerships and link activities, plans, projects and initiatives which involves ecosystem stewardship. It will look at their ability to build networks, and assist in building the networks of fisherfolk organisations, as resource users and ecosystem stewards.

D. Processes and practices

For this conceptual component, the operational procedures for fisheries-related state agencies will be examined more closely. The processes and practices will be assessed in three sub-components. These are:

C.1 Promotion of good governance- This is determined by probing the inclusivity of the decision-making process in fisheries governance. The system of institution (i.e. the decision-making process applied) determines the relative success of the structural processes to a certain degree in institutional capacity for improved fisheries management that integrates ecosystem stewardship (i.e. levels of exclusion, discrimination). This also assesses organisations internal structures and systems ability to create an environment that encourages and facilitates stewardship. It includes the channels of communication for sharing or receiving information from fisherfolk, and transparent and accountable systems. This will also assess the structures and systems in places for clear communication, involvement and integration within and among fisheries-related state agencies.

C.2 Collaborative management- This sub-component focuses on the extent of cooperative management that exists in practice between fisheries-related state agencies and small-scale fisheries groups such

as FFOs, as well as fisherfolk individuals and the local communities. It also identifies the degree of stakeholder collaboration in management practises (government, private sector and civil society/local communities).

C.3 Adaptive management This assesses the ability of the fisheries-related state agencies to budget, manage and implement activities, using internal structures and mechanisms which are flexible and adaptive to internal or external changes, changes in the resources, or changes in the resource users. This looks at the organisations ability to learn actively, develop practices and policies for promoting stewardship; and implement, monitor and evaluate plans, projects, programmes of work for actions or systems enabling stewardship.

C.4 Communication

This sub-component assesses the extent to which fisheries information providers in StewardFish project countries are using communication tools/channels to communicate with fisherfolk, as well as their capacity to use the tools/channels effectively. It includes the channels of communication for sharing or receiving information from fisherfolk, and transparent and accountable systems. This will also assess the structures and systems in place to for clear communication, involvement and integration within and among fisheries-related state agencies.

13.2 Country contacts/participants

13.2.1 List of webinar participants

	Name	Organisation	Contact
In-country participants			
1	Denzil Roberts	Department of Fisheries	bertz99@yahoo.com ; fisheriesguyana@gmail.com
2	Ingrid Peters		ingrid.o17@hotmail.com
3	Reuben Charles	Fisheries Advisory Committee	charliereub@gmail.com
4	Pamashwar Jainarine	Upper Corentyne Fishermen's Co-operative Society	pjainarine@gmail.com
5	Sally Farinha	Veterinary Public Health Unit Ministry of Public Health	sallyfarinha@gmail.com
6	Vidyanand Mohabir	Environmental Protection Agency	vvmohabir@gmail.com
7	Troy Broomes		troybroomes@live.com
8	Perlina Gifth	Cooperative Department	pangifth@yahoo.com
9	Gabriela Fernands		gfernands_92@outlook.com
10	Kemraj Parsram	Consultant/ CANARI Mentor	kemraj.parsram@gmail.com
11	Sopheia Edghill	World Wildlife Fund	sedghill@wwf.gy
Project partners			
12	Sanya Compton	CERMES	sanyacompton@gmail.com
Facilitators			

13	Melanie Andrews	CANARI	melanie@canari.org
14	Neema Ramlogan	CANARI	neema@canari.org
15	Maren Headley	Caribbean Regional Fisheries Mechanism (CRFM) Secretariat	maren.headley@crfm.int
16	June Masters	Caribbean Regional Fisheries Mechanism (CRFM) Secretariat	june.masters@crfm.net
FAO			
17	Terrence Phillips	Food and Agricultural Organisation (FAO) Sub-regional Office	Terrence.Phillips@fao.org
Technical support team			
18	Aaron Peter	CANARI	aaron@canari.org

13.2.2 List of key informant interviewees

Key informant interviews were carried out subsequent to the validation with individuals recommended by the country focal point and identified by the researcher for additional information.

Key informants interviewed in Guyana include representatives from

- *Department of Co-operatives and Friendly Societies*
- *Environmental Protection Agency*
- *Fisheries Advisory Council*
- *Guyana National Fisherfolk Organisation*

13.3 Institutional Analysis and Organisational Assessment Validation Webinar Agenda



Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-Scale Fisheries (StewardFish) project

Institutional Analysis and Organisational Assessment Webinar

June 30th, 2020

Provisional Agenda

Background

The Institutional Analysis and Organisational Assessment webinarⁱ is an activity under the StewardFish project. StewardFish aims 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. This action will contribute to Output 1.2.1 “State agency implementation gaps assessed regarding support for fisherfolk organisations and their role in stewardship” and Outcome 1.2 “Fisheries-related state agencies have capacity to support fishing industry stewardship” of StewardFish. StewardFish is funded by the Global Environment Facility (GEF) and is being implemented by the United Nations Food and Agriculture Organization (FAO). Please see project summary handout to learn more about StewardFish and the Caribbean Natural Resources Institute’s (CANARI) role as a regional co-executing partner.

Participants

Webinar participants will be representatives of fisheries-related state agencies and civil society organisations, academia and intergovernmental organisations with a role or interest in sustainable fisheries development in Guyana.

Facilitators

The webinar will be facilitated by CANARI and the Caribbean Regional Fisheries Mechanism Secretariat (CRFM Sec.) which is also a regional co-executing partner of the StewardFish project.

Objectives

The objectives of the webinar are to:

1. Present preliminary findings of the institutional analysis and organisational assessment of key fisheries-related state agencies to assess gaps in support for fisherfolk organisations and their role in stewardship.
2. Validate, refine and receive input on the findings of the institutional analysis and organisational assessment for inclusion in country report.

-
3. Develop recommendations for improving fisheries-related state agencies capacity to promote, facilitate and support ecosystem stewardship of fisherfolk organisations, for implementation by the CRFM Sec.

Documents provided

- Provisional agenda
- StewardFish project summary
- Webinar Concept Note
- Link to webinar pre-survey
- Handout for “Overview of the StewardFish project and institutional analysis webinar” session
- Handout for Understanding the conceptual approach for the institutional analysis” session
- Link to webinar post-survey (*to be sent separately*)

Provisional Agenda

Time	Topics
9:45	Log in and testing of platform and audio*
10:00	Welcome and introductions
10:10	Overview of the StewardFish project and institutional analysis webinar
10:15	Understanding the conceptual approach for the institutional analysis
10:35	Exploring the policy and legal context for ecosystem stewardship in Guyana
11:15	Exploring mechanisms for fisherfolk participation in decision-making
11:35	Recommended actions for addressing ecosystem stewardship gaps in fisheries institution in Guyana
12:00	End of Webinar

Attendees are kindly asked to log in at least **15 minutes before the webinar begins to check audio function and quality.*

A link for joining the webinar will be shared upon registration. Further information on joining the webinar will be shared separately.



Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-Scale Fisheries project (StewardFish)

Organisational Capacity Assessment Survey for National Fisheries Authorities

StewardFish aims 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.

As part of the project, the Caribbean Natural Resources Institute (CANARI) is conducting **institutional analyses** and **organisational assessments** with key fisheries-related state agencies in each of the seven StewardFish project countries to identify gaps and develop recommendations for enhancing the capacity of fisheries-related state agencies to promote, facilitate and support ecosystem stewardship of fisherfolk organisations.

This is a key activity under Output 1.2.1 “State agency implementation gaps assessed regarding support for fisherfolk organisations and their role in stewardship” that will contribute to Outcome 1.2 “Fisheries-related state agencies have capacity to support fishing industry stewardship” of the StewardFish project. CANARI has already begun conducting desk studies, interviews and workshops to get information and engage a range of key stakeholders for the institutional analyses being conducted in each of the project countries.

While the institutional analyses look broadly at the fisheries institution in each country, the organisational assessments focus specifically on their national fisheries authorities as the primary unit of analysis. This survey therefore seeks to do a rapid organisational assessment of the national fisheries authority in your country to assess its internal capacity to support ecosystem stewardship of fisherfolk and their organisations.

The survey has 28 questions and is organised into the following four sections that will examine organisational motivation and capacity to support ecosystem stewardship by fisherfolk organisations:

1. Vision, mandate and culture (4 questions)
2. Practices (8 questions)
3. Knowledge and skills (11 questions)
4. Resources (5 questions)

Questions are a mix of both closed and open-ended questions.

A glossary of key terms is provided.

The results of the survey will be synthesised and included on the country institutional analysis and organisational assessment reports being prepared by CANARI under the StewardFish project.

CANARI values your contribution to this key activity under StewardFish and looks forward to your responses.

If you have any questions or concerns, please email Neema Ramlogan, Technical Officer, CANARI at neema@canari.org and for more information, please visit the project webpage: <https://canari.org/stewardfish-project>.

How to complete this survey:

It is recommended that this survey be completed as part of a small focus group including relevant and knowledgeable staff members in the national fisheries authority in your country.

Where applicable, website links, supporting documents and other relevant resources can be shared with CANARI to support responses provided.

CANARI may conduct a brief follow up interview with the lead respondent to clarify responses and get additional information as needed.

Glossary

Ecosystem Approach to Fisheries (EAF)	EAF strives to balance diverse societal objectives, by taking into account the knowledge and uncertainties about biotic, abiotic and human components of ecosystems and their interactions and applying an integrated approach to fisheries within ecologically meaningful boundaries. The core principles of EAF are human well-being, ecological well-being and good governance (FAO).
Ecosystem stewardship	The actions taken by individuals, groups or networks of actors, with various motivations and levels of capacity, to protect, care for or responsibly use the environment in pursuit of environmental and/or social outcomes in diverse social–ecological contexts (Bennett et. Al, 2018).
Institution	The set of arrangements for making decisions about the development, management, and use of a natural resource, including the stakeholders, as well as, the laws, formal and informal policies, plans and structures that guide how these stakeholders interact with each other and with the resources (CANARI).
Participatory approach	Participation in the context of natural resource management can be described as a process that: facilitates dialogue among all actors; mobilises and validates popular knowledge and skills; encourages communities and their institutions to manage and control resources; seeks to achieve sustainability, economic equity and social justice; and maintains cultural integrity (Renard and Valdés-Pizzini 1994).

Respondent information

Country:	GUYANA
Name of national fisheries authority:	DEPARTMENT OF FISHERIES
Name of lead respondent:	INGRID PETERS
Position of lead respondent:	PRINCIPAL FISHERIES OFFICER
Email address of lead respondent:	ingrid.o17@hotmail.com or ingridpeters93@gmail.com
Contact number of lead respondent:	(592) -225-9558 592 646 3538

Name and contact information of other persons who contributed to completing this survey

Name	Position in organisation	Email address
Randy Bumbury	Fisheries Officer	randybumbury@gmail.com
Denzil Roberts	Chief Fisheries Officer	fisheries_guyana@gmail.com
Mikhail Amsterdam	Fisheries Officer	mikhail.amsterdam@gmail.com
Kadeem Jacobs	Fisheries Officer	kadeemjacobs79@yahoo.com
Saskia Tull	Fisheries Officer	saskiatull@yahoo.com

Section 1: Vision, Mandate and Culture

This section looks at the organisation's *motivation* to support ecosystem stewardship by fisherfolk and fisherfolk organisations. It is reflected in the organisation's vision, mandate and culture.

1. Does the organisation have a vision statement that is supportive of /promotes ecosystem stewardship by fisherfolk? Briefly explain your answer.

2. Does the organisation's mandate support ecosystem stewardship by fisherfolk? Briefly explain your answer. **Yes**
It is important that Guyana's Fishery engages in the sustainable utilization of our resources. This requires that our fishers be more diligent in their efforts to ensure their impact on the marine ecosystem is minimal.

3. Which of the following core values/beliefs reflect the culture of the organisation?
Check/highlight all that apply.
 - ***The organisation believes that ecosystem stewardship by fisherfolk is important for sustainable use of fisheries and marine resources.***
 - The organisation believes that ecosystem stewardship by fisherfolk is not important for sustainable use of fisheries and marine resources.
 - ***The organisation believes that fisherfolk can be effective ecosystem stewards.***
 - The organisation believes that fisherfolk are not effective ecosystem stewards.
 - ***The organisation believes that fisherfolk should be included in decisions made about how fisheries and marine resources are managed.***
 - The organisation believes that fisherfolk input into decisions about how fisheries and marine resources are managed is not important.
 - ***The organisation values local and/or traditional knowledge held by fisherfolk.***
 - ***The organisation believes in the ecosystem approach to fisheries (EAF).***

4. Do you have any additional information to share about your organisation's vision, mandate and culture as it relates to supporting ecosystem stewardship by fisherfolk and their organisations? You can also use this section to clarify any of the responses provided for question S1.3.

Section 2: Practices

This section looks at the how the organisation's core values and beliefs are translated into actions (practices). It focuses in particular on the actions that support ecosystem stewardship by fisherfolk and fisherfolk organisations in the following areas: decision-making; collaboration and partnerships; and information collection and sharing.

Decision-making - Please provide answers to the following questions about your organisation's decision-making practices.

1. Does the organisation **have a clear process** for including the opinions of fisherfolk in decisions made about fisheries and marine resources? Briefly explain your answer.
No
2. Does the organisation regularly and systematically include fisherfolk input in decisions about how fisheries and marine resources are managed? Briefly explain your answer.

Collaboration and partnerships - Please provide answers to the following questions about your organisation's collaboration and partnership practices

3. Select which of the following statements are true for the organisation. *Check/highlight all that apply.*
 - Fisherfolk generally view the organisation as a partner with whom they can collaborate on fisheries management (*participatory relationship*).
 - **Fisherfolk generally view the organisation as an enforcer of fisheries management guidelines and regulations with whom they must comply (top-down relationship).**
 - **The organisation regularly highlights sustainable use practices undertaken by fisherfolk.**
 - The organisation regularly highlights unsustainable use practices undertaken by fisherfolk.
4. Does the organisation regularly partner/collaborate with fisherfolk and their organisations for fisheries management initiatives? If yes, please provide a recent of example.

Yes. Collection of specimens for Endangered Threatened and Protected (ETP) training

5. Does the organisation regularly facilitate collaboration/partnerships between fisherfolk and other fisheries and marine stakeholders? If, yes please provide a recent example.

Yes. Training of captains conducted by Maritime Administration (MARAD) and facilitated by the Department

Information collection and sharing – Please provide answers to the following question about your organisation's information collection and sharing practices.

6. Select which of the following statements are true for the organisation. *Check/highlight all that apply.*
 - **The organisation collects local/traditional knowledge held by fisherfolk about fisheries and marine resources.**

-
- The organisation does not collect local/traditional knowledge held by fisherfolk about fisheries and marine resources.
 - ***The organisation uses local/traditional knowledge held by fisherfolk to inform management decisions about fisheries and marine resources.***
 - The organisation does not use local/traditional knowledge held by fisherfolk to inform management decisions about fisheries and marine resources.
 - ***The organisation records best practices related to sustainable use and management of marine resources and shares this information regularly.***
 - The organisation provides information on sustainable fishing practices to fisherfolk in a manner that they can understand.
 - The organisation does not provide information on sustainable fishing practices in a manner they can understand to fisherfolk.
 - The organisation has a communication strategy to share the information with different stakeholders including fisherfolk.
 - ***The organisation does not have a communication strategy to share the information with different stakeholders including fisherfolk.***
 - ***The organisation provides advice/guidance to fisherfolk for stewardship activities and initiatives.***
 - The organisation does not provide advice/guidance to fisherfolk for stewardship activities and initiatives.
7. How does the organisation share information with fisherfolk about sustainable use practices for fisheries and marine resources?

Through workshops, data collection exercises and training

8. What has the organisation found to be the most effective way to share information with fisherfolk?

Training and Data Collection exercises

9. Do you have any additional information to share about your organisation's decision-making; collaboration and partnerships; and information collection and sharing practices as it relates to supporting ecosystem stewardship by fisherfolk and their organisations? You can also use this section to clarify any of the responses provided for questions S2.3 and S2.6.

The Department of Fisheries encourages fishers to join established cooperative societies or form themselves into groups and of Friendly Society. This will allow them to participate in various activities.

In 2015 the department played an integral part in the formation of Guyana National Fisherfolk Organization. The chairperson is from # 66 Inshore Fishport Complex and sits as a member of the Fishery Advisory Committee

Section 3: Knowledge and Skills

This section looks at the organisation's capacity to support ecosystem stewardship by fisherfolk and fisherfolk organisations. It focuses in particular on the knowledge and skills held by technical staff (e.g. managers, researchers, policy development officers, field officers etc.).

1. Do technical staff have knowledge of the Ecosystem Approach to Fisheries (EAF)? Briefly explain your answer.

Selected staff were exposed to a short EAF training in 2019 by Ceremes, UWI

2. Do technical staff have specialist knowledge on ecosystems, their functions and ecosystem changes? Briefly explain your answer.

No

3. Do technical staff understand the socio-economic context of fisheries and marine resource use by fisherfolk and other stakeholders? Briefly explain your answer.

YES

Probably 2 staff

4. Do technical staff have the skills to conduct socio-economic assessments? Briefly explain your answer.

Yes

Staff are equipped with BSc and MBA in management

5. Do technical staff have knowledge of aquaculture and other alternative or complementary livelihood options for which fisherfolk may be well suited? Briefly explain your answer.

Yes

6. Do technical staff have knowledge of how fisherfolk organisations function including key challenges that they may face and how they can be supported to resolve them? Briefly explain your answer. Briefly explain your answer.

Yes. Regional Staff i.e Officers from the department located in the various regions are known as Extension Officers and interact with fishers, assist with management of co-op and attend co-op meetings etc

7. Does the organisation have the capacity to provide training for fisherfolk in different technical areas and organisational strengthening (these may include soft skills such as facilitation, development of training material, etc.)? Briefly explain your answer.

Yes. The department has its complement of technical staff at different level.

8. Do technical staff have the skills to assist fisherfolk with mobilising funding for ecosystem stewardship activities and initiatives? Briefly explain your answer.

Yes. Staff are trained in project development.

-
9. Do technical staff have skills in participatory approaches (e.g. participatory monitoring and evaluation, participatory planning, participatory management etc.)? Briefly explain your answer.

Yes.

10. Do technical staff have communication skills needed to effectively communicate with a range of stakeholders including fisherfolk? Briefly explain your answer.

No

Lacking is set skills in extension services

11. Does the organisation provide or access training and other kinds of capacity building for staff to regularly improve their technical knowledge and skills? Briefly explain your answer.

Yes. Training of fishers is a priority area of the department.

12. Do you have any additional information to share about the knowledge and skills of your organisation's technical staff as it relates to supporting ecosystem stewardship by fisherfolk and their organisations?

Section 4: Resources

This section looks at the organisation's capacity to support ecosystem stewardship by fisherfolk and fisherfolk organisations. It focuses in particular on the finance, equipment, materials, tools and methods that the organisation has access to for supporting fisherfolk with ecosystem stewardship activities and initiatives.

1. Does the organisation provide funding assistance to fisherfolk to support ecosystem stewardship activities or initiatives? Briefly explain your answer.

No

2. Does the organisation provide materials, equipment or technology to fisherfolk to support ecosystem stewardship activities or initiatives? Briefly explain your answer.

No

3. Does the organisation have access to tools, methods and good practices that can be used to support fisherfolk with ecosystem stewardship activities and initiatives? Briefly explain your answer.

No

4. Does the organisation provide access to or assist fisherfolk organisation with accessing networks or resources outside of itself (such as technical experts, funding, projects, etc.)? Briefly explain your answer.

Yes. Through partnership with various organizations for example, CRFM, WWF, Conservation International and other government agencies.

5. Does the organisation have a dedicated website which can be used to share information and resources on ecosystem stewardship practices with fisherfolk? Briefly explain your answer.

No.

6. Do you have any additional information to share about your organisation's resources as it relates to supporting ecosystem stewardship by fisherfolk and their organisations?



Caribbean Natural Resources Institute

INSTITUTIONAL ANALYSIS AND ORGANISATIONAL ASSESSMENT OF FISHERIES-RELATED STATE AGENCIES FOR ENABLING ECOSYSTEM STEWARDSHIP IN THE FISHERIES SECTOR OF JAMAICA

August, 2020



Cover photograph: Pirogue at Bull Bay (centre), boats at New Forum Fishing Village (left) and aquaculture pond in Hill Run, Spanish Town (right). 2020. ©CANARI

CARIBBEAN NATURAL RESOURCES INSTITUTE

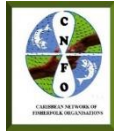
INSTITUTIONAL ANALYSIS AND ORGANISATIONAL ASSESSMENT OF FISHERIES-RELATED STATE AGENCIES FOR ENABLING ECOSYSTEM STEWARDSHIP IN THE FISHERIES SECTOR OF JAMAICA

August, 2020

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Disclaimer:

This publication has been produced by CANARI as an output of the StewardFish project. However, the views expressed herein are those of the authors, and can therefore in no way be taken to reflect the official opinions of the National Fisheries Authority of the Ministry of Industry, Commerce, Agriculture and Fisheries (MICAFA) Jamaica, the Global Environmental Facility, the Food and Agriculture Organization of the United Nations or other co-executing partners of the StewardFish project.

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List of acronyms and abbreviations

ARIA	WRI's Adaptation: Rapid Institutional Analysis
BBFFS	Bluefields Bay Fishermen's Friendly Society
CANARI	Caribbean Natural Resources Institute
CBO	Community-based organisation
CCAM	Caribbean Coastal Area Management Foundation
CCRIF	Caribbean Catastrophe Risk Insurance Facility
CEPF	Critical Ecosystem Partnership Fund
CLME + SAP	Strategic Action Programme for the Sustainable Management of the Shared Living Marine Resources of the Caribbean and North Brazil Shelf Large Marine Ecosystems
CMU	Caribbean Maritime University
CNFO	Caribbean Network Fisherfolk Organisation
COPESCAALC	Commission for Inland Fisheries and Aquaculture of Latin America and the Caribbean (COPESCAALC)
CPR	Cardiopulmonary resuscitation
CRFM	Caribbean Regional Fisheries Mechanism
CRP	Community Renewal Programme
CSO	Civil society organisation
DCFS	Department of Co-operatives and Friendly Societies
EAF	Ecosystem Approach to Fisheries
EBM	Ecosystem-based management
EHF	Environmental Health Foundation
FAC	Fisheries Advisory Council
FAD	Fish aggregating devices
FAO	Food and Agricultural Organisation
FFO	Fisherfolk organisations
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
GIS	Geographic information system
GPS	Global positioning system
ICCAT	International Commission for the Conservation of Atlantic Tunas
ICT	Information and communication technology
IDB	International Development Bank
IUU	Illegal, unreported and unregulated fishing
JCA	Jamaica Customs Agency
JCFU	Jamaica Fishermen Cooperative Union
JET	Jamaica Environmental Trust
JMD	Jamaica dollars
JNSBL	Jamaica National Small Business Loan
JRC	Jamaica Red Cross
MEGJC	Ministry of Economic Growth and Job Creation
MFAFT	Ministry of Foreign Affairs and Foreign Trade
MFPS	Ministry of Finance and Public Service
MICAF	Ministry of Industry, Commerce, Agriculture and Fisheries

MOU	Memorandum of understanding
MPA	Marine protected areas
MTF	Medium Term Socio-Economic Policy Frameworks
NBSAP	National Biodiversity Strategic Action Plan
NCOCZM	National Council on Ocean and Coastal Zone Management
NEPA	National Environmental Protection Agency
NFA	National Fisheries Authority
NFAC	National Fisheries Advisory Council
NFO	National Fisherfolk Organisation
NGO	Non-governmental organisations
NIC	National Intersectoral Committee/Coordinating Mechanism
NRCA	Natural Resources Conservation Authority
OGC	Ocean Governance Committees
OSPESCA	Organization of Central American Fisheries and Aquaculture Sector
PIOJ	Planning Institute of Jamaica
PPCR	Pilot Project for Climate Resilience
RADA	Rural Agricultural Development Authority
RFB	Regional fisheries bodies
SDC	Social Development Commission
SDG	Sustainable Development Goals
SFCA	Special Fishery Conservation Areas
SFCAN	Special Fishery Conservation Areas Network
SGP	Small Grants Programme
TNC	The Nature Conservancy
UCC	University of the Commonwealth Caribbean
UNEP-CEP	United Nations Environment Programme- Caribbean Environment Programme
UWI	University of the West Indies
UWI-CERMES	Centre for Resource Management and Environmental Studies of the University of the West Indies
UWI-CIRP	Caribbean ICT Research Programme of the University of the West Indies
WECAFC	FAO Western Central Atlantic Fisheries Commission
WRI	World Resources Institute

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Executive Summary

The Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in the Caribbean Small-Scale Fisheries (StewardFish) project is aimed at implementing the 10-year 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) within seven Caribbean Regional Fisheries Mechanism (CRFM) member states (Antigua and Barbuda, Barbados, Belize, Guyana, Jamaica, Saint Lucia, St. Vincent and the Grenadines). The project aims to deliver enhanced stewardship of fisheries resources and livelihood benefits.

CANARI conducted an Institutional Analysis and Organisational Assessment in Jamaica to contribute to Outcome 1.2 “Fisheries-related state agencies have capacity to support fishing industry stewardship” and Output 1.2.1 “state agency implementation gaps are assessed regarding support for fisherfolk organisations and their role in stewardship” of the project. The aim of the analysis was to identify current strengths, as well as opportunities for improvement in Jamaica’s fisheries-related state agencies, in order to improve their capacity to support ecosystem stewardship by fisherfolk and their organisations as it related to the following areas (i) policies, laws and plans (ii) advisory and/or decision making mechanism (iii) fisheries related organisations (iv) processes and practices. The methods utilised included desk study, interviews with key stakeholders and a validation workshop.

Jamaica is one of the largest islands in the Caribbean and participating project countries. The island has rich coastal and marine biodiversity and has over the years developed innovate and sustainable solutions to ensure these resources are protected and responsibly utilised. Fisheries in Jamaica is mainly divided into harvest and post-harvest sectors, and marine capture fisheries and aquaculture. The industry has been undergoing transition over recent years, given the passing of a new Fisheries Act (2018) which re-established the National Fisheries Authority (NFA) (formerly Fisheries Division) and mandated the formation of a new multisectoral committee for fisheries management, the National Fisheries Advisory Council (NFAC). This institutional analysis and organisational assessment look at the fisheries institution of Jamaica given this context and delves deeper into the institution’s ability to support and enable fisherfolk to be stewards for coastal and marine ecosystems and for sustainable fisheries. Key findings of the report include:

- There was a wide array of stakeholders identified for the fisheries institution of Jamaica, some more directly related than others. Through a power triangle exercise, stakeholders identified agencies and organisation with greater perceived power than others. Generally, it was thought that ministers, ministries and their aligned national intersectoral coordinating mechanisms (NICs) had the greatest decision-making power in the institution. Local government and planning institutions had a medium level of decision-making power and civil society, including fisherfolk, had the lowest. The role of fisheries institution influencers was also discussed and included tourism and private stakeholders, large inter-governmental organisations and international non-profit organisations, and academia.
- The legislative and policy frameworks which guide the fisheries institution of Jamaica strongly reflects key tenets of the ecosystem approach to fisheries (EAF), that is ecosystem well-being, socio-economic well-being and good governance, particularly collaborative management/co-management. Laws, policies and plans were especially good at addressing ecological well-being, with the Fisheries Act (2018) identifying the need for a more ecosystem-based approach to management of the industry. However, less attention was given to socio-economic well-being and good governance.
- With the establishment of the NFAC and other existing NICs it was evident that there is potential for fisherfolk to influence decision-making processes and be a key stakeholder in a

participative governance structure. However, this comes with some caveats, as individuals' fishers are usually included in NICs, and not fisherfolk organisation representatives.

- There are many initiatives and projects which benefit fisherfolk in Jamaica, including access to materials, equipment, training and capacity building, and technical expertise through the NFA. Safety at sea, alternative livelihood training and sea turtle monitoring are a few of the more common training opportunities given to fisherfolk which directly influences their ability to be better stewards. There are some important areas where resources are lacking however, more specifically there is limited financing that can be directly accessed by fisherfolk and there is little emphasis on capacity building in technology, including information and communication technology (ICT).
- Communication needs to be improved within the fisheries institution. The NFA, the core agency responsible for communicating with fisherfolk, does not have a communication strategy and plan. The Jamaican Fishermen Cooperative Union (JFCU), a national fisherfolk organisation, also does not have an adequate communication plan. The NFA has developed methods for communicating, using face-to-face interaction and social media platforms, to share information with its stakeholders which include fisherfolk.
- There are strong partnerships identified in the fisheries institution, particularly between the NFA and the JFCU, and among civil society organisations (CSOs). These partnerships can benefit from more formal agreements and support from the government/ministries. Partnership and collaboration among government agencies need to be addressed through the institutionalisation of inter-agency committees to coordinate work and avoid duplication of efforts. There is also very little indication of collaboration among fisherfolk organisations, outside of the JFCU's membership, an issue that can be addressed by expanding the membership of the organisation and the creation of new opportunities and events for fisherfolk to partner on.
- The ability the NFA, the key fisheries management organisation, to promote and support ecosystem stewardship is fairly strong. The Ministry of Industry, Commerce, Agriculture and Fisheries (MICAF) itself recognises stewardship as a core value to guide its work. Despite its limited access to resources, the NFA still has the capacity to support fisherfolk and their organisations with undertaking stewardship activity by providing technical guidance, fund raising support and access to resources through other organisations and projects. There is a need, however, to ensure that NFA staff receive training to improve their ability to provide support to fisherfolk organisations in organisational capacity development to assist with the establishment and management of successful organisations by fisherfolk. The NFA should also seek to ensure that its staff has a diverse range of technical expertise to ensure that fisheries management interventions are holistic, taking all aspects of EAF into consideration.

Jamaica is moving in the right direction in supporting ecosystem stewardship. The legislative framework and mechanisms for participative governance highlight the importance of embracing an ecosystem approach to fisheries and the role fisherfolk play in this. This can only be successful if fisherfolk feel represented nationally and have a collective voice to advocate for their needs and their resources and are supported with the tools and knowledge to do so. The analysis identifies key recommendations, from the legislative and policy to implementation level, to create a fisheries institution that enables stronger ecosystem stewardship and sustainable mobilisation of resources by fisherfolk.

1 Introduction

In 2013, countries bordering and/or located within the Caribbean and North Brazil Shelf Large Marine Ecosystems (CLME+ region) adopted a 10-year 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)¹. The 10-year CLME+ SAP aims to contribute to the achievement of the regionally adopted long-term vision of “a healthy marine environment in the CLME+ that provides benefits and livelihoods for the well-being of the people of the region.” The CLME+ SAP consists of 6 Strategies and 4 Sub-strategies. SAP strategies 1-3, with a focus on governance, are cross-cutting, while strategies 4-6 tackle the three main marine ecosystems (reef, pelagic and continental shelf) in the CLME+ region. One of the key strategies of the CLME+ SAP is to achieve sustainable fisheries, including of small-scale fisheries which are important economic drivers for the sustainability of coastal communities and rural livelihoods and a vital source of employment, food and income for Caribbean people.

The *Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in the Caribbean Small-Scale Fisheries (StewardFish)* project is therefore aimed at implementing the CLME+ SAP within seven Caribbean Regional Fisheries Mechanism (CRFM) member states (Antigua and Barbuda, Barbados, Belize, Guyana, Jamaica, Saint Lucia, St. Vincent and the Grenadines) that have politically endorsed the CLME+ SAP by empowering small-scale fisherfolk throughout fisheries value-chains to engage in resource management, decision-making processes and sustainable livelihoods with strengthened institutional support at all levels.² The project aims to deliver enhanced stewardship of fisheries resources and livelihood benefits through implementation of the four core project components (See Figure 1).

StewardFish recognises that there are several challenges that hinder the engagement of fisherfolk and their organisations in the sustainable use and management of fisheries in the region including fisheries-related state agencies not having adequate capacity to support fisherfolk and their organisations with ecosystem stewardship initiatives. Because state agencies, including fisheries authorities, vary widely in their support of fisherfolk organisations for different reasons, some within their control and others beyond, a situation specific analysis is required.

In support of this, CANARI conducted an Institutional Analysis and Organisational Assessment in each of the project countries to contribute to Outcome 1.2 “*Fisheries-related state agencies have capacity to support fishing industry stewardship*” and Output 1.2.1 “*state agency implementation gaps are assessed regarding support for fisherfolk organisations and their role in stewardship*” of the project.

The aim of the analysis was to identify current strengths, as well as opportunities for improvement in each project country’s fisheries-related state agencies, in order to improve their capacity to support ecosystem stewardship by fisherfolk and their organisations.

The analysis included:

- Designing an institutional analysis tool adapted from the Adaptation: Rapid Institutional Assessment (ARIA) methodology, including an organisational assessment survey targeted at the fisheries authorities

¹ CLME+ Strategic Action Programme <https://www.clmeproject.org/sap-overview/>

² CANARI. 2019. StewardFish – Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-Scale Fisheries (StewardFish) project. [March 2020]

- Conducting desk studies, surveys, virtual and in-country interviews and focus groups with fisherfolk, fisheries authorities and other key state agencies in the project countries
- Facilitating national workshops³ to present, validate, refine and receive input on the preliminary findings and identify priorities for improvement, in each project country
- Producing country reports of findings, including recommended priorities for improvement

This report provides the findings and recommendations from the institutional analysis and organisational assessment conducted for Jamaica, between December 2019 to June 2020.

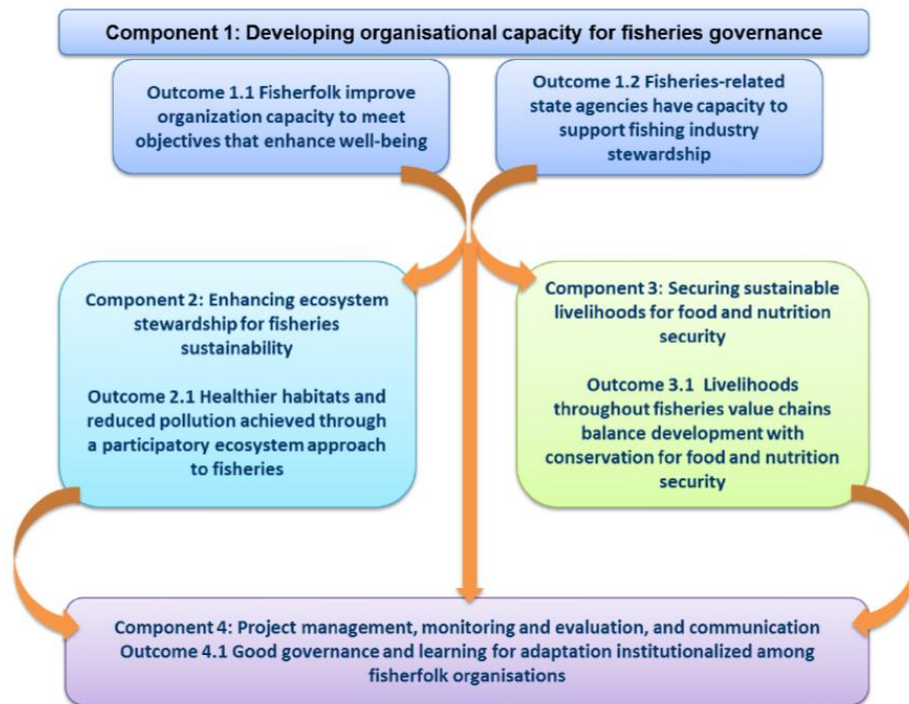


Figure 1.1.1: StewardFish Project Framework. Credit: FAO

1.1 *How strong institutions can support ecosystem stewardship by fisherfolk*
 Stewardship is a terminology related to rights and responsibilities in governance processes. Application in natural resource management has expanded the understanding of stewardship to relay that “stewards” are stakeholders with responsibility for proper resource use, who will “take care” of a resource under communal or public property rights.⁴ The term also importantly encompasses responsibility not only for proper use of resources but also right to life of



Figure 1.2: Members of the Caribbean Network of Fisherfolk Organisations (CNFO), a regional fisherfolk organisation, at the StewardFish project Regional Fisherfolk Mentors training workshop Oct 28-Nov 1, 2019. Credit: CANARI 2019

³ National workshops were initially carded to be conducted in-country for all project countries, however, due to the COVID-19 pandemic as declared by the World Health Organisation on March 11, 2020, and subsequent restrictions on air travel, all workshops following the declaration date were conducted virtually through webinars.

⁴ Medeiros, R. P., Serafini, T. Z., McConney, P. 2014. Enhancing Ecosystem Stewardship in Small-Scale Fisheries: Prospects for Latin America and the Caribbean. *Desenvolv. Meio Ambiente*, n. 32, 181-191.

other species and for future generations.⁵ The concept of ecosystem stewardship, particularly in the fisheries sector; includes reducing the vulnerability of the sector by promoting resilience and making use of opportunities to transform undesirable paths.

A fundamental concern of stewardship is capacity – i.e. whether individuals or groups are able to steward their resources. Capacity, which is in part determined by broader governance -including systems of institutions (i.e. laws and policies, formal and informal organisations, and decision-making processes and structural processes related to power and politics (i.e. economic inequality, discrimination, exclusion from decision-

“Local environmental stewardship is the actions taken by individuals, groups or networks of actors, with various motivations and levels of capacity, to protect, care for or responsibly use the environment in pursuit of environmental and/or social outcomes in diverse social-ecological contexts.”

making)—can either empower or constrain the sense of agency, available options and capacity of would-be stewards⁶. From the paper “Environmental Stewardship: A Conceptual Review and Analytical Framework” Bennet *et. al* notes for the small-scale fisheries sector that stewardship efforts can be supported by national laws or policy frameworks that protect local fishers’ rights and tenure, formalise local fishers’ stewardship responsibilities, or that provide resources to support local community efforts to steward their own resources. Conversely, the paper notes that even when local small-scale fishers want to take action, the broader policy landscape may undermine their efforts by creating bureaucratic challenges.

Ensuring that the fisheries institution adequately enables ecosystem stewardship by fisherfolk, and their organisations will not only contribute to sustainable fisheries but will also help to ease the burden of already under-resourced fisheries state agencies to monitor and enforce fisheries regulations.

2 Institutional Analysis Framework

An institution is the set of arrangements for making decisions about the development, management, and use of a natural resource, including the stakeholders, as well as, the laws, formal and informal policies, plans and structures that guide how these stakeholders interact with each other and with the resources.

To conduct the rapid analysis CANARI developed and piloted an institutional analysis tool which was adapted from the World Resources Institute’s (WRI) Adaptation: Rapid Institutional Assessment (ARIA)⁷ methodology, including an organisational assessment survey targeted at national fisheries authorities. The tool analyses the institutional and organisational capacity of fisheries-related state agencies to support stewardship in the small-scale fisheries sector. The tool was used to conduct a baseline assessment and can subsequently be used for monitoring and evaluation as part of an institutional strengthening process.

The tool examines four conceptual components- fisheries-related policies, laws and plans, advisory and/or decision-making mechanisms, fisheries-related organisations and processes and practises to

⁵ Medeiros, R. P., Serafini, T. Z., McConney, P. 2014. Enhancing Ecosystem Stewardship in Small-Scale Fisheries: Prospects for Latin America and the Caribbean. *Desenvolv. Meio Ambiente*, n. 32, 181-191.

⁶ Bennett, N.J., Whitty, T.S, Finkbeiner, E., *et. al*. 2018. *Environmental Stewardship: A Conceptual Review and Analytical Framework*.

⁷ WRI’s Rapid Institutional Analysis for Adaptation Tool. <https://accessinitiative.org/resources/adaptation-rapid-institutional-analysis-phase-1-workbook>

determine the capacity of the fisheries institution- to support the role of fisherfolk and their organisations in ecosystem stewardship. Refer to Table 2.1 for a description of each conceptual component. Appendix 13.1 includes more detailed definitions of conceptual components.

Table 2.1: The four conceptual components assessed in the rapid institutional analysis

Conceptual component	Description of component
Policies, laws and plans	Examined fisheries and fisheries-related policies, plans and legislation (including rules and regulations) to determine how they may be empowering or constraining the ability to integrate ecosystem stewardship practices within the country's small-scale fisheries sector.
Advisory and/or decision-making mechanisms	Examined the presence, composition and functioning of existing multi-stakeholder mechanisms (e.g. Fisheries Advisory Committee) established for advising or making decisions for fisheries management.
Fisheries-related organisations	Examined the roles and responsibilities of fisheries-related state agencies, as well as other fisheries-related organisations [e.g. FFOs, civil society organisation (CSOs), private sector organisations and academia] which play a key role in the fisheries-related institutional arrangements of the project country. Additionally, an organisational capacity assessment was carried out to examine the national fisheries authority's current ability to support ecosystem stewardship by small-scale fisherfolk and included an examination of the authority's: <ul style="list-style-type: none"> ○ Vision, mandate, culture ○ Knowledge and skills ○ Resources ○ Partnerships
Processes and practices	Examined the various processes and practices in the country's fisheries institution related to: <ul style="list-style-type: none"> ○ Good governance- assessed the application of good governance practices, particularly fisherfolk inclusion, in decision-making processes in the fisheries sector. ○ Collaborative management- assessed the extent to which cooperative management exists in practice between fisheries-related state agencies and small-scale fisherfolk and their organisations. The degree of stakeholder collaboration in management practices was also assessed. ○ Effective communication- assessed the extent to which providers of fisheries information in the project country were using defined communication strategies, tools and channels to communicate with fisherfolk, as well as their capacity to use the tools and channels effectively; including the structures and systems in place for clear communication.

The tool was implemented using a variety of data collection methods (See Section 3 on Methodology) in order to capture a broad range of stakeholder perceptions and input; as well as to gather perspectives on the realised benefit of existing laws, rules, regulations, processes, practices and procedures of the fisheries institutions.

Based on the information collected the institutional analysis and organisational assessment report will discuss the following key aspects in regard to the capacity of the fisheries institution to support the role of fisherfolk and their organisations in ecosystem stewardship:

- Policy, legal and planning context for ecosystem stewardship

- Mechanisms for fisherfolk participation in decision-making
- Support and resources available to fisherfolk and their organisations for ecosystem stewardship
- Partnerships and networks for ecosystem stewardship
- Communication of information on sustainable practices for fisheries resources use
- Organisational capacity of the fisheries authority to support fisherfolk and their organisations with ecosystem stewardship

3 Methodology

A rapid analysis of the institutional and organisational capacity of fisheries-related state agencies to enable stewardship in the fisheries sector was conducted for Jamaica during the period December 2019 – June 2020. The analysis piloted an institutional and organisational capacity assessment tool developed by CANARI (Refer to Section 2). The rapid analysis included the following key research methods:

- **Desk study:** CANARI collated and reviewed information readily available (e.g. through online sources) on the project country's small-scale fisheries sector and its institutional environment; particularly as it relates to capacities to support ecosystem stewardship by small scale fisherfolk and their organisations. This was carried out at an early stage of the analysis to inform and guide the subsequent methods.
- **Validation workshop:** Following the initial desk study; a validation workshop was held in-country on January 28th and 29th, 2020 at the Farmers Training Centre, Twicknam Park, Spanish Town, St. Catherine, which included participants from government [e.g. National Fisheries Authority (NFA)], civil society [e.g. Caribbean Coastal Area Management Foundation (CCAM)] and representatives from fisherfolk organisations [e.g. Jamaica Fishermen Co-operative Union (JFCU)]. The full participants list is attached at Appendix 13.2.1. This validation workshop provided an opportunity to corroborate information collated during the desk study phase and supplement information from in-country sources. See workshop agenda included in Appendix 13.3.
- **Focus group session:** this methodology involved a focus on stakeholders from fisherfolk organisations to discuss their priorities to effectively engage and action ecosystem stewardship. This was held on January 30, 2020 with fisherfolk at the New Forum Fishing Village to discuss how they currently engage ecosystem stewardship and the issues they face. A list of organisations participating in the focus group is included in Appendix 13.2.2.
- **Interviews:** in-country and virtual key informant interviews were conducted in January and included key stakeholders in organisations involved in the fisheries institution of Jamaica. A full list of interviewees' associated organisations is attached at Appendix 13.2.2.
- **Survey:** an organisational capacity assessment survey was carried out to examine the NFA's current ability to support ecosystem stewardship by small-scale fisherfolk.



4 Background

4.1 Geography

Jamaica is the third largest island in the Caribbean archipelago located 18° 15' North and 77° 30' West of the equator. It has a total area of 10,991 km² (land: 10,831 km² and sea: 160 km²) and a coastline of 1,022 km. Jamaica also has an exclusive economic zone coverage of 263,283 km²^{8,9} and a continental shelf area of 13,401 km².

The island is volcanic and is the top of a submerged mountain with three main divisions: coastal plains, eastern mountains and the central valleys and plateaus. On and off the coast there are several bays, beaches, and small island and cays. The north and west coasts are home to several fine sand beaches. There are also a multitude of rivers and freshwater systems in Jamaica, with most unreachable and uncharted, some of which are subterranean in the karst landscape. The widest river is the Black River and the longest is the Rio Minho (Moen, 2020).

The Blue Mountains is the highest feature on Jamaica, with the peak being 2,256m above sea level. Other notable mountainous areas include the south out Manchester Plateau, John Crow Mountains, Dry Harbour Mountains and the Cockpit Country which are karst (limestone) regions made up of plateaus and hills. Coastal plains surround these elevated areas at the coast with alluvial plains also found to the south (Bryan, 2020). This limestone area makes up around two-thirds of the island where there are numerous valleys, caves and sinkholes.

Jamaica has a tropical climate which varies from hotter temperatures (22-34°C) at the coast to lower temperatures in the mountainous areas (as low as 4°C). There is also a range in rainfall of 1,500 – 3,850 mm per annum from Kingston to Port Antonio, with the average annual rainfall at about 2,100 mm. and the island lies within the hurricane belt (Bryan, 2020).

4.2 Governance

Jamaica has 14 parishes, which are managed at the local government level by parish councils and also traditionally used three counties divisions, namely, Cornwall, Middlesex and Surrey. Jamaica is a Commonwealth member, gaining independence from the United Kingdom in 1962. It is a constitutional monarchy with a bicameral parliamentary system which comprises of a House of Representatives (63 members) and a Senate (21 members)¹⁰. The government is led by the prime minister, usually the leader of the winning political party. There is also a governor general or head of state with ceremonial roles. Jamaica's general elections are held every five years. The island had an approximate population of 2,948,279 in 2019.¹¹ The capital of Kingston alone accounts a populace of 591,000 persons and although population density is relatively high throughout the island, there is increased settlement in areas in and around Kingston, Montego Bay and Port Esquivel (Central Intelligence Agency, 2020). Population growth in Jamaica has steadily increased, though both birth and death rates have been decreasing over the years.

4.3 Economy

Tourism and finance are services that play a large role in the mixed economy of the island (Bryan, 2020). The services sector accounts for an estimated 70 percent of the country's Gross Domestic Product (GDP). There has been a decline in the export of agricultural products, and greater development in in the mining and manufacturing industries. Apart from tourism and the bauxite

⁸ (FAO/Global Environment Facility, 2016)

⁹ CIA 2020. The World Factbook- Central America: Jamaica. Last updated on June 10, 2020. <https://www.cia.gov/library/publications/the-world-factbook/geos/jm.html>

¹⁰ Britannica (2020). Jamaica. Countries of the World. <https://www.britannica.com/place/Jamaica>

¹¹ World Bank (2020). *Jamaica*. World Bank Group. <https://data.worldbank.org/country/JM>

industry, remittances also account for a large portion of the foreign exchange in the country. There has been recorded limited growth in the sector for the last 30 years due to the large public sector, high unemployment, high debt and crime. Nonetheless the country is making strides in reducing debt, despite the aforementioned issues and impacts of climate-related events (Central Intelligence Agency, 2020). According to the World Bank as of 2019, Jamaica has a GDP of 16.458 billion (World Bank, 2020). In 2012, 19.9% of the population was estimated to be living below the national poverty line.

4.4 Overview of fisheries sector

In Jamaica, the small-scale fisheries sector makes a significant contribution to food security, providing an important source of food and livelihoods to coastal communities. Around 40,000 persons make up the small-scale fisheries sector of Jamaica and participate in fishing-related activities. Jamaica also has a small number of persons engaged in aquaculture, who also form part of the small-scale fisheries sector of the island (FAO, 2019). Reef fisheries are of substantial value to coastal communities in Jamaica, both socially and economically, as it supports the bulk of artisanal fishers, and directly employs around 20,000 fishers. Jamaica's reef fishery is largely considered a critical "safety net" for rural and coastal communities during difficult social times. The sector as a whole employs more than 100,000 persons (around five percent of the population) (FAO, 2019) but has a minor contribution to the island GDP (0.3 percent in 2012).¹² This strong dependence on fishery resources, and particularly reef fisheries, increases the vulnerability of the island to climate change and climate variability and their associated events, with the food security and livelihoods in coastal communities under direct threat.

According to the FAO, the fisheries sector plays a significant role in the Jamaican economy, as the amount of fish consumed per capita is one of the highest in the Western Hemisphere (25.8 kg per year in 2017). A large part of this demand for fish, around 80 percent, is met by import.¹³ The fisheries industry in Jamaica is mainly artisanal and like most others, is divided into the harvest (production) and post-harvest (processing) sectors. Each sector involves both capture and culture fisheries of finfish and shellfish.



¹⁴ Marine capture fisheries take place both inshore (shelf) and offshore, with five main categories: artisanal, industrial, sport/tourism-based and recreational fisheries, with artisanal being the largest subsector. All fisheries, with the exception of industrial fishing, which targets the Caribbean spiny lobster (*Panulirus argus*) and the

¹² FAO/Global Environment Facility (2016). Project document: Developing organizational capacity for ecosystem stewardship and livelihoods in Caribbean small-scale fisheries (StewardFish) project. GEF.

¹³ Fishery and Aquaculture Country Profiles. Jamaica (2018). Country Profile Fact Sheets. In: FAO Fisheries and Aquaculture Department [online]. Rome. Updated 08 11 2018. [Cited 24 July 2020]. <http://www.fao.org/fishery/>

¹⁴ CFRAMP (2000). Jamaica National Marine Fisheries Atlas. CARICOM Fishery Report No. 4:53 p. <http://www.crfm.net/~uwohxjxf/images/documents/administrative/Jamaica%20National%20Marine%20Fisheries%20Atlas.pdf>

Caribbean queen conch (*Strombus gigas*) specifically, are open access.¹⁵ Other targeted marine species include shallow shelf fish¹⁶ (including reef fish and coastal pelagics) and offshore pelagics.¹⁷ The species targeted are also determined by the gear type used. Fishers operate from 148 landing beaches around the island, with the main ones located on the south coast, including Old Harbour Bay, Port Royal, Rocky Point and Whitehouse. Of those, 21 have satellite offices of the National Fisheries Authority where extension officers are based and where there is access to fuel.¹⁸ Artisanal fishing fleets consist primarily of wooden canoes around seven metres long and fibreglass boats, larger than the wooden boats, and with outboard engines. Gear types used include pot/traps, hook and line (for example longlines, handlines, troll lines), nets (for example beach seine, trawl nets, lobster nets, trammel nets) and diving (SCUBA and freediving) (CFRAMP, 2000).

For the post-harvest sector, fish is usually bought from fishers and prices are usually high for fresh fish. All local caught fish are sold at local fish markets.



Figure 4.1: Worker feeding Tilapia at aquaculture farm in hill run, Spanish Town. Credit CANARI 2020.

Though there is little information about the inland fisheries, the sector includes the aquaculture subsector. This subsector is further categorised into food fish and ornamental fish. Food fish species typically farmed are tilapia, both marine and freshwater shrimp and oyster. This subsector flourished around the year 2006 where 1,100 hectares were utilized by 189 aquaculture farmers to produce 8,019 tonnes of fish. Over the years there has been a decrease in production, due in part to the heavy

cost of operations (energy), lack of supply of appropriate feed and limited research and development of the sector.¹⁹

Jamaica is signatory to a number of conventions and multilateral agreements with relevance to fisheries covering the high seas, territorial waters, protection of the marine environment, straddling and migratory fish stocks, biodiversity, marine pollution, trade and endangered species and wetlands. The country is also a member of regional fisheries bodies, including the:

- Caribbean Regional Fisheries Mechanism (CRFM)
- International Commission for the Conservation of Atlantic Tunas (ICCAT)
- Western Central Atlantic Fishery Commission (WECAFC)

¹⁵ Kong, G.A. (2000). The Jamaica fishing industry: brief notes on its' structure, socio-economic importance and some critical management issues. Fisheries Division Ministry of Agriculture.

¹⁶ FAO/Global Environment Facility (2016). Project document: Developing organizational capacity for ecosystem stewardship and livelihoods in Caribbean small-scale fisheries (StewardFish) project. GEF.

^{17, 19, 20} CFRAMP (2000). Jamaica National Marine Fisheries Atlas. CARICOM Fishery Report No. 4:53 p.

<http://www.crfm.net/~uwohxjxf/images/documents/administrative/Jamaica%20National%20Marine%20Fisheries%20Atlas.pdf>

^{18, 21} Fishery and Aquaculture Country Profiles. Jamaica (2018). Country Profile Fact Sheets. In: FAO Fisheries and Aquaculture Department [online]. Rome. Updated 08 11 2018. [Cited 24 July 2020].

- Commission for Inland Fisheries and Aquaculture of Latin America and the Caribbean (COPESCAALC)²⁰

The national fisheries governance structure and mechanisms and how it facilitates ecosystem stewardship will be explored in Section 5.1. However, key legislation to note is the Fisheries Act (2018) which mandated and implemented a restructuring of the Fisheries Division into the current National Fisheries Authority and the establishment of the National Fisheries Council- a multi-stakeholder advisory committee to which representatives from the fishing community are elected.

Jamaica's fishing industry has many challenges, similar to other Caribbean islands, such as overexploitation of fishery resources, loss of biodiversity and habitat, increasing operational costs, reduced supply and increased demand for fish products and illegal fishing practices. However, the new Fisheries Act as well as the draft Fisheries Policy were developed to address these issues and safeguard the marine resources of Jamaica, while allowing sustainable resource mobilisation to address larger issues such as economic growth, unemployment and food and nutritional security.²¹ Other stakeholders such as civil society organisations and academic institutions are working steadily to promote sustainable management of marine resources through projects and the establishment of marine protected areas and fish sanctuaries, and education and awareness communication.²²

4.5 Stakeholder identification and analysis

Jamaica's fisheries institution includes a range of stakeholders including government, civil society organisations, academia, private sector and intergovernmental organisations with various roles, mandates and responsibilities that influence the development and management of the fisheries industry. As part of the institutional analysis, key stakeholders in Jamaica's fisheries institution were identified and analysed in the list presented in Table 4.1. The analysis looks at the roles and interests of various stakeholders and how they can potentially benefit from improved ecosystem stewardship by fisherfolk and their organisations. The list is not meant to be exhaustive but rather to give one an understanding of the range of actors involved in the fisheries institution.



The stakeholder identification and analysis were informed by the desk study, information provided by the NFA and the stakeholders who participated in the validation workshop. During the workshop, a stakeholder mapping and analysis exercise, using a decision-making pyramid, was conducted to

²⁰ CFRAMP (2000). Jamaica National Marine Fisheries Atlas. CARICOM Fishery Report No. 4:53 p. <http://www.crfm.net/~uwohxjxf/images/documents/administrative/Jamaica%20National%20Marine%20Fisheries%20Atlas.pdf>

²¹ MICAF (2008). Draft Fisheries Policy. Ministry of Agriculture and Lands Fisheries Division. <https://www.micaf.gov.jm/sites/default/files/Draft%20fisheries%20policy%202008.pdf>

²² FAO/Global Environment Facility (2016). Project document: Developing organizational capacity for ecosystem stewardship and livelihoods in Caribbean small-scale fisheries (StewardFish) project. GEF

understand stakeholders' perceptions of decision-making power and relationships among the various stakeholders in the fisheries institution.

Workshop participants were introduced to the decision-making pyramid for the fisheries institution of Jamaica, where the top of the pyramid indicated the most decision-making power and the base, the least. Participants placed key stakeholders identified at different positions on the power pyramid based on their perceived decision-making power. Some stakeholders not previously on the list of were also added to the pyramid and some were even placed outside of the pyramid – with the perception that they did not fit within the core institution; but influence its management and development.

One of the key perceptions coming out of the exercise was that participants, including representatives of these organisations themselves, saw civil society, such as fisherfolk organisations and conservation-based non-governmental organisations, as having the lowest or very little decision-making power. For one particular non-governmental organisation, upon further discussion by participants, the general opinion was that they did have greater decision-making power than initially thought, as representatives from the organisation sit on multi-stakeholder committees, including the National Fisheries Council, and is often included in an advisory role for activities or projects. This non-governmental organisation, like others in Jamaica, are leaders in marine and coastal resource conservation, which work with fisherfolk and/or manage marine protected areas (MPAs). This led to further reassessment of where stakeholders were placed, but the consensus was that fisherfolk groups like the JFCU generally have lower decision-making power.

The power pyramid exercise highlighted two main clusters of stakeholders - a larger more government-populated cluster to the top of the triangle and a smaller cluster to the base of the triangle with a mix of government agencies and civil society organisations. At the apex of the triangle were ministers and politicians who were perceived as having the ultimate decision-making power to create policy interventions for the fisheries institution. The Ministry of Industry, Commerce, Agriculture and Fisheries (MICAFA) and the NFA were placed high on the triangle, along with the National Fisheries Council. The National Fisheries Council was seen as having high decision-making power given that it comprised of individuals or representatives of organisations appointed by the Minister. Other notable government ministries and agencies perceived to have high-decision making power included the National Environmental Protection Agency, the Ministry of Foreign Affairs and Foreign Trade, the Ministry of Finance and Public Service and the Ministry of Economic Growth and Job Creation, who all have various mandates which intersect with the fisheries industry and along the fishery value chain. The National Council on Ocean and Coastal Zone Management, a national intersectoral coordinating mechanism, was also placed high on the pyramid along with government agencies, particularly enforcement and regulatory agencies, such as the Jamaican Constabulary Force Marine Police, Jamaican Defence Force Coast Guard, the Port Authority, the Maritime Authority, the Veterinary Services Unit and Jamaica Customs Agency.

At the bottom of the pyramid there were, as mentioned previously, the civil society organisations, such as the Caribbean Coastal Area Management Foundation (C-CAM) and fisherfolk organisations, both primary (i.e. fisherfolk organisations that operate at the local or community level) and national. Other government agencies were placed here, though having very discrete roles in the fisheries institution is believed to have low decision-making power. These included for example the Social Development Commission and the Department of Cooperatives and Friendly Societies. It should be noted that participants believed that the primary fisherfolk organisations in Jamaica had more decision-making power than the JFCU which is considered to be a type of national umbrella

organisation for fisherfolk cooperatives. The reasoning for this is that individuals, who may belong to a primary fisherfolk organisation, are usually elected to multi-sectoral advisory/decision-making committees. In these instances, though appointed as an individual, the fisher is able to represent the needs of their organisation and/or the fishing community to which they belong.

A few other government agencies were placed in the middle of the triangle, namely the parish council, which represents local government, the Ministry of Health and the Planning Institute of Jamaica. Outside of the triangle, influencers were placed, also at various levels at the top. The most influential entities being the private sector, including processors and industrial exporters and the Ministry of Tourism. The media was also noted to have a significant role in influencing decision-making in the Jamaican fisheries sector. Interestingly, intergovernmental organisations and

international non-governmental organisations were also placed here. These included the Caribbean Regional Fisheries Mechanism (CRFM), United Nations Environment Programme- Caribbean Environment Programme (UNEP-CEP), FAO, the International Development Bank (IDB), Green Climate Fund (GCF), Global Environment Facility (GEF) and The Nature Conservancy (TNC). Academic institutions like the University of the West Indies were also listed as important influencers. As suggested previously, these influences, particularly intergovernmental organisations and regional or international non-governmental organisations guide and influence the shaping of the fisheries industry and the interventions for development, through projects and programmes they implement and the initiatives they fund.

There were many interactions mapped in the exercise between stakeholders, with many overlaps and connections drawn. One of the more significant trends seen was that some of the government agencies and organisations placed at the base of the pyramid interacted with several of the organisations and agencies placed higher but were perceived to have very limited decision-making power. MICAFA appeared to have the most interaction with other stakeholders. Civil society organisations, such as C-CAM and Food for the Poor, were noted as interacting the most with stakeholders in the fisheries institution with a growing role in influencing interventions. Overall, the power pyramid reiterated the need for strengthened relationships among stakeholders in civil society and the private and public sectors. It also highlighted the need for stronger relationships between civil society organisations and donor agencies and greater involvement of the private sector, who can drive change through corporate social responsibility. It was noted that strengthening of relationships with donors can be facilitated by focal points in government. The JFCU has a strong working relationship with the NFA, however there may be necessary to strengthen partnerships by both entities with primary fisherfolk organisations, particularly those who are not members of the JFCU. Greater linkages should also be made among ministries, even though there are some strong working relationships between agencies such as NEPA and NFA.



Figure 4.3: perceived arrangement of stakeholders in power triangle

Table 4.1: Analysis of key stakeholders in the fisheries institution in Jamaica

Stakeholder	Role/Interests	How will they be affected by improved ecosystem stewardship by fisherfolk/fisherfolk organisations?
Government		
National Fisheries Authority (NFA), MICAF	<ul style="list-style-type: none"> Responsible for managing the sustainable use and conservation of fishery resources in Jamaica to facilitate optimal social and economic benefits to Jamaica. Responsible for licensing, registration, research, monitoring and maintenance of environmental assets, data collection and management, enforcement, education, training and outreach, managing some landing sites and the Special Fishery Conservation Areas (SFCA's) programme. 	<p>Ecosystem stewardship develops inclusivity in resource management and in fisheries governance. Co-management of initiatives and participative implementation and monitoring improves partnership and collaboration between the NFA and resource users, deters unsustainable use of resources and allows the, sometimes limited, resources available to fisheries departments to be more effectively utilised by 'sharing the burden' of management. Stewardship action will also help the NFA to understand how resource users like fisherfolk and fishing communities respond to ecological change, their values and motivations for engaging in stewardship activity, and their decision-making systems. This allows a regulatory and management body like the NFA, and MICAF as a whole, to respond with effective interventions ensuring sustainable use, ecosystem health and social and economic benefits to users.</p>
National Fisheries Advisory Council (NFAC)	<ul style="list-style-type: none"> Multi-stakeholder mechanism responsible for advising the Minister responsible for fisheries on policies involving all marine capture and aquaculture fisheries and any related issues/activities; changes to fisheries regulations or law; development and review of fisheries and aquaculture management plans; and any other instances obligated by the Act or the Minister. 	<p>The presence of fisherfolk or fisherfolk organisation members on the Council is an example of ecosystem stewardship. The NFAC can benefit from fisherfolk who engage in ecosystem stewardship by the providing access to local knowledge and fisherfolk priorities and decision-making mechanisms. This in turn improves the ability of the NFAC to advise the Minister on matters arising/affecting fisherfolk and promotes good governance.</p>

<p>National Environmental Protection Agency (NEPA), Ministry of Water, Land, Environment and Climate Change</p>	<ul style="list-style-type: none"> • NEPA is the overarching executive governmental organisation dealing with environmental matters in Jamaica. The agency manages ecosystems inclusive of the sea floor and the sea front and the management of moorings, fish aggregating devices (FADs), coral nurseries etc. • Roles relevant to the fisheries management include: conservation and protection of species and ecosystems and coastal and marine area management, pollution management (prevention, control, monitoring, assessment and reporting), spatial planning (marine), manages applications and advising on licenses and permits pertinent to beaches (administrators of the Beach Control Act), education and outreach and monitoring and enforcement. • Responsible for management of some landing sites. 	<p>With fisherfolk and their organisations participating and leading in ecosystem stewardship, it there will be greater understanding and buy-in to management measures implemented by NEPA. With fisherfolk and other resource users leading in stewardship action, there will be a better understanding and appreciation by NEPA of what issues are affecting them, how they problem solve and make decisions surrounding the issue, and what solutions work best. Fisherfolk will have a greater “voice” within the fisheries institution and marine and coastal resource management and can contribute to solutions, leading to more successful interventions, more informed policy, improved ecosystem health and sustainable livelihoods.</p>
<p>Ministry of Foreign Affairs and Foreign Trade (MFAFT)</p>	<ul style="list-style-type: none"> • Responsible for ensuring compliance to requirements under bilateral, regional and international agreements and negotiates in foreign trade and investment. • Chairs the National Council on Ocean and Coastal Zone Management (NCOCZM). 	<p>MFAFT will benefit from fisherfolk being more aware of the issues facing ocean management, with more support and input to solutions and interventions put forward. Fisherfolk will also be more committed to projects and activities, leading to greater success, improved resource management and sustainable use.</p>
<p>Port Authority, Ministry of Transport, Works and Housing</p>	<ul style="list-style-type: none"> • Main entity in control of regulating and developing the port and shipping industry. The Authority ensures the safety of vessels at ports of entry, management of tariffs and the goods coming in, and leaving the ports. This includes larger industrial fishing vessels. • Role in upgrading and management of fishing facilities, like the Ocho Rios Fishing Village.²³ 	<p>The Port Authority will have improved relations with fisherfolk stakeholders, improved and continued adherence to regulations, with greater representation from fisherfolk. This can improve policy formulation, development of measures and systems and efficient utilisation of resources.</p>

²³ Port Authority of Jamaica. 2019. Fishing for Tourists – Ocho Rios Fishing Village Upgrade Tracks Tourism Calendar. <http://poj.newmediastudios.net/category/news/>

Jamaica Defence Force Coast Guard	<ul style="list-style-type: none"> • Responsible for maritime law enforcement and safety • Role in enforcing and upholding regulations related to fisheries protection and management, national security and customs and immigration. • Role in ensuring safety-at-sea, conducting search and rescue for fishers lost at sea and surveillance of closed seasons and registration of fishers at sea 	<p>The Coast Guard will benefit from improved relations with fisherfolk stakeholders, improved and continued adherence to regulations, with greater representation from fisherfolk. This can improve policy formulation, development of measures and systems and efficient utilisation of resources.</p>
Jamaica Constabulary Force Marine Division (Marine Police)	<ul style="list-style-type: none"> • Responsible for monitoring and controlling illicit activity along the coast and in the territorial waters of Jamaica. • Role in enforcing fisheries laws • As it relates directly to fisheries, they provide surveillance of uncontrolled ports, enforce fisheries legislation, search and rescue and environmental and wildlife protection 	<p>The Marine Police, like the Coast Guard, will benefit from improved relations and cooperation with fisherfolk stakeholders and fisherfolk organisations, improved and continued adherence to regulations, with greater representation from fisherfolk. This can improve policy formulation, development of measures and systems and efficient utilisation of resources. It will also encourage reporting of unsustainable and illegal fishing practices or other activities, as fisherfolk now have a sense of ownership and responsibility for the resources.</p>
Maritime Authority	<ul style="list-style-type: none"> • Responsible for maritime safety, prevention of marine pollution and the wellbeing of Jamaican seafarers • Roles in vessel registration, certification for seamen, safety in vessel construction and navigation, policy administration, inspection of ships, development of training and safety standards and inquires to incidences at sea. 	<p>The Authority can benefit from greater organisation of fisherfolk, better representation of fisherfolk issues, adherence to regulations and safety-at-sea.</p>
National Council on Ocean and Coastal Zone Management (NCOCZM)	<ul style="list-style-type: none"> • Inter-agency committee chaired by the MFAFT responsible for providing oversight on policies and activities in ocean and coastal marine resource management and public education on the sustainable development of the sector. 	<p>As suggested for MFAFT, the NCOCZM will benefit from fisherfolk being more aware of the issues facing ocean management, with more support and input to solutions and interventions put forward. Fisherfolk will also be more committed to projects and activities, leading to greater success, improved resource management and sustainable use.</p>

Veterinary Services Division, MICA	<ul style="list-style-type: none"> • Responsible for issuing catch certificates for each landed boat and each shipment of fish and seafood. Involved in the import/export inspection of fishery products • Interest in national health and animal status and welfare 	<p>The Division can benefit from greater organisation of fisherfolk and other stakeholders within the fishery value chain, such as vendors, processors and other fish handlers. They will be more aware and receptive to the environmental health issues and quality control and quality assurance measures.</p>
Jamaica Customs Agency (JCA)	<ul style="list-style-type: none"> • Key role in facilitating trade, inclusive of import or export of fish and fish products, including the collection of duties and fees and the processing of cargo 	<p>The JCA can also benefit from greater organisation of fisherfolk, even at the industrial export and import level. There will be greater awareness and receptivity to the environmental health issues and quality control and quality assurance measures.</p>
Ministry of Health and Wellness	<ul style="list-style-type: none"> • Primary role in promoting food and nutritional security and the wellbeing of Jamaican nationals. The Food and Nutrition Security Policy was developed jointly by the Ministry of Health and MICA²⁴ • Responsible for issuing food handlers permit (which is a requirement, by law, for persons who handle any fishery products) and inspecting processing plants and fish markets on a regular basis to ensure compliance with public health standards 	<p>The Ministry can benefit from greater organisation of fisherfolk and other stakeholders within the fishery value chain, such as vendors, processors and other fish handlers. Improved ecosystem stewardship by fisherfolk can contribute to increased awareness and receptivity to environmental health issues and quality control and quality assurance measures.</p>

²⁴ Government of Jamaica. 2013. Jamaica National Food and Nutrition Security Policy. Kingston, Ministry of Agriculture and Fisheries and Ministry of Health. <https://extranet.who.int/nutrition/gina/sites/default/files/JAM%202013%20Food%20and%20nutrition%20security%20policy.pdf>

<p>Parish Councils, Ministry of Local Government and Community Development</p>	<ul style="list-style-type: none"> • Parish Councils²⁵ are local government authorities with many roles including development and management of infrastructure, sanitation, relief and public health, development planning and approval, coordination between organisations, support for national development and policies and leading initiatives for the sustainable development of the parish. • Roles that are of particular importance to the fisheries industry are the development, management and maintenance of fish markets and facilities and coordinating collaboration among non-governmental organisations, community-based organisations and government agencies. 	<p>Improved ecosystem stewardship by fisherfolk can lead to greater partnership between fisherfolk organisations and Parish Councils, particularly around maintenance and management of fish markets and landing facilities, communities' social events and environmental initiatives. Leadership and support from fisherfolk can assist local government entities to meet development goals within parishes near the coast and ensure more buy-in and collaboration in decision-making.</p>
<p>Planning Institute of Jamaica (PIOJ), Ministry of Finance and the Public Service</p>	<ul style="list-style-type: none"> • Primary organisation responsible for planning and coordinating advancement of policies, plans and programmes for sustainable development (Examples of specific programmes which fisherfolk may be beneficiaries include the Community Renewal Programme (CRP), the GOJ/Adaptation Fund Programme and National Poverty Reduction Programme²⁶.) • Specific plans and policies monitored by the PIOJ which are relevant to the fisheries industry and fisherfolk include the Vision 2030 Jamaica National Development Plan, the Sustainable Development Goals and National Policy on Poverty.²⁷ 	<p>Improved ecosystem stewardship can assist the IOF in designing and developing policies, plans and programmes by highlighting issues affecting fishers and assisting in the creation of comprehensive solutions. This can also lead to more holistic solutions that address targets under international agreements such as the Sustainable Development Goals (SDGs).²⁸</p>

²⁵ Local government authorities in Jamaica include 12 Parish Councils, the Kingston and St. Andrew Corporation and the Portmore Municipal Council.

<https://www.localgovjamaica.gov.jm/roles-and-functions/>

²⁶ Government of Jamaica. 2020. Programmes. Kingston, Planning Institute of Jamaica. <https://www.pioj.gov.jm/programmes/>

²⁷ Government of Jamaica. 2020. Policies and Plans. Kingston, Planning Institute of Jamaica. <https://www.pioj.gov.jm/policies-plans/>

²⁸ United Nations. 2020. Sustainable Development Goals. Department of Economic and Social Affairs. <https://sdgs.un.org/goals>

<p>Social Development Commission (SDC), Ministry of Local Government and Community Development</p>	<ul style="list-style-type: none"> • Responsible for supporting the social, cultural and economic development of all Jamaicans. • Interest in strengthening community governance and improving the production of data to support the creation of interventions and fostering partnerships for implementation of interventions 	<p>Improved ecosystem stewardship by fisherfolk can benefit the SDC through increased willingness of fisherfolk to formalise organisations, register and following guidelines and regulations governing these organisations. There may also be improved participation in and support for initiatives of the SDC, by fisherfolk, their families and communities.</p>
<p>Department of Cooperatives and Friendly Societies</p>	<ul style="list-style-type: none"> • Responsible for assisting cooperatives and friendly societies to achieve their overarching goal of economic and social benefit to their members • Provides guidance and advice on the improvement of systems of operation; inspection of accounts, assets and records; assists with audit preparation; training; and development of governance structures and technical guidance to Boards and ensures Act and Regulations²⁹ are followed. 	<p>Improved ecosystem stewardship by fisherfolk can benefit the Department through increased willingness of fisherfolk to formalise organisations, following guidelines and regulations, participate in training and improve record keeping and administrative functions. There may also be improved participation and support for initiatives by fisherfolk, their families and communities.</p>
<p>Civil Society</p>		

²⁹ Co-operative Societies Act 1950 and Friendly Society Act 1966

<p>Caribbean Coastal Area Management Foundation (CCAM)</p>	<ul style="list-style-type: none"> • Plays a significant role in the conservation and sustainable development of the Portland Bight Protected Area • Interest in co-management of the natural resources in the protected area through the establishment of councils • The organisation has a Fisheries Management Programme which is geared to the recovery of fisheries resources in the Portland Bight Area, through a Portland Bight Fisheries Management Council, Special Fisheries Management Areas, enforcement and education and awareness activities. 	<p>CCAM can benefit from partnership with fisherfolk and fishing communities. Fisherfolk as ecosystem stewards will bring about better understanding of the mission and work carried out by CCAM and create more buy-in and support. Fisherfolk will be more willing to learn about and participate in conservation activities and it will enable them to become more involved in and vocal about the needs of fisherfolk and fisheries resources in project design and development.</p> <p>CCAM can also benefit from fisherfolk with capacity and drive to co-manage resources and fisherfolk who can advocate for shared concerns at the local and national levels. Fisherfolk would be motivated to engage with CCAM on issues related to management of fisheries resources, leading to greater participation / collaboration in consultations and implementation of project activities.</p>
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<p>Primary fisherfolk organisations such as:</p> <ul style="list-style-type: none"> • Bluefields Bay Fishermen’s Friendly Society (BBFFS) • Half Moon Bay Fishermen Co-operative • Old Harbour Bay Fishermen Co-Operative • Montego Bay Fishermen Co-Operative • Treasure Beach Fishers Co-Operative • Rocky Point Fishermen Co-Operative • Gillings Gully Fishermen Co-operative • Altoa Fishermen Co-operative • Negril Fishermen Co-operative ((Jamaica Fishermen Co-operative Union, 2015). 	<ul style="list-style-type: none"> • Represent and advocate for the wellbeing and issues of members and local fishing community. • Interest in ensuring economic development of the sector on-behalf of their members/shareholders, including ensuring access to markets and sale of products, access to cold storage and fuel. • Role in fostering engagement of fishers in stewardship type activities 	<p>Fisherfolk organisations that adopt and promote more sustainable fishing practices among their membership are likely to have more sustainable and viable business enterprises. A positive reputation in this regard can potentially create opportunities for these organisations to form new partnerships with other organisations with similar values willing to provide capacity building and other resources to support development of these cooperatives.</p> <p>Fisherfolk would be motivated to engage on issues related to management of fisheries resources leading to greater participation / collaboration at cooperatives meetings, and various consultations</p>
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<p>Jamaica Fishermen Cooperative Union (JFCU)</p>	<ul style="list-style-type: none"> • JFCU is an umbrella organisation with a current membership of nine primary co-operatives • Interest in improving the socio-economic wellbeing of its membership. Provides training, access to fishing equipment at affordable prices, and building of vessels • Interest in promoting sustainable fishing practices and environmental protection and conservation of fisheries resources 	<p>Fishing cooperatives that adopt and promote more sustainable fishing practices among their membership are likely to have more sustainable and viable business enterprises. A positive reputation in this regard can potentially create opportunities for these cooperatives to form new partnerships with other organisations with similar values willing to provide capacity building and other resources to support development of these cooperatives.</p> <p>Fisherfolk would be motivated to engage on issues related to management of fisheries resources leading to greater participation / collaboration at cooperatives meetings, and various consultations</p>
<p>Food for the Poor Jamaica (FFTP)</p>	<ul style="list-style-type: none"> • The organisation main goal is to ensure that all persons in Jamaica have improved health, economic, social and spiritual well-being through relief efforts and through the implementation of work programmes in food, medicine, water, sanitation, housing agriculture, education, outreach and development of micro-enterprise. They have a significant role in implementation of interventions to support fisherfolk through their fishing programme as part of their mandate. • Role in assisting fisherfolk with accessing on the ground resources for building of boat sheds, vessels and formalising groups through the Department of Cooperatives. 	<p>Food for the Poor can benefit from partnership with fisherfolk and fishing communities. Fisherfolk as ecosystem stewards will bring about better understanding of the mission and work carried out by the organisation and create more buy-in and support. Fisherfolk will be more willing to learn about and participate in alternative livelihood and organisational development activities and it will enable them to become more involved in and vocal about the needs of fisherfolk and fisheries resources.</p>

Jamaica Environmental Trust (JET)	<ul style="list-style-type: none"> • Interest in protecting and conserving the natural resources of Jamaica through advocacy and education 	<p>Jamaica Environmental Trust can benefit from partnership with fisherfolk and fishing communities. Fisherfolk as ecosystem stewards will bring about better understanding of the mission and work carried out by the Trust and create more buy-in and support. Fisherfolk will be more willing to learn about and participate in conservation activities and it will enable them to become more involved in and vocal about the needs of fisherfolk and fisheries resources in project design and development.</p> <p>Fisherfolk would be motivated to engage with the Trust on issues related to management of fisheries resources, leading to greater participation / collaboration in consultations and implementation of project activities.</p>
Private sector		
Industrial exporters and processors	<p>Responsible for providing processing, storage and marketing facilities for fisherfolk and processing and marketing of fish and fish products</p>	<p>Sustainable catch and reduced overexploitation of fishery resources by fisherfolk could contribute to reduced market gluts and the subsequent financial burden on the Corporation, which relies on public funds, to provide inputs such as ice and fish storage facilities.</p> <p>Increased collaboration with private sector entities as it relates to alternative livelihoods.</p> <p>Increased revenues from improved long-term sustainable supply to market.</p>
Tourism industry	<p>The wide range of stakeholders in the tourism industry, that is, hotels, restaurants, tour operators, sport/charter fishing operators, and others, are a part of the fishery value chain of Jamaica. They are buyers or consumers of fishery product generating demand and creating local markets for seafood.</p> <p>The role is important in revenue generation and sustainability of the sector.</p>	<p>The tourism industry can benefit from value addition to fisheries products- as fish and other seafood are harvested and sold sustainably. It can become part of the businesses brand, and can contribute through corporate social responsibility, to further propel sustainable development of the industry.</p>

5 Policy and legal context for ecosystem stewardship

National policies, laws or plans can either encourage ecosystem stewardship by fisherfolk or undermine it.³⁰ To determine whether existing fisheries and coastal and marine related policies, laws and plans in Jamaica were supporting or constraining ecosystem stewardship selected priority policies, laws and plans were assessed to determine whether they were adequately in line with the principles of the ecosystem-approach to fisheries (EAF), namely whether they considered:

- human well-being: a condition in which all members of society are able to determine and meet their needs and have a large range of choices to meet their potential;
- ecosystem well-being: a condition in which the ecosystem maintains its diversity and quality — and thus its capacity to support people and the rest of life — and its potential to adapt to change and provide a viable range of choices and opportunities for the future; and
- good governance: governance arrangements that enable broad stakeholder participation are similarly expected to confer support for management and foster stewardship among fisherfolk and other resource users.³¹

EAF recognises the need to maintain the productivity of ecosystems for present and future generations, conserving critical habitats, reducing pollution and degradation, minimising waste and protecting endangered species. It also recognises that this will not be achieved without the cooperation of people, i.e. unless the ecosystem contributes to human well-being, providing sustainable goods and services and sources of livelihood.³² Consideration of the latter is likely to encourage fisherfolk and other resource users to sustainably use, protect and conserve the resources they depend on for livelihoods. A holistic governance framework which considers importance of not only the ecological well-being of fisheries resources – but equally considers socio-economic well-being of fishery resource users and collaborative management mechanisms in the approach to fishery resources management – will increase the likelihood of ecosystem stewardship from fisherfolk in the small-scale fisheries industry.

5.1 Findings for policy, legal and planning context for ecosystem stewardship in Jamaica

Table 5.1 identifies some of the national fisheries and coastal and marine related policies, laws and plans within the fisheries institution in Jamaica. Policies, plans and laws identified are either directly related to the fisheries sector, for example the Fisheries Act which regulates the fisheries industry in Jamaica or indirectly related to the fisheries sector, for example the Food and Nutrition Security Policy, 2013, which was developed a framework with strategies and actions to address issues of food and nutritional security in Jamaica.

Table 5.1: List of policies, laws and plans relevant to the fisheries sector in Jamaica³³

Policies
<ul style="list-style-type: none">● Draft Fisheries Policy (2008)● National Policy on Ocean and Coastal Zone Management (2000)● Dolphin Conservation Policy (Draft 2003)● Food and Nutrition Security Policy (2013)● National Food Safety Policy (2013)

³⁰ Bennett, N.J. et al. 2018. Environmental stewardship: a conceptual review and analytical framework. *Environmental Management*, 61(4), pp.597-614.

³¹ Turner, R. et al. 2019. Viability and Sustainability of Small-Scale Fisheries in Latin America and The Caribbean. *MARE Publication Series* 19. p475

³² FAO. 2002. The ecosystem approach to fisheries. <http://www.fao.org/3/a-y4773e.pdf>

³³ Policies, Laws and Plans list was developed through the desk study and validation workshop.

<ul style="list-style-type: none"> • National System of Protected Areas Policy (1997) • Beach Policy (2000) • Draft Cays Management Policy • Draft Wildlife Trade Policy • National Energy Policy 2009-2030 (2009) • National Policy on Poverty- National Poverty Reduction Programme (2017)
Laws <ul style="list-style-type: none"> • Fisheries Act (2018) • Morant and Pedro Cays Act (1907) • National Environmental Policy Act (1969) • Natural Resources Conservation Authority Act (1991) • Wildlife Protection Act (Amended 1991) • Beach Control Act (1956) • Maritime Areas Act (1996) • Endangered Species (Protection, Conservation and Regulation of Trade) Act (2000) • Animal (Diseases and Importation) Act (Amended 1969) • Aquaculture, Inland and Marine Products and By-Products (Inspection, Licensing and Export) Act (1999) and Regulations (2000) • Exclusive Economic Zone Act (1991) • The Conch (Export Levy) Act (2009) • Fishing Industry (Special Fishery Conservation Area) Regulations (2012) • Fishing Industry Regulations (1976) • Natural Resources (Marine Parks) Regulations (1992) • Cooperative Societies Act (Amended 1992) • Friendly Societies Act (Amended 1976) • Agricultural Loans Societies and Organisations Act (2017) • Industrial and Provident Societies Act (Amended 2010)
Plans <ul style="list-style-type: none"> • Climate Change Policy Framework and Action Plan (2013) • Vision 2030 Jamaica- Urban Planning and Regional Development Plan (2009-2030) • Vision 2030- Jamaica- National Development Plan • Queen Conch Management Plan (2006) • Medium Term Socio-Economic Policy Framework (2018-2021) • National Strategy and Action Plan on Biological Diversity in Jamaica (2016-2021) • Protected Area Systems Master Plan (Amended 2015)

Key national policies, laws and/or plans were selected from the above list for deeper analysis. Instruments were selected based on their direct relevance to the fisheries sector (i.e. Fisheries policy, law or plan) as well as through a prioritisation process facilitated during the national validation workshop where participants selected the national policies, laws and/or plans that they felt were most relevant to the sustainable development of the fisheries sector in Jamaica. Participants were informed that the policies, laws and/or plans identified and selected did not have to be directly related to the fisheries sector but could be broad and cross cutting. The following instruments were identified and analysed against the principles of EAF in Table 5.2.

- Fisheries Act (2018)
- National Policy on Ocean and Coastal Zone Management (2000)
- National Strategy and Action Plan on Biological Diversity in Jamaica 2016-2021
- Vision 2030- Jamaica- National Development Plan

- Beach Control Act (1956)
- Food and Nutrition Security Policy (2013)
- National System of Protected Areas Policy (1997)

Jamaica has a long list of related laws, policy and plans which manages the fisheries industry. As highlighted above, seven of these were chosen for further analysis as they represent some of the most recent and/or relevant instruments and plans identified from the desk study and through the validation workshop. From the analysis presented in Table 5.1, it can be said that the most recent fisheries legislation, the Fisheries Act (2018) addresses the three EAF principles: ecosystem well-being, socio-economic well-being and good governance as evidenced by co-management and decision-making mechanisms of which fishers are a part. The Act is fairly comprehensive in addressing these, but, as with most of the laws, policies and plans reviewed, did not explicitly state the involvement of fisherfolk in local ownership, collaborative management or sitting on councils.

For most of the reviewed frameworks, ecosystem well-being is well addressed and there is an overall understanding of the need to conserve and sustainably mobilise natural resources. Socio-economic well-being and collaborative management, though addressed to some degree, are less explicit. For socio-economic well-being, this is more so for fisheries or conservation type laws/policies/plans, and as suggested, though participation by stakeholders and involvement in management and/or decision-making is stated, there is no clear indication of fisherfolk having a position of co-management. Local co-management by stakeholders was only mentioned in the National System of Protected Areas Policy, but with no reference to fisherfolk being involved. There is recognition of fisherfolk in non-fisheries related policy like the Food and Nutrition Security Policy (2013) and the Vision 2030 National Development Plan. This is particularly so for the socio-economic well-being of fisherfolk and fishing communities.

Looking at the entire fisheries institution legal framework, these EAF principles are addressed to some degree or another, through fisheries-related law and through national plans, however, more direct reference to fisherfolk may help to ensure they are involved in decision-making and co-management, that they have more active roles in natural resource conservation and that their socio-economic needs are addressed, so that they are enabled to be better ecosystem stewards.

Table 5.2: Analysis of key fisheries related policies, laws and plans

Name of Policy, Law, Plan	Description	The policy/law/plan considers the ecological well-being of fisheries resources	The policy/law/plan considers socio-economic well-being of resource users including fisherfolk	The policy/law/plan considers collaborative management and inclusion of stakeholders in decision-making
Fisheries Act (2018)	The Fisheries Act (2018) repeals the Fishing Industry Act and provides for efficient, effective and sustainable fisheries management, including aquaculture and other related activities.	<p>There is consideration for ecological well-being throughout the Act. For example:</p> <ul style="list-style-type: none"> • Objects of Act. 3 (b) <i>“an ecosystem approach which addresses the multiple needs and desires of society without jeopardising the options for future generations to benefit from the full range of goods and services provided by aquatic ecosystems.”</i> • Guiding principles for management 4(b)(ii) <i>“to ensure the protection of fishery and aquaculture resources and human health”</i> and 4(c) the precautionary approach shall be applied. • Declaration of special fishery research area- 14- <i>“The Minister may, after consultation with the Authority, by order, declare any area in Jamaica or in the</i> 	<p>Aspects of socio-economic well-being are incorporated into the Act. Examples of this are:</p> <ul style="list-style-type: none"> • Guiding principles for management 4(d) <i>“...the utilisation of fishery and aquaculture resources to achieve economic growth, human resources development, employment creation and a sound ecological balance, consistent with Jamaica’s national development objectives.”</i> 	<p>There were few references to stakeholder inclusion, but provisions were not explicit to collaborative management. Examples include:</p> <ul style="list-style-type: none"> • Guiding principles for management 4(g) <i>“to the extent practicable, stakeholder participation in the management of fishery and aquaculture resources shall be promoted.”</i> • Fisheries Management Plans- (5) <i>“In the preparation or review of a fishery management plan, the Authority shall consult with persons engaged in fishing, aquaculture and such related activities as appear to the Authority to be necessary.”</i> • Appointment of Council- (2) <i>“The Council shall comprise of such members who shall be appointed by the Minister, in such manner as he considers necessary, by instrument in writing from persons who</i>

		<i>fisheries waters to be a special fishery area.”</i>		<i>have expertise in fisheries, aquaculture and other related fields.”</i>
National Policy on Ocean and Coastal Zone Management (2000) (Natural Resources Conservation Authority, 2000)	The policy was developed to improve the role of economic sectors in integrated coastal zone management through the building the awareness of associated agencies and resource users.	The Policy incorporates ecological well-being. For example: <ul style="list-style-type: none"> • <i>“Guiding Principles for sustainable management of coastal resources: 3.1 Precautionary Principle and 3.2 Polluter Pays Principle.</i> • <i>Goal 2: Conservation of ocean and coastal resources and ecosystems. This Goal specifically looks at the protection and enhancement of ocean and coastal resources, including natural communities and ecosystems.</i> • <i>Strategy 4.2.4 – 4.2.7: Conservation of living and non-living coastal resources, protected areas and ecosystem management.”</i> 	There are aspects of the policy which address socio-economic well-being, such as: <ul style="list-style-type: none"> • <i>“Guiding Principles for sustainable management of coastal resources: 3.3 Inter-generational equity</i> • <i>Guiding Principles for operational principles for the implementation of the policy: 3.8 Equitable distribution of environmental resources and 3.9 Recognition of traditional rights and uses.</i> • <i>Goal 3: Baseline data collection and research, Strategy 4.3.1: Consolidating baseline data for Jamaica’s coastal resources as well as socio-economic issues that impact the coastal zone.”</i> 	The Policy highlights the need to participatory processes for achieving its objectives. For example: <ul style="list-style-type: none"> • <i>“3. Encourage community-based participatory approaches in coastal planning and management planning, and in conservation of critical habitats, and develop an integrated decision-making process including all sectors, to promote compatibility and a balance of uses.</i> • <i>15. Develop and provide tools to engender effective participation in planning and management by local communities and government, NGOs and the business sector.</i> • <i>Strategy 4.1.1: Development sustainable fisheries practices- Application of co-management principles to the sector. The desired outcome is to empower fishers to participate in co-management of the fishery.”</i>

<p>National Strategy and Action Plan on Biological Diversity in Jamaica 2016-2021 (NBSAP)</p>	<p>The NBSAP was developed to update the last strategy and action plan done in 2003. It was designed to guide implement plans and activities to meet targets set under the Convention on Biological Diversity Aichi Targets and now also considers national development plans like Vision 2030 Jamaica and the SDGs.</p>	<p>The NBSAP has eight guiding principles, which addresses ecological well-being, such as:</p> <ul style="list-style-type: none"> • <i>“Principle IV- Protect habitats, ecosystems, species and genetic resources- Adopt comprehensive biodiversity strategies and plans as part of efforts to conserve Jamaica's habitats, ecosystems, species and genetic resources.</i> • <i>Principle VI- Precautionary approach Situational analysis- Ensure that the precautionary approach (Principle 15, Rio Declaration 1992) is applied as widely as possible to avoid or minimise environmental degradation and the loss of biodiversity.”</i> 	<p>Guiding principles which speak to socio-economic well-being:</p> <ul style="list-style-type: none"> • <i>“Principle II- Acknowledge the need for behavioural change- Address the underlying causes of the loss and decline of biodiversity by promoting the necessary societal changes through policies, laws, public education and awareness.</i> • <i>Principle VII- Environmental economic tools and technology- Invest adequate financial capital in resource management tools, including biophysical inventories, monitoring, research, enforcement, environmental education and other activities to ensure the conservation of biodiversity and the sustainable use of biological resources.</i> • <i>Principle VIII- Sectoral integration- Ensure that economic, social and environmental objectives are integrated, and polices, strategies, plans and programmes are co-ordinated to effectively use scare human and financial resources to</i> 	<p>The NBSAP also makes provisions for stakeholders’ engagement to some degree. This is represented in the principles outlined below:</p> <ul style="list-style-type: none"> • <i>“Principle I – Transparency- Affirm their commitment to open and transparent decision-making processes and provide opportunities for the participation of all citizens in the development of strategies, plans and programmes aimed at addressing biodiversity issues.</i> • <i>Principle III - Local and traditional knowledge- Respect local and traditional knowledge when developing and implementing policies, programmes and plans related to biodiversity.</i> • <i>Principle V - Local management- Encourage non-governmental organisations and community groups to manage protected areas; operate rescue centres; captive breeding and other artificial propagation facilities; and to implement species management and recovery plans.”</i>
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			<i>ensure their greatest positive impacts.”</i>	
Vision 2030- Jamaica- National Development Plan³⁴	<p>This national development plan is an inclusive framework addressing environmental, economic, social and governance issues and solutions. Strategies of the plan are prioritised, and implementation monitored through Medium Term Socio-Economic Policy Frameworks (MTFs). The MTFs are also used to update the plan on continuous basis. Plans of other government agencies and departments are included in the MTFs and the SDGs.</p> <p>The Vision 2030 Jamaica has four National Goals. Goal 4, “Jamaica has a healthy natural environment”, is directly linked to ecosystem</p>	<p>Under Goal 4- Jamaica has a healthy natural environment, there are National Outcomes, two of which promote ecosystem well-being:</p> <ul style="list-style-type: none"> • 13. Sustainable management and use of environmental and natural resources <ul style="list-style-type: none"> ○ 13.2 Develop and implement mechanism for biodiversity conservation and ecosystems management <ul style="list-style-type: none"> ▪ <i>“Adopt an ecosystems management approach which takes into account: access to biological resources for benefit sharing by our population at large sustainable use of biological resources safe transfer, handling and use of living modified organisms implementation of forestry management initiatives establishment of terrestrial and marine</i> 	<p>This is captured in the Plan in different ways. Some examples that can be considered include:</p> <ul style="list-style-type: none"> • <i>“9.4 Expand and diversify maritime infrastructure and services</i> <ul style="list-style-type: none"> ○ <i>Facilitate the smooth development of strategic maritime infrastructure for cargo and passengers</i> <ul style="list-style-type: none"> ▪ <i>Conduct comprehensive port study including existing commercial ports, sufferance wharves, marinas and fishing facilities</i> • <i>National Outcome 3- Effective Social Protection.</i> <ul style="list-style-type: none"> ○ <i>3.2 Expand opportunities for the poor to engage in sustainable livelihoods</i> ○ <i>3.3 Create and sustain an effective, efficient, transparent and objective system for delivering social assistance services and programmes</i> ○ <i>3.4 Promote greater participation in, and viability</i> 	<p>The Plan highlights the need for participatory approaches throughout the document. Examples where decision-making is considered are:</p> <ul style="list-style-type: none"> • National Outcome 13: Sustainable Management and use of environmental and natural resources. <ul style="list-style-type: none"> ○ 13.1 Integrate environmental issues in economic and social decision-making policies and processes. <ul style="list-style-type: none"> ▪ Create frameworks that will enable the integrated management and sustainable use of Jamaica’s natural resources (e.g. guidelines for resource use, phased mining etc.)- <i>Promulgate the Environmental Stewardship Policy</i> ○ 13.3 Develop efficient and effective governance structures for

³⁴ <https://www.pioj.gov.jm/wp-content/uploads/2019/08/Vision-2030-Jamaica-NDP-Full-No-Cover-web.pdf>

	<p>stewardship, but other goals and outcomes are indirectly linked to the fisheries institution as well.</p>	<p><i>protected areas research to enhance scientific understanding of ecosystems, including their economic contributions to national development</i></p> <ul style="list-style-type: none"> ▪ <i>Develop a comprehensive framework to reverse loss of ecosystems and biological resources through restoration initiatives and protection from invasive species.”</i> 	<p><i>of social insurance and pension schemes</i></p> <ul style="list-style-type: none"> ○ <i>3.5 Promote family responsibility and community participation for the protection of vulnerable groups</i> • <i>National Outcome 12- Internationally competitive industry structures</i> <ul style="list-style-type: none"> ○ <i>Promote national food security</i> <ul style="list-style-type: none"> ▪ <i>Implement key food security projects including: Fisheries Development Programme”</i> 	<p>environmental management.</p> <ul style="list-style-type: none"> ▪ <i>Establish institutional mechanisms to foster coordination and collaboration among resource management agencies of resource protection issues- Strengthen partnerships with the NGO community both locally and internationally, the private sector and key public sector entities</i>
<p>Beach Control Act (1956)³⁵</p>	<p>The Act specifically regulates activity and management seafloor, water column, nearshore and beaches around Jamaica through the establishment of the Beach Control Authority.</p>	<p>The Act addresses ecological well-being insofar as addressing protected areas.</p> <p>Section 7 (a) of the act states that <i>“any part of the foreshore and floor of the sea defined in the order together with the water lying on such part of the floor of the sea to be a protected area for the purposes of this Act...”</i></p>	<p>The Beach Control Act does not speak specifically to the socio-economic well-being but does outline the rights of fisherfolk under the <i>“Rights in the Foreshore and Floor of the Sea.”</i></p> <p>It states that with the exception of section 7, there should be no disruption to fishers’ rights including <i>“(a) any rights enjoyed by fishermen engaged in fishing as a trade, where such rights existed immediately before 1st</i></p>	<p>There is no explicit mention of co-management, collaborative management or decision-making mechanisms in which fisherfolk are involved.</p>

³⁵ https://www.nepa.gov.jm/new/legal_matters/laws/Environmental_Laws/Beach_Control_Act_1956.pdf

		Subsection (20) also speaks to ecosystem well-being stating, <i>“Any order made under this section may contain provisions for the constitution of the Board of the appointment of persons to undertake the conservation, protection or rehabilitation of the area defined in such order.”</i>	<i>June, 1956, in or over any beach or adjoining land; or (b) the enjoyment by such fishermen of the use of any part of the foreshore adjoining any beach or land in or over which any rights have been enjoyed by them up to the 1st June, 1956.”</i>	
Food and Nutrition Security Policy (2013) ³⁶	The goal of this policy is for Jamaica to attain sustainable food and nutrition security, eradicate malnutrition and ensure the right to healthy food for the populace.	Ecosystem well-being is presented in the policy as one of the guiding principles- Protection of Forest and Fishery Resources- <i>“Recognizing therefore that the forests, watersheds, wetlands and marine resources constitute a substantive resource for food and nutrition security to be safeguarded through the establishment of protected areas (for example national parks, forest reserves, marine parks etc.) and implementation of climate change adaptation measures.”</i>	Socio-economic well-being is considered generally under Objective 2 of the Policy- Food Security- <i>“To improve the food and nutrition security resilience of the national community to natural and socio-economic shocks and climate change.</i> Under Objective 1- Food Availability, fisherfolk are addressed under 2 which looks at the increased availability of local nutritious food by improving the planning of production and ensuring access to competitive market prices. It also states that there will be promotion of production of select food and livestock and the creation of an enabling	The policy, though broadly considering collaboration among the various stakeholders, does not specifically address co-management or collaborative management, more so specific to fisherfolk. However, Object 3- Food Access, 8 (iii) states that <i>“Developing a structured national policy and plan of action for poverty reduction and revision of the national poverty eradication programmes, ensuring that participatory approaches to policy and decision-making for poverty reduction are followed.”</i>

³⁶ <https://extranet.who.int/nutrition/gina/sites/default/files/JAM%202013%20Food%20and%20nutrition%20security%20policy.pdf>

			environment to <i>“support and encourage sustainable fisheries Practices”</i> .	
National System of Protected Areas Policy (1997) ³⁷	The policy was developed to protect natural resources and the ecosystems of Jamaica that are of national and international ecological significance.	<p>The policy does address ecological well-being generally, however more specific examples of these are seen in Goal 2- Environmental Conservation which addresses the conservation of Jamaica’s biodiversity, natural and cultural heritage. It states specifically <i>“Preserve major representative stocks or areas of all of Jamaica’s biological resources, including populations of indigenous animal and plant species, natural communities and ecosystems.”</i></p> <p>This is also highlighted in Goal 3- Sustainable Resource Use which addresses the protection of ecosystems and the good and services they provide. It goes on to say more specifically- <i>“Restore, protect and enhance watersheds, rivers, wetlands, coral reefs, and other important ecosystems so that essential resources, such as water, soil, trees, wildlife, fish</i></p>	<p>Goal 1- Economic Development of the policy directly addresses socioeconomic well-being.</p> <p>Here it states, <i>“Improve and sustain the livelihoods of individuals and local communities by increasing their earning capacity.”</i></p>	<p>Local co-management is highlighted in the policy for the system of protected areas.</p> <p>In the policy, Goal 5- Public Participation and Local Responsibility, directly addresses this. It states that <i>“Provide for the participation of all interested groups and individuals in all aspects of protected area planning and management”</i> and <i>“Confer responsibility for planning and management of protected areas on qualified local groups through delegation of authority.”</i></p> <p>The policy also mentions the establishment of a Protected Areas Advisory Council, which will advise the National Resources Conservation Authority on the management of the protected areas and conservation of resources they contain. It should be noted however, fisherfolk or other resource users are not</p>

³⁷ https://www.nepa.gov.jm/new/legal_matters/policies_standards/docs/policy/protected_area/Protected-Areas-Policy-1997.pdf

		<i>and shellfish, are available for sustainable economic use”, and “Restore and protect ecosystems, such as coral reefs, beaches and dunes, wetlands and forested hillsides, that maintain life-support processes and reduce risks from natural disasters.”</i>		identified as being a part of the Council.
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6 Mechanisms for fisherfolk participation in decision-making

Taking action is a fundamental part of ecosystem stewardship. Stewardship actions include the range of approaches, activities, behaviours, and technologies that are applied to protect, restore or sustainably use the environment. In the case of small-scale fisheries, stewardship actions by fisherfolk and/or their organisations are influenced by formal or informal decision-making processes about the use of fisheries resources that may or may not involve fisherfolk. Participation and involvement of stakeholders in the fisheries management decision-making process is advantageous as it facilitates common understanding, establishes trust, manages conflict, increases stakeholder responsibility and accountability and enhances the legitimacy and acceptance of management policies and decisions thereby contributing to more effective enforcement of rules and regulations and increasing likelihood of compliance. To determine the extent to which fisherfolk were being included in decision-making processes related to the management of fisheries and other coastal and marine resources the institutional analysis examined the existence, composition and functioning of current National Intersectoral Coordinating Mechanisms (NICs).



Figure 6.1: Members of the New Forum Fishing Village chat with CANARI and CRFM staff on their plans for the development of the group. Credit CANARI 2020.

The CLME+ SAP identified interactive governance arrangements such as NICs essential to successfully implementing and achieving EBM and EAF. In the CLME+ region NICs can be broad or narrow based on the scope and ecosystem approach being used. Examples of NICs include: Fisheries Advisory Committees or Councils, Ocean Governance Committees, sustainable development commissions, integrated coastal management institutions and climate change bodies.

NICs operate within the policy cycle and involve interactions across multiple scales, stakeholders, sectors and levels of governance (local, national, regional and international). A NIC can be considered as the operational arm of good and effective governance or policy processes.

Inclusion of fisherfolk and fisherfolk organisations within NICs will encourage and support ecosystem stewardship by increasing the stakeholder inclusion of these resource users in the governance aspect of fisheries management, contribute to building and establishing trust and provide an avenue for including their perspectives among other advantages.

6.1 Findings for mechanisms for fisherfolk participation in decision-making in Guyana

During the national validation workshop, participants were asked to validate current NICs identified during the desk study and identify others not presented, which may be related to the coastal and marine sector in Jamaica. Participants were also asked to share information on the composition of the NIC, especially whether it included fisherfolk or not, or if this information was unknown to share where additional information could be sourced for further analysis. NICs identified through desk research and at the validation workshop include:

- National Fisheries Advisory Council (NFAC)
- National Council on Ocean and Coastal Zone Management (NCOZM)
- Natural Resources Conservation Authority (Board)
- Local Scientific Authority for Jamaica
- Protected Areas Advisory Council

- Marine Park Advisory Committee
- Fisheries Management and Development Fund Board
- Jamaica Fish Sanctuary Network
- Portland Bight Fisheries Management Council
- Ramsar Committee
- Biodiversity and Game Birds Committee
- Third City Development Committee

Table 6.1 shows the NICs discussed at the validation workshop, that were identified as important to the fisheries industry and, by extension the fisheries institution, of Jamaica. These NICs were also selected given their present or likely role in ecosystem stewardship of fisherfolk.

Table 6.1: Relevant national intersectoral coordinating mechanisms (NICs) relevant to the fisheries sector of Jamaica

NIC	Purpose	Composition	Are fisherfolk members of the NIC?	Functioning (Active/Inactive)
National Fisheries Advisory Council (NFC)	According to the Fisheries Act (2018) the NFAC shall advise on policies, fishery management plans and amendments to these, along with any other matters related to fisheries management.	The council will consist of persons appointed by the Minister who are experts in fisheries, aquaculture and related areas. Representatives from the NFA, civil society and individual fishers are included. ³⁸	Yes. Individual fishers are members, but fisherfolk organisation leaders/representatives are not.	Active The NFAC convened earlier this year.
National Council on Ocean and Coastal Zone Management (NCOCZM)	<p>The NCOCZM is an inter-ministerial committee that was convened in 1998. It advises on ocean and coastal resource management, development of policies and public engagement and education on the significance of these resources and the marine sector. marine sector to the sustainable development of Jamaica.</p> <p>It is a politically endorsed committee and is tasked with the responsibility of elevating the mandate and advising on the management and coordination of coastal zone and ocean matters. Since the Council is not involved in implementation, an implementing agency is required. Cabinet advisory council.</p>	<p>The NCOCZM is comprised of:</p> <ul style="list-style-type: none"> • Ministry of Foreign Affairs and Foreign Trade (MFAFT) (Senator acts as chair) • Caribbean Maritime University (CMU) • Ministry of Industry, Commerce, Agriculture and Fisheries (MICAFA) • National Fisheries Authority (NFA) • Maritime Authority • Mines and Geology Division • National Environmental Protection Agency (NEPA) • Water Commission • Planning Institute of Jamaica (PIOJ) • Shipping Association • Rural Agricultural Development Authority • Port Authority • Jamaica Environmental Trust • Scientific Committee³⁹ 	No.	Active

³⁸ The list of member organisations would need to be requested, as the committee was established earlier this year.

³⁹ List of organisations obtained from participants of the national workshop in Jamaica.

<p>Natural Resources Marine Park Advisory Board</p>	<p>The Advisory Board was established under the Natural Resources (Marine Parks) Regulations (1992)⁴⁰. Section 27 of this Act speaks to the establishment of the Board for a marine park.</p> <p>It is politically endorsed through the Act. And has a clear mandate outlined Section 27 of the Act.</p> <p>The Board is responsible advising the Natural Resources Conservation Authority (NRCA) on administrative matters, control and preservation of resources in the marine park, develop management plans, monitor strategies, create revenue generating activities for the park, advise on the appointment of park rangers, advise on the disposal or retention of specimens and other scientific material, co-ordinate community education programmes and provide advice on the zoning and boundaries of the marine park.</p>	<p>According to the Act, the board should include:</p> <ul style="list-style-type: none"> • the manager of the marine park; • the chairman of the Natural Resources Conservation Authority (NRCA) or his nominee; • a representative of the National Fisheries Authority (NFA); • the director of the Discovery Bay Marine Laboratory; and • four additional persons, one of which should be qualified in marine biology. <p>These additional persons can include; representatives from National Environmental Authority (NEPA), the NFA, University of the West Indies, an expert in marine biology, the Ministry of Tourism, Maritime Authority, a fisherfolk organisation in the area, the Coast Guard, Marine Police and the Port Authority.</p>	<p>Yes.</p> <p>The Act does not specify that a fisherfolk representative should be included on the board, however, representatives from local fisherfolk organisations can be appointed as one of the four additional persons.</p>	<p>Active</p> <p>The board meets quarterly and appointments last for two years.</p>
<p>Fisheries Management and Development Fund Board</p>	<p>The Fund was established under the Conch Levy Act () for the purpose of sustainably managing and developing the fisheries sector of Jamaica. The fund is maintained from the money attained through the conch levy, investments, and other funding from</p>	<p>The board comprises of eight persons, as per the Conch Levy Act, these include:</p> <ul style="list-style-type: none"> • the Permanent Secretary of Ministry of Industry, Commerce, Agriculture and Fisheries (MICAFA) or his nominee; • the Director of Fisheries; 	<p>Yes.</p> <p>The Act does not require a fisherfolk representative to be on the Board, however one can be appointed as</p>	<p>Active</p> <p>This has been active since 2009 and has monthly/quarterly as necessary</p>

⁴⁰ [https://www.nepa.gov.jm/new/legal_matters/laws/Environmental_Laws/NR\(Marine_Parks\)Regulations_1992.pdf](https://www.nepa.gov.jm/new/legal_matters/laws/Environmental_Laws/NR(Marine_Parks)Regulations_1992.pdf)

	<p>Parliament or otherwise that is accepted by the fund.</p> <p>It is a legally mandated Board through the Conch Levy Act (2009) with a clear mandate. The NFA is the lead agency on the board.</p>	<ul style="list-style-type: none"> • the Director of Veterinary Services or his nominee; • Chairman of the Fishery Advisory Board (now the NFAC); and • Four other persons as appointed by the Minister and approved by cabinet, such as representatives from academia like the University of the Commonwealth Caribbean and an industrial fisher/private fishing company 	<p>one of the additions four persons. It was suggested at the workshop that an industrial fisher is included on the board.</p>	
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For the four NICs analysed, there is no overt requirement for fisherfolk inclusion on the council, committee or board, though there is scope for fisherfolk or a representative of a fisherfolk organisation to be involved. This was mainly through the provision for four additional persons, outside of the identified government representatives to sit on the board. As highlighted with the power pyramid (see Section 5.5), fisherfolk can be and are involved, but at the individual or primary fisherfolk organisation level. In no instance were national fisherfolk organisations, like the JFCU, mandated to sit on the committees analysed in Table 6.1, but there is greater opportunity for primary fisherfolk organisations to sit on the boards, particularly for the Natural Resources Marine Park Advisory Board, which manages specific marine protected areas. It was also mentioned that on national committees, where fishers are included, there are usually industrial fishers. Even so, the fisher may still represent the concerns and interests of the group, whether formal or informal (group) to which they belong.

The Fisheries Act (2018) does not list the organisations that should be included, like the Natural Resources (Marine Parks) Regulations (1992) and the Conch Levy Act (2009), but will include similar government agencies like the National Fisheries Authority (NFA) and National Environmental Protection Agency (NEPA), civil society organisations (such as C-CAM) and an individual fisher(s), likely an industrial fisher or a member of the JFCU.

For JFCU, though established as an umbrella organisation, with a board that can promote ecosystem stewardship action for and by fisherfolk, only represents about 10% of fisherfolk in Jamaica. As mentioned before there are currently nine member organisations of the cooperative. JFCU also sits on a tribunal for resolution of conflicts and other matters involving damaged gear and the like. The issue of representation was raised at the workshop, where fisherfolk feel like they are not or under-represented and, in some cases, may be unaware of the JFCU and their work. Also, worth noting is the limited presence of women who, it was indicated, are not strong members and often expressed that they are excluded.

Although there is some indicated inclusion of fisherfolk in advisory bodies, their influence or power in decision-making processes is still perceived as low. Fisherfolk, as it relates to the management of their local fisheries and/or fishery conservation areas and MPAs, may have greater decision-making power and “voice” at local, community levels, than at the national level. However, national fisherfolk organisation groups like the JFCU can be useful to bring the issues from communities to the fore, for discussion at on national committees and other fora. This can also be supported by the strong relationship between the JFCU and the NFA, who can also bring the issues of fisherfolk to the attention of policy makers.

7 Support and resources for ecosystem stewardship by fisherfolk and their organisations

To undertake ecosystem stewardship, would-be stewards must have the support and resources to do so. In this case “support and resources” refer to the finances, technology and equipment and education, skills and knowledge needed to effectively undertake ecosystem stewardship actions. In addition to directly supporting ecosystem stewardship actions, access to these resources may also ensure that aspects of fisherfolk’s human well-being (e.g. access to training to ensure safety at sea) are considered by support agencies and may provide motivation for stewardship actions. 8

To determine whether fisherfolk have adequate support and resources to undertake ecosystem stewardship actions the institutional analysis examined some of the projects, programmes and initiatives in Jamaica that have provided or are providing finances, technology and equipment and capacity building (e.g. education, skills and knowledge) to fisherfolk and their organisations.

7.1 Findings for support and resources for ecosystem stewardship by fisherfolk and their organisations

During the validation workshop and through interviews the resources made available to fisherfolk through projects, programmes and agency mandates were identified and discussed. Table 7.1 summarises what was found. The resources are divided into three main categories: (1) Materials, equipment and technology, (2) Finance and (3) Skills and knowledge.

Table 7.1: Programmes and initiatives providing support and resources to fisherfolk and fisherfolk organisations in country

Name of programme/initiative	Description of programme/initiative	Organisation delivering programme/initiative	Organisation type
Materials, equipment and technology			
Fishing programme	Through this programme fisherfolk are provided with: <ul style="list-style-type: none"> • Boats • Medical care and equipment • Fishing gear • Gear sheds • Fish processing facilities • Fish aggregating devices (FADs) 	Food for the Poor Jamaica	Civil society
Services provided	Through the JFCU, licensed fishers and member organisations can access fishing equipment including: <ul style="list-style-type: none"> • imported fishing tackles • mesh wire • netting • baits • fibre-glass material • lines • safety equipment • marine ply • fishing boats and materials to build and repair fishing boats • credit to its members through the primary cooperatives 	JFCU	Civil society – Fisherfolk organisation
Corporate social responsibility	This company supplies fishing equipment to the Salem Fishing Beach	Vivier Pharma	Private sector
Pilot Project for Climate Resilience (PPCR)- Promoting community-based resilience in the fisheries sector ⁴¹	The project supports the development of alternative livelihoods through: <ul style="list-style-type: none"> • the establishment of a fish farm cluster in selected communities with technical inputs such as fingerlings and 	Government of Jamaica, Inter-American Development Bank (IDB)	Government and Inter-governmental organisation

⁴¹ <https://ppcrja.org.jm/promoting-community-based-resilience-in-the-fisheries-sector/>

	<p>forming partnership with existing aquaculture businesses to provide technical and material support</p> <ul style="list-style-type: none"> • supporting coastal mariculture/polyculture • research and development of the artisanal long-line fishery for offshore pelagics 	And the World Bank	
Regular work programme of the Aquaculture Unit of the NFA	<p>Farmers can benefit from:</p> <ul style="list-style-type: none"> • Work with farmers to access concessions and funding through other agencies like the Rural Agricultural Development Authority • Research and development in aquaculture and mariculture • Extension services which include the site evaluations and cost/return analysis • Sale of ornamental and tilapia seedstock • Rental of equipment such as nets, tanks and pumps 	Aquaculture Branch (NFA)	Government
Finance			
Fisheries Management and Development Fund	According to the Conch Levey Act (2009) "The resources of the fund shall be used to facilitate the sustainable management and development of the fisheries sector".	Fisheries Management and Development Fund Board	Government
Promoting Community Based Climate Resilience in the Fisheries Sector ⁴² - Pilot Project for Climate Change Resilience (PPCR)	Financial resources are not given directly to fisherfolk, but funding is being provided through four components covering policy and regulatory framework strengthening; alternative livelihoods; aquaculture and sustainable livelihoods; capacity building and training; and monitoring and evaluation.	Government of Jamaica, IDB, World Bank	Government and Inter-governmental
Global Environment Facility (GEF) Small Grants Programme (SGP)	The GEF SGP has funded several projects involving fishers and fisheries in Jamaica covering areas such as capacity building, training, fish sanctuary and ecosystem protection, sustainable financing,	GEF	Inter-governmental

⁴² <https://www.worldbank.org/en/news/loans-credits/2018/03/07/jamaica-promoting-community-based-climate-resilience-in-the-fisheries-sector-project>

	<p>protected area management. Two examples of projects include:</p> <ul style="list-style-type: none"> • Enhancing the Conservation Mechanisms of the Marine Ecosystems in Jamaica through Fisher-Controlled Sanctuaries- The Oracabessa Marine Trust • Biodiversity Restoration in the Portland Blight Protected Area through Community Engagement- C-CAM 		
Tourism Enhancement Fund	Fisherfolk may be beneficiaries of projects or funding developed through the Masterplan for Sustainable Tourism Development which the fund promotes. The Masterplan objectives target community-based development, local support and sustainability, inclusivity in the industry, and preservation of the natural resources.	Ministry of Tourism	Government
Fisheries Programme	Through donations given to the organisation, direct funding is available to fishers for boat repair, and materials to build gear sheds and processing facilities.	Food for the Poor Jamaica	Civil society
Benefits as part of the membership of the co-operative	<p>Benefits members can receive through the JFCU include:</p> <ul style="list-style-type: none"> • A patronage refund- for members who purchase materials or boats from the JFCU • Dividend shares, if there is a surplus • Scholarships- two are available to children of members and one is available to employees of JFCU • JFCU also provides credit to its members through the primary cooperatives 	JFCU	Civil society- FFO
Regular work programme of the Natural Resources Conservation Authority (NRCA)	Memorandum of understanding MOU with fisherfolk organisations for sea turtle monitoring	Natural Resources Conservation Authority (NRCA)	Government
Regular work programme of the	Provides direct grants and grant income on behalf of donors. The Foundation funds projects covering	EHF	Civil society

Environmental Health Foundation (EHF)	capacity building, training, technical assistance projects, institutional strengthening, research and education and awareness.		
Environment Programme, Sandals Foundation	The Sandals Foundation has funded environmental conservation and sustainable projects in Jamaica, including: <ul style="list-style-type: none"> • coral conservation in Boscobel, Bluefield's and Whitehouse for fish population recovery and supporting ecotourism livelihoods • Fish sanctuaries like the Whitehouse Fish Sanctuary and the Boscobel Marine Sanctuary 	Sandals Resorts International	Private sector
Caribbean Catastrophe Risk Insurance Facility (CCRIF) Small Grants Programme ⁴³	The Small Grants Programme funds projects on climate change adaptation, capacity building and training, and environmental management which addresses vulnerability of communities.	CCRIF	Regional intergovernmental
Skills and knowledge			
Regular work programme of the Jamaica Defence Force Coast Guard	Safety at sea training	Coast Guard	Government
Fisheries Management Programme	CCAM has provided: <ul style="list-style-type: none"> • mentorship • training • boat handling • CPR and first aid • safety at sea • enforcement 	CCAM	Civil society
Regular work programme of NEPA	National Environmental Protection Agency (NEPA) carries out training in several areas including: <ul style="list-style-type: none"> • game warden • lifeguard • coral gardening • beach erosion • first responders for marine and freshwater pollution 	NEPA	Government
Regular work programme of the JFCU	The JFCU organises and hosts retreats with all fisherfolk around Jamaica where they learn about	JFCU	Civil society

⁴³ <https://www.ccrif.org/en/ccrif-small-grants-programme>

	and discuss issues surrounding the management of fisheries resources, licenses, promoting sustainable practices (such as complying with open season and not poaching)		
Pilot Project for Climate Change Resilience (PPCR)	As part of component four of the project fisherfolk are/will be trained in fishing with artisanal long line for offshore pelagics. Component three also provides training, capacity building, education and awareness initiatives and organisational strengthening.	Government of Jamaica, IDB and World Bank	Government and Inter-governmental organisations
Regular work programme of the Aquaculture Unit	The Aquaculture Unit provides training in: <ul style="list-style-type: none"> • tilapia production • ornamental fish • data collection • water quality testing (safe water usage for the production of tilapia) 	Aquaculture Unit, NFA	Government
Conservation Projects as part of the regular work programme on Jamaica Environmental Trust (JET) ⁴⁴	Support provided by the JET include: <ul style="list-style-type: none"> • Sea turtle monitoring • Management, monitoring and education and awareness around the South West Cay Especial Fisheries Conservation Area • Better beach management 	JET	Civil society
Various projects of the Bluefields Bay Fishermen's Friendly Society (BBFFS)	Under several projects fisherfolk have/had access to: <ul style="list-style-type: none"> • Training in honey production, entrepreneurship, sea turtle monitoring and alternative livelihoods • Revitalisation of the Bluefields Marketplace • Through Food for the Poor, fibreglass boats, gear, freezers, office, office equipment • Housing and electricity 	BBFFS	Civil society
Regular work programme of the	Disaster Preparedness	Marine Police	Government

⁴⁴ <https://www.jamentrust.org/pedro-bank/>

Jamaica Constabulary Force Marine Division			
Courses taught at the Caribbean Maritime University (CMU) ⁴⁵	Some courses and programmes offered here which fisherfolk can access are: <ul style="list-style-type: none"> • navigation • boat handling • safety training • first aid 	Caribbean Maritime University	Academia
Fishing programme	The organisation provides training on: <ul style="list-style-type: none"> • first aid • safety at sea • sustainable fisheries • fisheries as a business • fishing value chain • boat handling • deep line fishing • alternative livelihoods such craft, livestock and honey • data collection 	Food for the Poor Jamaica	Civil society
Regular work programme of the Department of Cooperatives and Friendly Societies	The Department offers assistance and training in: <ul style="list-style-type: none"> • Formation of groups • Training in record management • Secretarial/administrative tasks 	Department of Cooperatives and Friendly Societies	Government
Regular work programme of the NFA	The Authority provides training in: <ul style="list-style-type: none"> • Formation of fishing groups • Training of fisheries wardens • Public education on Fisheries Act and Regulations 	NFA	Government
Regular work programme of the Ministry of Health (MoH)	The MoH is responsible for issuing food handling permits and provides food handling training	Ministry of Health	Government
Course offered by the Jamaica Red Cross (JRC) ⁴⁶	The JRC offers courses, which can be accessed by fisherfolk, in first aid with CPR.	Red Cross	Civil society
Regular work programme and small projects of the New Forum Fishing Village Friendly Society	This FFO is leads numerous social initiatives which fishers and their families can benefit from and be a part of including: <ul style="list-style-type: none"> • One-week summer camps 	New Forum Fishing Village Friendly Society	Civil society-FFO

⁴⁵ <https://srs.cmu.edu.jm/page/homepage>

⁴⁶ <https://www.jamaicaredcross.org/about-us/who-we-are>

	<ul style="list-style-type: none"> • Health fairs • Football matches • Beach clean-ups • Education and awareness 		
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From the list presented in Table 7.1, there are some key trends arising which can help identify areas where the fisheries institution is strong in providing support to fisherfolk for ecosystem stewardship and their overall development, and gaps where more work can be done. These trends are summarised in the sub-sections below.

- **Technology, equipment and materials:**

Civil society has played and is playing an important role in the provision and access of materials for fisherfolk and fisherfolk organisations. This is seen particularly with Food for the Poor Jamaica, which has been actively working on the ground with several formal or informal fisherfolk groups to equip them with resources for them to operate more efficiently and sustainably. The JFCU has also been increasing accessibility to equipment and materials to the membership, even imported equipment which may not have been as accessible to member organisations and their membership previously. The NFA also supplies significant inputs into the sector, particularly the Aquaculture Unit for aquaculture and mariculture farms.

There are several sources of equipment and materials, whether through projects or the regular work programme of the NFA, civil society and other organisations, however there is limited access to technology. The fishers do benefit, in the larger context, from improved technology available to government agencies, such as in monitoring and surveillance, however, there is little mention of technology that is directly beneficial to fishers, in the everyday operations and improving their sustainability. Improved application and use of technology like GPS tracking can assist with issues like lost traps, an issue that was mentioned at the workshop, and fishers going adrift at sea.

- **Finance:**

Financial resources were/are mostly made available through partnerships with intergovernmental organisations like the IDB, World Bank, FAO and the like. These partnerships are often with the Government of Jamaica or through some of the more active civil society organisations like Caribbean Coastal Area Management Foundation (CCAM) and Jamaica Environmental Trust (JET). Fisherfolk are not usually the direct recipients of these types of funding, but through an intermediary or JFCU. Direct funding to fisherfolk organisations is available through small grant programmes, such as the Global Environment Facility Small Grants Programme (GEF SGP) or the Caribbean Catastrophe Risk Insurance Facility Small Grants Programme CCRIF SGP, but the groups would require the capacity to complete the applications and submit proposals. There are other types of financial benefits made available to fisherfolk such as concessions on equipment and materials (e.g. concessions given to aquaculture farmers through the Rural Agricultural Development Authority (RADA)). The JFCU also provides credit to membership and yearly dividends if there is a profit.

From discussion with fisherfolk in-country, in most instances the group is aware of what is needed but lack the financial resources to get it done and by extension do not know where they may be able to obtain funding. As an example, the New Forum Fisherfolk Fishing Village Friendly Society has plans to further develop their premises, both for ecotourism and fishing. Some of the main issues they face include improper sanitation waste disposal, sewage management and improving facilities for vendors. Fisherfolk themselves face the issue of lack of proper landing facilities, processing area, sleeping quarters for fishers who stay at the

site, toilets and electricity. At present the fishers operate from a makeshift jetty and live in containers where their gear is stored. These issues pose significant health and livelihood



concerns as expressed by fishers. The leadership of the fisherfolk organisation has a very clear understanding of the issues and what needs to be done, as shared at the focus group meeting, but there is limited access to funding to be able to address these concerns, and fisherfolk themselves are focussed on their survival and livelihood on a day to day basis. Another issue, as brought to light by the fishers at Bull Bay, is that groups may be informal and unregistered, and in order to access funding or other assistance, they will need to register as a cooperative or friendly society.

- **Skills and knowledge:**

Of the three categories, this is where most resources are available to fisherfolk, provided largely through projects or regular work programmes of government agencies and civil society. There has been a number of initiatives focusing on training and capacity building around safety at sea, boat handling, first aid, sea turtle monitoring, beach management and alternative livelihoods like apiculture. There has also been substantial education and awareness on sustainable fisheries, conservation through fish sanctuaries, alternative fisheries (e.g. long line fishing for offshore pelagics) and alternative livelihoods (apiculture, ecotourism, aquaculture, craft). The main source of support for aquaculture has been the NFA Aquaculture Unit, which provides training and technical expertise. Research and development is also an important resource provided mainly by government agencies and projects. One unique initiative is a retreat/conference hosted by the JFCU for membership where they discuss issues and collectively devise solutions. At this retreat, they also do education and awareness building of membership on sustainable fisheries.

Fisherfolk have been receptive to alternative livelihood and other training. Fisherfolk who have received apiculture training are now continuing with the activity as a source of additional income. Some fishers are also involved in aquaculture. Participants at the workshop offered other suggestions for alternative livelihoods for fisherfolk that promoted ecosystem stewardship. This included dolphin conservation as another form of ecotourism and fishing tourism like chartered fishing trips. There was also the suggestion that national fisherfolk organisations like the JFCU can play a greater role in supporting and promoting aquaculture as a viable alternative or supplement income source. This can be done by expanding their store to also supply materials and equipment for aquaculture and mariculture.

Overall, there are a significant level of inputs into the fisheries sector of Jamaica, but the awareness and knowledge about what is available to them and furthermore how to access the resources and information presents a gap. In speaking to some fishers on the ground, they are vaguely aware or not at all informed about the JFCU and the role they perform representing and advocating for fisherfolk. Fisherfolk and fisherfolk organisations may also be disorganised, whether in formal or

informal groups, with little engagement and support from membership which impairs their ability to pursue and access resources.

8 Partnerships and networks for ecosystem stewardship

Partnerships and networks connect institutions and organisations across levels and scales. For fisherfolk organisations seeking to engage in ecosystem stewardship, partnerships and networks are important as these arrangements help facilitate information flows, fill knowledge gaps, and strengthen expertise for ecosystem management, including stewardship. This section discusses a few current or past partnerships or networks in Jamaica that included fisherfolk organisations and how these have impacted ecosystem management.

8.1 Findings for partnerships and networks for ecosystem stewardship

Fisherfolk organisations in Jamaica collaborate with various stakeholders in government, civil society and private sector through projects or the routine work of the organisation as discussed in Section 9 above. Fisherfolk however, in most instances are involved as beneficiaries or participants for the activity or intervention and may not necessarily be considered a partner. Despite this, the Jamaica Fishermen Cooperative Union (JFCU) has partnered on several projects nationally and regionally, representing the interests of fisherfolk.

Partnerships with government agencies: The JFCU has a strong working and partnership with the NFA and are usually consulted and informed of activity taking place in the fisheries sector. This is part of the aligned Ministry's priority programmes and core values, one of which directly speaks to stewardship; "Stewardship - We interact and collaborate with all our stakeholders with understanding of our integral role to ensure the sustainable development in the agriculture, fisheries, manufacturing and service sectors".⁴⁷ However, in a report prepared under the project "Strengthening Caribbean Fisherfolk to Participate in Governance", an analysis was done of the then state of partnerships and networks in the sector. It was said that partnerships were formed among co-operatives through a five-year development plan. The national fisherfolk organisation also identified other key formal partnerships with the NFA (then Fisheries Division) and the Caribbean Network Fisherfolk Organisation (CNFO) (JFCU, 2014). As part of its organisational mandate, the board of the JFCU also has a responsibility to develop and maintain strategic partnerships.

Partnerships with other civil society organisations: From in-country discussions and through desk research, another notable trend is that some civil society organisation, namely, environmental non-governmental organisations have a greater ability to foster partnerships and greater social capital among other civil society organisations. This point was addressed in another workshop report produced as part of a project to update the Critical Ecosystem Partnership Fund (CEPF) ecosystem profile for biodiversity hotspots in Jamaica. The reason for this is their level of operation and implementation- they are usually on the ground working with stakeholders and natural resources (CEPF, 2017). According to the report, this level of partnership among civil society organisations is very important for capacity building of smaller groups and knowledge sharing, but it needs to be strengthened. The report also recommended that engagement at this level works better as coalitions/partnerships and not umbrella organisations (CEPF, 2017). Clear examples of instances where fisherfolk partner with other civil society organisations and/or private organisations is with the management of MPAs and fish sanctuaries.

⁴⁷ <https://www.micaf.gov.jm/content/priority-programmes>

Partnerships through MOUs: There MOUs between NEPA and various marine park management agencies and fisherfolk societies. Some examples include:

- Memorandum of Understanding between The National Environment and Planning Agency and Bluefields Bay Fishermen’s Friendly Society - To promote and enhance the development of Alternative Livelihoods Program through Grants. ⁴⁸
- Memorandum of Understanding between The National Environment and Planning Agency and the Caribbean Coastal Area Management Foundation - To promote and enhance the development of Alternative Livelihoods Program through Grants⁴⁹
- Memorandum of Understanding between The National Environment and Planning Agency and The Montego Bay Marine Park Trust - To promote and enhance the development of Alternative Livelihoods Program through Grants⁵⁰
- Memorandum of Understanding between The Natural Resources Conservation Authority and The Montego Bay Marine Park Trust⁵¹

There are also MOUs between NEPA and academic institutions such as the University of Technology and UWI Mona; NEPA and private sector stakeholders like Sandals; and NEPA and other conservation-based NGOs and trusts.⁵²

Looking at the policy and legal framework in which the fisheries institution operates, there are also MOUs which the Government of Jamaica has signed on to at a regional level. Although these agreements do not involve fisherfolk as signatories or partners, they still have implication on the industry at large and the operations and livelihood of fisherfolk on the ground and at sea. One example of this is the MOU signed by three regional fisheries bodies: the Caribbean Regional Fisheries Mechanism (CRFM) of which Jamaica is a member state, the Organization of Central American Fisheries and Aquaculture Sector (OSPESCA), and the Food and Agricultural Organisation of the United Nations - Western Central Atlantic Fisheries Commission (FAO-WECAFC). This MOU was developed and signed to facilitate improved coordination of sustainable fisheries interventions among the three bodies. ⁵³ In 2017 there was also the establishment of an MOU between the Governments of Jamaica and China which is aimed at improving the sanitary conditions and certification for the export of live lobster from Jamaica to China as part of the MICAFA’s commitment to accesses new markets for Jamaican fisherfolk. ⁵⁴

The private sector has also partnered with fisherfolk, though there are limited formal instances of this. One example is the MOU referenced previously between NEPA and Sandals, who also work directly with fisherfolk in management of protected areas. Another example of a formal partnership was between the Jamaica National Small Business Loan (JNSBL) and Yamaha Engines Limited where an MOU was signed to provide 1.5 million JMD for loans accessible to fisherfolk and other marine sectors for obtaining parts and engines for boats.⁵⁵ Again, though the agreement is not directly with fisherfolk or fisherfolk organisations themselves, they are the beneficiaries.

⁴⁸ <https://www.nepa.gov.jm/MoU/Bluefields%20Bay-Fishermen-Friendly-Society/MoU.pdf>

⁴⁹ <https://www.nepa.gov.jm/MoU/CCAM/Alternative-Livelihoods/MoU.pdf>

⁵⁰ <https://www.nepa.gov.jm/MoU/Montego%20Bay%20Marine%20Park%20Trust/climate-change-project/MoU.pdf>

⁵¹ <https://www.nepa.gov.jm/MoU/Montego%20Bay%20Marine%20Park%20Trust/MoU.pdf>

⁵² <https://www.nepa.gov.jm/MoU/>

⁵³ http://www.crfm.int/index.php?option=com_acymailing&ctrl=archive&task=view&listid=3-fisher-folk-net&mailid=51-MoU-signed-to-improve-coordination-for-sustainable-fisheries-in-the-western-central-atlantic

⁵⁴ <https://micaf.gov.jm/node/1359>

⁵⁵ <https://www.jnsbl.com/jnsbl-yamaha-sign-MoU-to-provide-support-for-fishing-industry/>

Networks: Networks which fisherfolk are active include the Special Fisheries Conservation Areas Network (SFCAN), the JFCU, and the Caribbean Network of Fisherfolk Organisations (CNFO). There are currently 14 special fishery conservation areas which are managed by MICAFA and civil society organisations and formalised by a Memorandum of Agreement (MOA). Under this agreement, the Ministry provides resources the management of the SFCA and the daily operations are carried out by the civil society organisation. Fisherfolk organisations which are a part of a network are the Bluefields Bay Fisherman’s Friendly Society (BBFFS), the Altoa Fisherman’s Cooperative and the Oracabessa Bay Foundation/Oracabessa Bay Fisherman’s Group. CCAM also manages four fish sanctuaries and the other seven are managed by six other environmental non-governmental organisations and the Sandal Foundations (Sandals Boscobel Fish Sanctuary East and West)⁵⁶. It should be noted that even though the majority is managed by environmental/conservation-based nongovernmental organisations, in most instances fisherfolk are involved.

To reiterate, the JFCU itself acts as a network for its members organisations and others, as they are often the facilitator of knowledge exchange between the groups and represent the “voice” of fisherfolk on the national agenda. However, as previously mentioned, their ability to create engagement among fisherfolk organisations and truly represent fisherfolk nationally is limited because the organisation is only comprised of nine members. These nine members are local co-operatives. This means that other types of fisherfolk organisations – friendly societies and associations, are not well represented and are not able to access the benefits of being in the JFCU. The JFCU is also the representative fisherfolk organisation member for Jamaica in the Caribbean Network of Fisherfolk Organisations (CNFO), and though they have been involved in many projects through the CNFO, the benefits of networking, knowledge sharing, and capacity building will be limited to the membership.



More formal arrangements for partnerships and networks may assist with addressing some of the issues identified in this section. The JFCU may also consider expanding their current role and membership to include more co—operatives and other types of fisherfolk organisations. This, however, may only be possible through the registering of informal groups. There may also be a need to improve partnerships with the NFA and other government agencies like the Department of Co-operatives and Friendly Societies for the registering of informal fisherfolk organisations groups, and NEPA. Strengthened inter-agency partnership and coordination can improve the enabling environment for ecosystem stewardship of fisherfolk.

9 Communication of information on sustainable practices for fisheries resources use

Communication is the means to share information on best practices, lessons learnt, available support/resources, training, networking, and opportunities for participatory decision-making that

⁵⁶ https://www.micaf.gov.jm/sites/default/files/Special_Fisheries_Conservation_areas.pdf

can support effective ecosystem stewardship. The institutional analysis examined the extent to which providers of fisheries information in the project country were using defined communication strategies, tools and channels to communicate with fisherfolk, as well as their capacity to use the tools and channels effectively; including the structures and systems in place for clear communication.

Communications within the ministry, inclusive of the National Fisheries Authority (NFA), is guided by the Government of Jamaica Communication Policy⁵⁷. This policy sets out key goals and outcomes for the policy focussed on accountability, transparency and proactiveness; and also provides guidelines for leveraging social media. MICAF also has a Communication and Public Relations Division, which is responsible for sharing information on the Ministries work to stakeholders and the general public. The Unit disseminates this information through various forms of media including television, radio, media tours, news conferences, press releases, advertisements and social media. ⁵⁸ This unit supports and shares information on behalf of all agencies and divisions within the ministry, including the NFA. The NFA however, does not have a communications plan for engaging its stakeholders, especially fisherfolk.

The NFA is the main source of information for fisherfolk and fisherfolk organisations on fisheries-related projects and initiatives, and sustainable fisheries. As mentioned in the validation workshop, the JFCU has a strong partnership with the NFA and is informed of developments in the sector mainly through them. This communication occurs through different communication tools or practices, namely, visits to the head office or satellite offices around Jamaica; face-to-face meetings (including workshops, focus groups and visit from fisheries officers); phone calls; the ministry website; newspaper and other print media (flyers, brochures and posters) and social media pages. Information can also be requested from the NFA by email or letter. Depending on the type of assistance required, fisherfolk may also seek information from websites or offices of other agencies such as Veterinary Services Division for permits, Ministry of Health for food handling training permits or the Department of Cooperatives and Friendly Societies for registering an organisation.

One of the primary and most effective ways of engaging and sharing information about sustainable fisheries with fisherfolk is through social media. The WhatsApp, Facebook and even Instagram applications are useful for getting fisherfolk interest and disseminating small bits of information and a format that is easy for fisherfolk to understand and share among their communities. Information is also often shared through Jamaica Fishermen Cooperative Union (JFCU) leadership and then shared with membership through WhatsApp groups. This is also an important and effective way for communicating among fisherfolk leaders in the CNFO, of which JFCU is a member and is also often created of projects (e.g. a StewardFish WhatsApp group for fisherfolk leaders and project partners to share updates and other useful information). MICAF and the NFA have Facebook pages



Figure 9.1: A recent post on the MICAF Facebook page on the launch of the PCR project

⁵⁷ <https://jis.gov.jm/media/FINAL-Nov.-11-2015-GoJ-Comm.-Policy-Final-doc.pdf>

⁵⁸ <https://www.micaf.gov.jm/content/communication-public-relations-division>

where they share recent news on projects and work done, though the MICAF page is more active and has more engagement (it has just under 5000 followers). They both also have very active Instagram pages (MICAF has just over 1000 followers and the NFA has a little over 220 followers). Other key conservation-based non-governmental organisations like CCAM, JET and Food for the Poor Jamaica also have an active social media presence and share useful information about initiatives impacting fisherfolk and their livelihoods. The JFCU does not have a Facebook or Instagram presence, but as indicated earlier primarily communicates via WhatsApp and phone, which has proven to be the most effective media. It should also be noted, because of the COVID-19 pandemic and restrictions, fisherfolk, including JFCU leadership, have been using ICT tools like virtual video conferencing platforms for participating in and hosting meetings, and training and capacity building activities,⁵⁹ examples of which are seen in the StewardFish project.

In a 2014 report the JFCU membership highlighted that there were inadequacies in their communication plan, particularly the lack of an organised system for sharing messages and feedback to the JFCU (JFCU, 2014). In order to address this issue and to increase the level of engagement and interest in information of ecosystem stewardship and sustainable fisheries, it is important for the JFCU to play a more active role and to improve imaging and messaging. In another report, it was recommended that environmental/conservation-based non-governmental organisations, where a substantial amount of information of ecosystem stewardship and sustainable livelihoods is generated, ensure that their image is relatable to fishing communities and fisherfolk organisations and that they strengthen relationships with and capacity of stakeholders (CEPF, 2017). As mentioned previously, there is also the need to increase the reach of the JFCU, so that fisherfolk or fisherfolk organisations who are not a member organisation, can also benefit from improved communication and knowledge sharing.

10 Organisational assessment of the fisheries authority in Barbados

While fisheries authorities have adopted EAF principles as an approach; evidenced by their inclusion in policies and plans (see Table 5.2), many have not yet adopted these principles within their administrative procedures and/or do not currently possess the capacities to facilitate effective collaborative management procedures.

As part of the institutional analysis, an organisational assessment of the of the state agency with direct responsibility for fisheries management was conducted in Jamaica to identify gaps and develop recommendations to better adopt the EAF approach and subsequently support fisherfolk and their organisations in actioning ecosystem stewardship. The assessment was conducted via survey to provide a rapid assessment of the state agency's internal capacity to support ecosystem stewardship by fisherfolk and their organisations. The questions in the survey examined the following four capacity areas to explore the organisational motivation and capacity for supporting ecosystem stewardship by fisherfolk:

1. Vision, mandate, culture- the organisation's visions and goals, its operational culture and its internal governance mechanisms and how they promote ecosystem stewardship.
2. Practices – the translation of the organisation core beliefs into actions that support ecosystem stewardship by fisherfolk organisations as it relates to decision making, collaboration and information sharing.

⁵⁹ These include platforms such as Zoom, Skype, Go-to-Meeting etc.

3. Knowledge and skills- the organisation's capacity to provide fisherfolk and fisherfolk organisations with the relevant knowledge and skills support required for improved stewardship actions.
4. Resources- focuses on the finance, equipment, materials, tools and methods that the organisation has access to for supporting fisherfolk with ecosystem stewardship activities and initiatives.

The assessment was conducted as an organisational self-assessment – where the selected agency, either through a small focus group (including relevant and knowledgeable staff members) or via an elected representative, completed the survey.

In the case of Jamaica, the organisational assessment focused on the National Fisheries Authority.

10.1 Findings from organisational assessment of the fisheries authority in Jamaica

The Fisheries Division of Jamaica was recently reinstated as the National Fisheries Authority (NFA) under the new Fisheries Act (2018). The NFA is the primary fisheries management authority in Jamaica with responsibility for the development of the fisheries and aquaculture sectors.

The roles of the organisation include, but are not limited to, conservation of fisheries resources; assessments of aquaculture and fisheries; data collection and analysis; ensuring viability of the aquatic ecosystems; management of rights, quotas and other fisheries management and control interventions; prevention and control of illegal, unreported and unregulated fishing IUU fishing; development and review of fisheries management plans; management of licenses and permits; establishment and regulation of zones for fishing and aquaculture and public education of fisheries matters.

The NFA is also governed by the mission and core values of MICAF. The mission of the ministry is “to create an enabling environment which grows and sustains industries in agriculture, fisheries, manufacturing and service sectors; strengthen national quality infrastructure; and ensure food and nutrition security, food safety and consumer protection”⁶⁰. One of the core values is *Stewardship* where the role the ministry itself plays a steward to and enabler of sustainable development in the agriculture, fisheries, manufacturing and service sectors and the role of partnership and collaboration with stakeholders.

Table 10.1 provides a synthesis of the organisational assessment survey findings for the National Fisheries Authority of Jamaica found in Appendix 13.3 and recommendations for addressing gaps related in the four capacity areas evaluated. It gives a closer look at the operations of the NFA and the capability of staff and the resources they have to carry out the mandate of the agency.

⁶⁰ <https://www.micaf.gov.jm/content/ministry>

Each capacity area is also given an overall ranking based on the findings using a traffic light rating system, where:




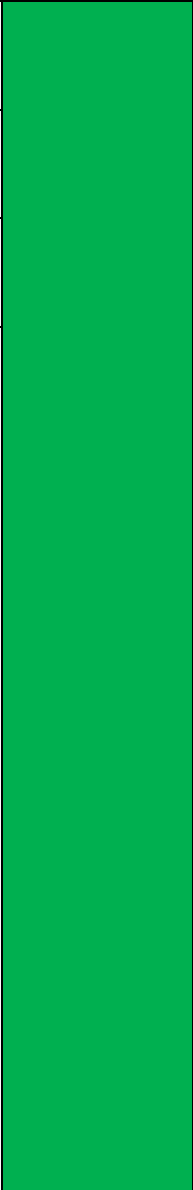
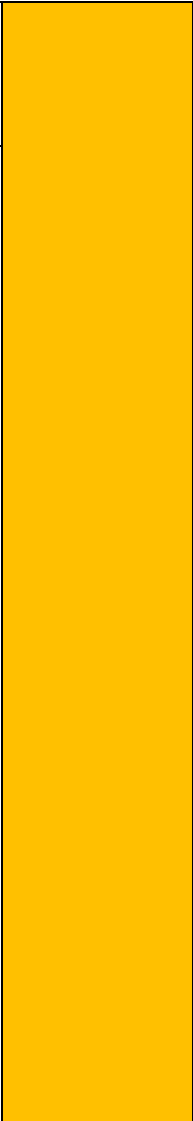
	Indicates that the agency is effectively supporting ecosystem stewardship by fisherfolk and their organisations in the capacity area, with non-critical gaps to be addressed
	Indicates that the agency is adequately supporting ecosystem stewardship by fisherfolk and their organisations in the capacity area, but there are some critical gaps to be addressed
	Indicates that the agency factor is not adequately supporting ecosystem stewardship by fisherfolk and their organisations in the capacity area and there are critical gaps to be addressed

Table 10.1: Organisational assessment for the national fisheries authority of Jamaica

Section	Evaluation statement	Response provided by agency	Overall ranking for section based on responses	Gaps/Areas for strengthening
Vision, Mandate and Culture	Organisation has a vision statement that is supportive of /promotes ecosystem stewardship by fisherfolk	Yes		<ul style="list-style-type: none"> EAF may not be mainstreamed in the culture of the organisation given that the legislation is recent, and actions are still being implemented.
	Organisation's mandate support ecosystem stewardship by fisherfolk	Yes		
	<p>Explanatory Notes provided by agency:</p> <ul style="list-style-type: none"> The organisation's vision statement indicates that the it will promote sustainable and viable capture fisheries and aquaculture industries. The organisation is guided by the new Fisheries Act (2018) which includes as a guiding principle that, to the extent practicable, stakeholder participation in the management of fishery and aquaculture resources shall be promoted. Core values/beliefs that the organisation identifies as its culture are: <ul style="list-style-type: none"> ecosystem stewardship by fisherfolk is important for sustainable use of fisheries and marine resources fisherfolk can be effective ecosystem stewards fisherfolk should be included in decisions made about how fisheries and marine resources are managed values local and/or traditional knowledge held by fisherfolk 			
Practices	Organisation has a clear process for including opinions of fisherfolk in decisions made about fisheries and marine resources	Yes		<ul style="list-style-type: none"> The fisherfolk on the National Fisheries Advisory Council (NFAC) are usually appointed as an

<p>Organisation regularly and systematically includes fisherfolk’s input in decisions about how fisheries and marine resources are managed</p>	<p>Yes</p>		<p>individual and may not necessarily represent all the needs of fisherfolk at large. Other mechanisms for fisherfolk to share their opinions on decisions and to regularly input in the decision-making needs to be strengthened or developed.</p> <ul style="list-style-type: none"> • The NFA does not have a dedicated website to share, store and access information, documents or data, though there is a webpage as part of the ministry’s website. Although there are other media by which information is shared, it is unclear if the NFA has a strategic communications strategy. • The communication strategy/organisation does not highlight fisherfolk advocacy and ecosystem stewardship. • Due to the size of Jamaica and the number of landing sites, formal or informal, it may be difficult for the NFA to collaborate with all fisherfolk or fishing communities, apart from those around fish sanctuaries or MPAs and the JFCU membership.
<p>Organisation regularly partners/collaborates with fisherfolk and their organisations for fisheries management initiatives</p>	<p>Yes</p>		
<p>Organisation regularly facilitates collaboration/partnerships between fisherfolk and other fisheries and marine stakeholders</p>	<p>Yes</p>		
<p>Explanatory notes provided by agency:</p> <ul style="list-style-type: none"> • The NFA has a clear process for inclusion of fisherfolk opinions through the establishment of a National Fisheries Advisory Council by the new Fisheries Act (2018) with sector stakeholders including representation from small-scale and industrial fishers. The Council is a mechanism whereby fishers and other stakeholders can consult, discuss and present their views on policy and resource management issues to policy makers. • Fisherfolk pinions are regularly and systematically included in decisions about how fisheries and marine resources are managed through the NFAC mentioned above. • Examples of activities where the NFA partnered and collaborated with fisherfolk include Eco-Reef Planting, SFCA, coral gardening and conch and lobster fisheries management. • Examples of activities where partnership and collaboration were facilitated by the NFA between fisherfolk and other stakeholders include: <ul style="list-style-type: none"> ○ Marine Police - conducting safety at sea training ○ Coast Guard – monitoring and enforcement of the lobster and conch close seasons ○ Jamaica Environment Trust (JET) - Better Beach Management Training 			

	○ Yamaha Engines – conducting of engine maintenance training		
Knowledge and Skills	Technical staff have knowledge of EAF	Yes	<ul style="list-style-type: none"> • The NFA has limited ability to assist/provide training in organisational development and planning of fisherfolk organisations and other associated skills. • There is also limited knowledge among staff on how fisherfolk organisations operate and the internal issues they face. A greater understanding of the context, socio-economic, cultural and ecological in which they operate, is needed. • Staff have limited training in fundraising and participatory processes to assist fisherfolk. • Staff should have equal opportunities for continually improving their skillsets.
	Technical staff have specialist knowledge on ecosystems, their functions and ecosystem changes	Yes	
	Technical staff understand socio-economic context of fisheries and marine resource use by fisherfolk and other stakeholders	Yes	
	Technical staff has the skills to conduct socio-economic assessments	Yes	
	Technical staff have knowledge of aquaculture and other alternative or complementary livelihood options for which fisherfolk may be well suited	Yes	
	Technical staff have knowledge of how fisherfolk organisations function including key challenges that they may face and how they can be supported to resolve them	Somewhat	
	Organisation has the capacity to provide training for fisherfolk in different technical areas and organisational strengthening (these may include soft skills such as facilitation, development of training material, etc.)	No	
	Technical staff has the skills to assist fisherfolk with mobilising funding for ecosystem stewardship activities and initiatives	Yes	
	Technical staff has skills in participatory approaches (e.g. participatory monitoring and evaluation, participatory planning, participatory management etc.)	Yes	
	Technical staff has communication skills needed to effectively communicate with a range of stakeholders including fisherfolk	Yes	

	<p>Organisation provides or accesses training and other kinds of capacity building for staff to regularly improve their technical knowledge and skills</p>	<p>Yes</p>		
	<p>Explanatory notes provided by agency:</p> <ul style="list-style-type: none"> • Staff gained knowledge of EAF through postgraduate training and the implementation of projects and activities intended to encourage and integrate EAF. • Technical staff have special knowledge on ecosystems, their functions and ecosystem changes through training in natural sciences. • Technical staff are skilled in conducting socio-economic assessments, but more training is welcomed. • Technical staff have been promoting alternative livelihoods options to fisherfolk such as coral reef gardening, aquaculture and mariculture (such as oyster culture) • Not all technical staff aware of how fisherfolk organisations function, but most are aware of key challenges they may face and how they can be supported to resolve them. They work with fisherfolk to address some of these challenges through the development of projects and by encouraging participatory learning and action. • Although staff has skills in mobilising funding for ecosystem stewardship activity, more training is needed for proposal writing and project development. • Staff do have the skills for facilitate participatory processes and approaches, but the number of trained persons is inadequate. <p>Staff participate in various capacity building and training such as data analysis, GIS mapping and ghost fishing. The NFA staff is always trying to upgrade themselves in different areas of study.</p>			

Resources	Organisation provides funding assistance to fisherfolk to support ecosystem stewardship activities or initiatives	Yes		<ul style="list-style-type: none"> • The organisation lacks materials, equipment and technology that can be shared with fisherfolk to support ecosystem stewardship. • There is no dedicated website for fishers to access information, data and other necessary information. • The organisation facilitates access to tools, methods and good practices outside of the organisation. Staff at the NFA should have access to and knowledge of these.
	Organisation provides materials, equipment or technology to fisherfolk to support ecosystem stewardship activities or initiatives	No		
	Organisation has access to tools, methods and good practices that can be used to support fisherfolk with ecosystem stewardship activities and initiatives	Yes		
	Organisation provides access to or assists fisherfolk organisation with accessing networks or resources outside of itself (such as technical experts, funding, projects, etc.)	Yes		
	Organisation has a dedicated website which can be used to share information and resources on ecosystem stewardship practices with fisherfolk	No		
	Explanatory notes provided by agency: <ul style="list-style-type: none"> • Funding assistance is provided to local community organisations to monitor and manage fish sanctuaries through specially developed fisheries management and development. • Tools, methods and good practices in supporting fisherfolk with undertaking ecosystem stewardship through networking with other organisations to acquire the necessary resources. • The NFA assists fisherfolk in accessing networks and resources outside of itself by informing them of funding opportunities as they become available and to technical assistance when needed. • The NFA does not have a dedicated website but has a Facebook and Instagram page which it uses to share 			

	<p>information. They also share updates through WhatsApp groups.</p> <p>The organisation also has trained social scientist on board dedicated to assisting fisherfolk in building their capacity in all areas of fisheries governance and successful group formation.</p>		
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11 Enabling and constraining factors and recommendations for strengthening fisheries institution to support ecosystem stewardship by fisherfolk

Table 11.1 set out some of the key enabling and constraining factors based on the findings from the institutional analysis and organisational assessment, it also provides recommendations to improve strengthening of the fisheries institution in Jamaica to better support fisheries ecosystem stewardship by fisherfolk and their organisations. Enabling and constraining factors and recommendations are presented below under the categories of:

- Policy, legal and planning context for ecosystem stewardship
- Mechanisms for fisherfolk participation in decision-making
- Support and resources available to fisherfolk and their organisations for ecosystem stewardship
- Partnerships and networks for ecosystem stewardship
- Communication of information on sustainable practices for fisheries resources use

Gaps and areas for strengthening the organisational capacity of the NFA to support ecosystem stewardship by fisherfolk are presented in Table 10.1.

Table 11.1: Summary of Enabling Factors, Gaps and Recommendations for strengthening the fisheries institution to support ecosystem stewardship by fisherfolk

Area	Enabling factors	Constraining factors	Recommendations
<p>Policy, legal and planning context for ecosystem stewardship</p>	<ul style="list-style-type: none"> • The new Fisheries Act (2018) is fairly comprehensive and includes aspects of ecosystem well-being, socio-economic well-being and good governance. • This legislation is also supported by other fisheries-related laws, plans and policies, which also, to some extent or another, address sustainable fisheries management and recognise the importance of inclusion of fisherfolk. • There is legislation that regulates the establishment of MPAs and fish sanctuaries, with scope for fisherfolk to be assist in the management. 	<ul style="list-style-type: none"> • There was limited knowledge of the laws, plan and polices by stakeholders and how they overlap with mandates of other agencies. • Although there are references to collaboration with fisherfolk, there is no explicit mention of fisherfolk, primary or national organisation, for co-management and inclusion in decision-making systems. • Ecosystem well-being is well addressed, but socio-economic well-being and local ownership has less focus. • The legislation of fairly new and directives within it are still being rolled out, but there is no clear indication of timelines or a framework for monitoring and evaluating the interventions implemented. 	<ul style="list-style-type: none"> • It should be made mandatory and stated for fisherfolk, preferably the national fisherfolk organisation (Jamaican Fishermen’s Co-operative Union (JFCU)) and primary fisherfolk organisations, be represented on the National Fisheries Advisory Council (NFAC) and other advisory and decision-making mechanisms tasked with management of coastal and marine resources. • There should be knowledge sharing and effective communication of laws, policies and plans to staff at NFA, other key agencies and fisherfolk in appropriate formats. This can be done through the development of a community strategy which can provide recommendations for targeted information packets for the various stakeholders. • Future laws, policies and plans should have equal focus on ecosystem well-being, socio-economic well-being and good governance. This can be ensured through input from multi-disciplinary experts/teams, which may include persons with economic, health and humanities backgrounds. The transdisciplinary approach can be sued to analyse issues and develop solutions.

			<ul style="list-style-type: none"> • Develop a monitoring and evaluation framework for continuous review of the implementation process and outputs.
<p>Mechanisms for fisherfolk participation in decision-making</p>	<ul style="list-style-type: none"> • There are at least three NICs in which fisherfolk can potentially be members, to advise on fisheries management and development decision and to actively participate in resource co-management. These NICS are formalised through supporting legislation. • Umbrella organisations like the JFCU can also act as a decision-making and advisory body. 	<ul style="list-style-type: none"> • Although there are references to collaboration with fisherfolk, there is no explicit mention of fisherfolk, primary or national organisation, for co-management and inclusion in decision-making systems. • The JFCU has a small number of member organisations and only represent co-operatives presently. As a result, they may not necessarily be able to represent the concerns of all fisherfolk, even though they sit on boards, are members of networks like CNFO and represent Jamaica fisherfolk in projects and initiatives. • Fisherfolk are perceived as having low decision-making power in the greater fisheries institution. • There is no organisation to represent the interests of aquaculture or mariculture farmers, and no mention of their inclusion in decision-making mechanisms. 	<ul style="list-style-type: none"> • It should be made mandatory and stated for fisherfolk, preferably the national fisherfolk organisation (JFCU) and primary fisherfolk organisations, be represented on the NFAC and other advisory and decision-making mechanisms tasked with management of coastal and marine resources. • The scope and membership of the JFCU should be expanded to include more co-operatives and other types of fisherfolk organisations such as friendly societies and associations. • There should be organisational development and formalisation of fisherfolk groups (including those outside of the JFCUs membership). These groups should receive training and capacity development in advocacy, communication, networking and collaboration to enable them to collectively come together with a unified voice. More organised a successful group have a greater chance of influencing the fisheries institutions and having their issues brought to the national agenda. • JCFU's scope can also be expanded to include an arm for aquaculture and mariculture farmers with assistance

			from the Aquaculture Unit of the NFA. Alternatively, a separate organisation can be formed to represent the interests of the aquaculture sub-sector.
Support and resources available to fisherfolk and their organisations for ecosystem stewardship	<ul style="list-style-type: none"> • Civil society plays a significant role in support and resources for fisherfolk. • The Aquaculture Unit provides substantial support for aquaculture and mariculture farmers. • Large pots of funding are made available to countries through partnerships with international donors, but fisherfolk can also access direct funding through small grant programmes. • Fisherfolk, through the NFA, NEPA and other government agencies or civil society organisations received training and capacity development opportunities, including alternative livelihoods. 	<ul style="list-style-type: none"> • There is little mention of technology use and access for fisherfolk. • There was no mention of training and development of the post-harvest sector. • As many groups are not members of the JFCU or are informal, they may be unable to access funding, whether indirectly through projects and programmes or through small grants. They may also lack the capacity to develop proposals to go after funding themselves and may lack internal organisation and systems which are sometimes required for accessing funds- like a board, banks accounts etc. • Fisherfolk groups may be facing challenges that require large investment and funding, which they cannot access, such as infrastructure, which also limit their ability to advocate for their issues and needs, as their focus is on their livelihoods and survival. • FFOs need training in organisational development, 	<ul style="list-style-type: none"> • There should be more emphasis on the use technology in the sector and the further innovation, to increase efficiency, quality and encourage development of the industry. • There should be more training and development in the post-harvest sector for value added products. This can drive “buy local initiatives” which is particularly important given the high import is seafood products in Jamaica and the current context of COVID-19. • There should be organisational development and formalisation of fisherfolk groups (including those outside of the JFCUs membership). These groups should receive training and capacity development in advocacy, communication, networking and collaboration to enable them to collectively come together with a unified voice. • A situation analysis and needs assessment should be carried out for the industry, to understand the context in which different groups (formal and informal) operate in and development more informed interventions. It is important to note that group or fishing

		<p>administration and fundraising and ecosystem stewardship.</p> <ul style="list-style-type: none"> • Fisherfolk who do not belong to formal groups, do not belong to a community with an MPA or fish sanctuary or belong to the membership of the NFA, may not have equal access to training and resources, as those who are. 	<p>communities may face similar problems but the solution may need to fit their particular nuances, that is, a “one-size-fits all” approach would not work because of various level of capacity, knowledge, interest, social capital etc.</p> <ul style="list-style-type: none"> • SocMon⁶¹ methodology can be used to collect more socio-economic data on the industry and actors in the fishery value chain.
Partnerships and networks for ecosystem stewardship	<ul style="list-style-type: none"> • There is a strong partnership between the JFCU and the NFA. • There is also a strong partnership between the NFA and NEPA. • Leading CSO, like environmental NGOs have strong partnerships and collaborate with other CSOs, particularly smaller community groups and fisherfolk groups. • Some partnerships between government agencies and CSOs are formalised through MoUs and MoAs. There are also MoUs with private sector contributors. 	<ul style="list-style-type: none"> • Though partnerships between the NFA and FFOs and NEPA exist, there is no formal arrangement for this partnership. • It is unclear the relationship between the NFA and other fisherfolk organisations, who are not members of JFCU. This is similar for JFCU and non-members. • There appears to be limited inter-organisation collaboration among fisherfolk organisations. • Again, the JFCU’s network and social capital does not extend or is not shared with all fisherfolk groups, because limited membership. • Due to the lack of organisation in FFOs or some groups being 	<ul style="list-style-type: none"> • Further exploration and analysis of the fisheries institution to identify strategic partnerships within and outside of the government sector can be useful for holistic development of the sector and for the NFA to carry out their mandate more effectively and efficiently. • Development of extension services programme of the NFA for each region, which can facilitate improved relationship between extension officers and local primary fisherfolk organisations. This can be done in collaboration with parish councils and should also be aligned to the national development agenda (as set out by Vision 2030). • Improved organisational capacity of FFOs and training in networking and fostering of partnerships.

⁶¹ SocMon or socioeconomic monitoring is an initiative aimed at helping coastal managers better understand and incorporate the socioeconomic context into coastal management programs. <https://www.socmon.org/>

	<ul style="list-style-type: none"> • There is are active national and regional networks which fisherfolk are involved in, usually represented by the JFCU or fisherfolk organisations which co-manage fish sanctuaries. 	<p>informal, they are unable to collaborate with other groups, build their network with other fishing groups around Jamaica, and are also unaware of how to leverage these relationships. This also included the private sector.</p> <ul style="list-style-type: none"> • There is limited collaboration between fisherfolk and government agencies beyond marine protected area management, monitoring and enforcement, prevention and deterrence of IUU fishing and public education and awareness activities. • There is limited engagement of the private sector, though they were identified as some of the most powerful influencers of the fisheries institution. • There is limited collaboration between the NFA and other government agencies such as the Department of Cooperatives and Friendly Societies, the Ministry of Health and the Social Development Commission. 	<ul style="list-style-type: none"> • Expanding the number of organisations involved in the fisherfolk retreat facilitated by the JFCU to cultivate more partnerships and widen network beyond membership. • The JFCU, through the fisherfolk retreat, or otherwise, can also assist in facilitating building of relationships with aquaculture and mariculture fishers, and marine capture fisherfolk. This particularly important for developing aquaculture as an alternative livelihood option for fisherfolk. • Fisherfolk should have a more active role in monitoring and enforcement, IUU fishing prevention and public education, which can be facilitated by the NFA through special programmes developed in collaboration with Marine Police, Coast Guard, NEPA and national civil society organisation involved in education and awareness campaigns. • There more engagement of the private sector by civil society organisations and government agencies, to advocate for their involvement as part of their corporate social responsibility. Organisations like the JFCU can play an important role in broaching possible corporate partners, on behalf of fisherfolk. • There should be greater collaboration of the Department of Cooperatives and
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			<p>Friendly Societies, the Ministry of Health and the Social Development Commission through projects, formal arrangements like MoUs and through their inclusion in multi-sectoral committees or NICs addressing fisheries management. This is similar for Marine Police and the Coast Guard.</p> <ul style="list-style-type: none"> • The JFCU should also develop relationships with these government agencies.
<p>Communication of information on sustainable practices for fisheries resources use</p>	<ul style="list-style-type: none"> • The NFA communicates frequently with stakeholders and provide them with information through various media. • The NFA is guided by the government communication policy and has a communications unit for wider information sharing. • The NFA also communicates with fisherfolk through means that are most accessible to them, that is, via phone call or WhatsApp. • The NFA is usually the first organisation fisherfolk will go to if they require information about anything related to their livelihood, and the NFA will then direct them to other 	<ul style="list-style-type: none"> • The NFA does not have dedicated website for information and data sharing. Developments are shared mainly through the Instagram page, an application which many fisherfolk may not have or use. • There is no formal communication strategy for the NFA. • Fisherfolk are often unaware of where to get information or who to go to. Some may have limited access to internet or lack the skills to use it to retrieve information online. • This low capacity to engage through social media platforms also limits the fisherfolk organisations ability to share about their livelihood, their stewardships activities and 	<ul style="list-style-type: none"> • Development of a website for the NFA covering information covering all aspect of the industry- harvest and post-harvest sectors; marine capture and aquaculture fisheries; small-scale and industrial fisheries. • Develop through consultations with key stakeholders a communication strategy and plan for the NFA. This can be facilitated by an environmental/science communication expert. • Fisherfolk and fisherfolk organisations should be made aware of the steps involved in accessing information, who they should go to and what they need to have (in the instance of permits, licenses etc.). This can be done through television announcements, radio, posters which can be posted at landing sites or shared on WhatsApp and social media. Information packs can also be created for fisherfolk organisations,

	<p>government agencies if needed.</p> <ul style="list-style-type: none"> • The NFA and MICAF, as well as key CSOs have Facebook and Instagram pages, where information is shared on projects and initiatives involving fisheries, fisherfolk and ecosystem stewardship activities. • The JFCU has a dedicated website. 	<p>projects they may be undertaking and limits their ability to advocate.</p> <ul style="list-style-type: none"> • The JFCU does not have a communication plan for engaging with their stakeholder and the wider public and this may be the case at the primary fisherfolk organistaion level. The also do not have any social media pages for engaging fisherfolk or the wider public. 	<p>which they can share and discuss during meetings.</p> <ul style="list-style-type: none"> • Information packs can be developed for other topics and initiatives as well and can be distributed to fisherfolk organisation leaders to share with their membership. • Training in communications, research and use of ICT tools for fisherfolk and FFOs, including the JFCU. Fisherfolk families can also be trained in the use of ICT and accessing information online, as children and/or spouses of fisherfolk may be more inclined to using it. • Development of a communications plan for the JFCU and development of social media pages for wider reach and sharing of information on projects, ecosystem stewardship and sustainable use of fisheries resources.
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13 Appendices

13.1 Definitions of conceptual components for the institutional analysis framework

Conceptual component	Worksheet
A. Policies. Laws and plans	<p>This component focuses on the existing legal framework within the target country to address and guide fisheries management and planning. It involves the formal governance of a nation's fisheries management which can either empower or constrain the ability to integrate <i>ecosystem stewardship</i>⁶² practises within small-scale fisheries. The assessment of this component also involves regulations, rules and management plans that resulted from the policies and legislation identified. This can be used as an indicator of fisheries-related state agencies capacity to support fishing industry stewardship. For example, to determine whether legislation is adequate as Stewardship is an evolving concept for management of natural resources such as fisheries. Policy and legislation need to be assessed in order to identify the barriers at the institutional level that may hinder the promotion of ecosystem stewardship. This component is divided into:</p> <p>A.1 Fisheries Policy A.2 Fisheries Management Plan A.3 Fisheries Legislation</p>
B. Advisory and/or decision-making mechanisms	<p>Institutional arrangements - examine the institutional frameworks and mechanisms established for governing fisheries management and fostering ecosystem stewardship. This includes the establishment of multi-stakeholder committees or similar structures, which play an advisory or decision-making role in resource management. The relationship between these mechanisms and the agencies/stakeholders involved will also be analysed.</p>
C. Fisheries-related Organisations	<p>This conceptual component will map the fisheries-related state agencies as well as other fisheries-related organisations which play a key role in the fishery-related institutional arrangements of each country. This includes the core fisheries management organisations such as Fisheries Divisions/Departments/Authorities/Agencies and other associated departments, such as Environment, Coastal Management, Agriculture, Cooperatives, Markets and others. It will also include non-state organisations such as fisherfolk organisations (FFOs), civil society organisation (CSOs), private sector and academia, where relevant. Given that the level of involvement in the fisheries sector will differ within and among project countries. This section will investigate agencies roles and particularly their mandated role in fisheries management. Furthermore, an organisational capacity assessment will be carried out to examine the core fisheries state agencies' current ability to support stewardship activity.</p> <p>Organisational Capacity Assessment:</p>

⁶² *Ecosystem Stewardship* is understood as "a strategy to respond to and shape social-ecological systems under conditions of uncertainty and change to sustain the supply and opportunities for use of ecosystem services to support human well-being".

	<p>Under this key conceptual component, core capacities¹ of fisheries-related state agencies capacity to support and enable ecosystem stewardship will be assessed. The capacities to be examined are:</p> <ol style="list-style-type: none"> I. Vision, mandate, culture- this section looks at the organisation’s visions and goals, its operational culture and its internal governance mechanisms and how they promote ecosystem stewardship. It is reflected in the everyday organisational culture, how they communicate with fisherfolk and their organisations and the relationships they build. II. Knowledge and skills- this focuses on assessing the fisheries-related state agency’s capacity to provide fisherfolk and fisherfolk organisations (FFOs) with the relevant knowledge and skills support required for improved stewardship actions. This section assesses the capacity in technical knowledge, skills and ability related to ecosystem stewardship. III. Resources- assesses the capacity, availability, and efficient access to resources related to organisations– in particular the resource support made available to FFOs from the state agency, as well as resources provided for execution of any ecosystem stewardship actions and practices. IV. Partnerships - is an assessment of the organisations capacity to foster partnerships and link activities, plans, projects and initiatives which involves ecosystem stewardship. It will look at their ability to build networks, and assist in building the networks of fisherfolk organisations, as resource users and ecosystem stewards.
<p>D. Processes and practices</p>	<p>For this conceptual component, the operational procedures for fisheries-related state agencies will be examined more closely. The processes and practices will be assessed in three sub-components. These are:</p> <p>C.1 Promotion of good governance- This is determined by probing the inclusivity of the decision-making process in fisheries governance. The system of institution (i.e. the decision-making process applied) determines the relative success of the structural processes to a certain degree in institutional capacity for improved fisheries management that integrates ecosystem stewardship (i.e. levels of exclusion, discrimination). This also assesses organisations internal structures and systems ability to create an environment that encourages and facilitates stewardship. It includes the channels of communication for sharing or receiving information from fisherfolk, and transparent and accountable systems. This will also assess the structures and systems in places for clear communication, involvement and integration within and among fisheries-related state agencies.</p> <p>C.2 Collaborative management- This sub-component focuses on the extent of cooperative management that exists in practice between fisheries-related state agencies and small-scale fisheries groups such as FFOs, as well as fisherfolk individuals and the local communities. It also identifies the degree of stakeholder collaboration in management practises (government, private sector and civil society/local communities).</p>

	<p>C.3 Adaptive management This assesses the ability of the fisheries-related state agencies to budget, manage and implement activities, using internal structures and mechanisms which are flexible and adaptive to internal or external changes, changes in the resources, or changes in the resource users. This looks at the organisations ability to learn actively, develop practices and policies for promoting stewardship; and implement, monitor and evaluate plans, projects, programmes of work for actions or systems enabling stewardship.</p> <p>C.4 Communication This sub-component assesses the extent to which fisheries information providers in StewardFish project countries are using communication tools/channels to communicate with fisherfolk, as well as their capacity to use the tools/channels effectively. It includes the channels of communication for sharing or receiving information from fisherfolk, and transparent and accountable systems. This will also assess the structures and systems in places to for clear communication, involvement and integration within and among fisheries-related state agencies.</p>
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13.2 In-country contacts/participants

13.2.1 List of workshop participants

	Name	Organisation	Contact
	In-country participants		
1	Andrew Francis	Ministry of Foreign Affairs and Foreign Trade	Andrew.Francis@mfaft.gov.jm
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4	Farah Hansel	National Fisheries Authority	fkhsel@micaf.gov.jm
5	Francine White	Department of Co-operatives and Friendly Societies (DCFS)	Francine.White@dcfs.gov.jm
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20	Maren Headley	Caribbean Regional Fisheries Mechanism (CRFM) Secretariat	maren.headley@crfm.int
21	June Masters	Caribbean Regional Fisheries Mechanism (CRFM) Secretariat	june.masters@crfm.net
FAO Representative			
22	Terrence Phillips	Food and Agricultural Organisation (FAO) Sub-regional Office	Terrence.Phillips@fao.org

13.2.2 List of key informant interviewees and focus group participants

Key informant interviews were carried out subsequent to the national workshop with individuals recommended by the country focal point and identified by the researcher for additional information.

Key informants interviewed in Jamaica include:

- *Shellene Berry, Fisheries Officer, National Fisheries Authority*
- *Aquaculture Farmer, Hill Run, Spanish Town*
- *Bull Bay fisherfolk and representative of Food for the Poor (group interview)*

Focus group activity was carried out with the *New Forum Fishing Village Friendly Society*.

13.3 Institutional Analysis and Organisational Assessment Validation Workshop Agenda



Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-Scale Fisheries (StewardFish) project

Institutional Analysis and Organisational Assessment Workshop

January 28- 29, 2020

Farmers Training Centre
Twicknam Park, Spanish Town, St. Catherine

Draft Agenda

Background

The Institutional Analysis and Organisational Assessment workshop is an activity under the StewardFish project. StewardFish aims 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. This action will contribute to Output 1.2.1 “State agency implementation gaps assessed regarding support for fisherfolk organisations and their role in stewardship” and Outcome 1.2 “Fisheries-related state agencies have capacity to support fishing industry stewardship” of StewardFish. StewardFish is funded by the Global Environment Facility (GEF) and is being implemented by the United Nations Food and Agriculture Organization (FAO). Please see project summary handout to learn more about StewardFish and the Caribbean Natural Resources Institute’s (CANARI) role as a regional co-executing partner.

Participants

Workshop participants will be representatives of fisheries-related state agencies and civil society organisations, academia and intergovernmental organisations with a role or interest in sustainable fisheries development in Jamaica.

Facilitators

The workshop will be facilitated by CANARI and the Caribbean Regional Fisheries Mechanism Secretariat (CRFM Sec.) which is also a regional co-executing partner of the StewardFish project.

Objectives

The objectives of the workshop are to:

1. Present preliminary findings of the institutional analysis and organisational assessment of key fisheries-related state agencies to assess gaps in support for fisherfolk organisations and their role in stewardship.
2. Validate, refine and receive input on the findings of the institutional analysis and organisational assessment for inclusion in country report.

-
3. Develop recommendations for improving fisheries-related state agencies capacity to promote, facilitate and support ecosystem stewardship of fisherfolk organisations, for implementation by the CRFM Sec.

Day 1 Tuesday 28 January, 2020

Time	Topics
8:30	Welcome and introductions
9:00	Overview of StewardFish
9:15	Overview of the institutional analysis workshop
9:30	Understanding the conceptual approach for the institutional analysis
10:30	Break
11:00	Exploring the policy and legal context for ecosystem stewardship in Jamaica
12:30	Lunch
1:30	Exploring mechanisms for fisherfolk participation in decision-making
3:00	Understanding fisheries-related organisations in the fisheries institution in Jamaica (Part 1)
4:30	End of Day 1

Day 2 Wednesday 29 January, 2020

Time	Topics
8:30	Re-cap of Day 1
9:00	Understanding fisheries-related organisations in the fisheries institution in Jamaica (Part 2)
10:30	Break
11:00	Support and resources for ecosystem stewardship by fisherfolk and their organisations
12:00	Communicating information on sustainable practices for the use of fisheries resources
12:30	Lunch
1:30	Overview of CRFM Secretariat's role in StewardFish
1:45	Validation of gaps identified in: the policy and legal context for ecosystem stewardship in Jamaica; the mechanisms for fisherfolk participation in decision-making; and the fisheries-related organisations in Jamaica
2:30	Recommended actions for addressing gaps
4:30	End

StewardFish is being funded by the Global Environment Facility (GEF), implemented by the Food & Agriculture Organisation of the United Nations (FAO) Sub-Regional Office for Latin America and the Caribbean, and executed by five (5) regional partners - Caribbean Natural Resources Institute (CANARI), Centre for Resource Management and Environmental Studies (UWI-CERMES), Caribbean ICT Research Programme (UWI-CIRP), Caribbean Network of Fisherfolk Organizations (CNFO), and the Caribbean Regional Fisheries Mechanism Secretariat (CRFM Sec.) - in Antigua and Barbuda, Barbados, Belize, Guyana, Jamaica, St. Lucia and St. Vincent and the Grenadines



Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-Scale Fisheries project (StewardFish)

Organisational Capacity Assessment Survey for National Fisheries Authorities

StewardFish aims 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.

As part of the project, the Caribbean Natural Resources Institute (CANARI) is conducting **institutional analyses** and **organisational assessments** with key fisheries-related state agencies in each of the seven StewardFish project countries to identify gaps and develop recommendations for enhancing the capacity of fisheries-related state agencies to promote, facilitate and support ecosystem stewardship of fisherfolk organisations.

This is a key activity under Output 1.2.1 “State agency implementation gaps assessed regarding support for fisherfolk organisations and their role in stewardship” that will contribute to Outcome 1.2 “Fisheries-related state agencies have capacity to support fishing industry stewardship” of the StewardFish project. CANARI has already begun conducting desk studies, interviews and workshops to get information and engage a range of key stakeholders for the institutional analyses being conducted in each of the project countries.

While the institutional analyses look broadly at the fisheries institutionⁱ in each country, the organisational assessments focus specifically on their national fisheries authorities as the primary unit of analysis. This survey therefore seeks to do a rapid organisational assessment of the national fisheries authority in your country to assess its internal capacity to support ecosystem stewardship of fisherfolk and their organisations.

The survey has 28 questions and is organised into the following four sections that will examine organisational motivation and capacity to support ecosystem stewardship by fisherfolk organisations:

1. Vision, mandate and culture (*4 questions*)
2. Practices (*8 questions*)
3. Knowledge and skills (*11 questions*)
4. Resources (*5 questions*)

Questions are a mix of both closed and open-ended questions.

A glossary of key terms is provided.

The results of the survey will be synthesised and included on the country institutional analysis and organisational assessment reports being prepared by CANARI under the StewardFish project.

CANARI values your contribution to this key activity under StewardFish and looks forward to your responses.

If you have any questions or concerns, please email Neema Ramlogan, Technical Officer, CANARI at neema@canari.org and for more information, please visit the project webpage: <https://canari.org/stewardfish-project>.

How to complete this survey:

It is recommended that this survey be completed as part of a small focus group including relevant and knowledgeable staff members in the national fisheries authority in your country.

Where applicable, website links, supporting documents and other relevant resources can be shared with CANARI to support responses provided.

CANARI may conduct a brief follow up interview with the lead respondent to clarify responses and get additional information as needed.

Glossary

Ecosystem Approach to Fisheries (EAF)	EAF strives to balance diverse societal objectives, by taking into account the knowledge and uncertainties about biotic, abiotic and human components of ecosystems and their interactions and applying an integrated approach to fisheries within ecologically meaningful boundaries. The core principles of EAF are human well-being, ecological well-being and good governance (FAO).
Ecosystem stewardship	The actions taken by individuals, groups or networks of actors, with various motivations and levels of capacity, to protect, care for or responsibly use the environment in pursuit of environmental and/or social outcomes in diverse social–ecological contexts (Bennett et. Al, 2018).
Institution	The set of arrangements for making decisions about the development, management, and use of a natural resource, including the stakeholders, as well as, the laws, formal and informal policies, plans and structures that guide how these stakeholders interact with each other and with the resources (CANARI).
Participatory approach	Participation in the context of natural resource management can be described as a process that: facilitates dialogue among all actors; mobilises and validates popular knowledge and skills; encourages communities and their institutions to manage and control resources; seeks to achieve sustainability,

economic equity and social justice; and maintains cultural integrity ([Renard and Valdés-Pizzini 1994](#)).

Respondent information

Country:	Jamaica
Name of national fisheries authority:	National Fisheries Authority
Name of lead respondent:	Shellene Berry
Position of lead respondent:	Fisheries Officer
Email address of lead respondent:	sberry@micaf.gov.jm
Contact number of lead respondent:	(876) 577-1558

Name and contact information of other persons who contributed to completing this survey

Name	Position in organisation	Email address
Mr. Stephen Smikle	Director of Marine Branch	sgsmikle@micaf.gov.jm

Section 1: Vision, Mandate and Culture

This section looks at the organisation's *motivation* to support ecosystem stewardship by fisherfolk and fisherfolk organisations. It is reflected in the organisation's vision, mandate and culture.

1. Does the organisation have a vision statement that is supportive of /promotes ecosystem stewardship by fisherfolk? Briefly explain your answer.

Yes. The Vision Statement indicates that the organisation will promote sustainable and viable capture fisheries and aquaculture industries.

2. Does the organisation's mandate support ecosystem stewardship by fisherfolk? Briefly explain your answer.

Yes. The new Fisheries Act of 2018 includes as a guiding principle that, to the extent practicable, stakeholder participation in the management of fishery and aquaculture resources shall be promoted.

3. Which of the following core values/beliefs reflect the culture of the organisation?

Check/highlight all that apply.

- The organisation believes that ecosystem stewardship by fisherfolk is important for sustainable use of fisheries and marine resources.**
- The organisation believes that ecosystem stewardship by fisherfolk is not important for sustainable use of fisheries and marine resources.
- The organisation believes that fisherfolk can be effective ecosystem stewards.**
- The organisation believes that fisherfolk are not effective ecosystem stewards.
- The organisation believes that fisherfolk should be included in decisions made about how fisheries and marine resources are managed.**
- The organisation believes that fisherfolk input into decisions about how fisheries and marine resources are managed is not important.
- The organisation values local and/or traditional knowledge held by fisherfolk.**
- The organisation believes in the ecosystem approach to fisheries (EAF).

4. Do you have any additional information to share about your organisation's vision, mandate and culture as it relates to supporting ecosystem stewardship by fisherfolk and their organisations? You can also use this section to clarify any of the responses provided for question S1.3.

No

Section 2: Practices

This section looks at the how the organisation's core values and beliefs are translated into actions (practices). It focuses in particular on the actions that support ecosystem stewardship by fisherfolk and fisherfolk organisations in the following areas: decision-making; collaboration and partnerships; and information collection and sharing.

Decision-making - Please provide answers to the following questions about your organisation's decision-making practices.

1. Does the organisation **have a clear process** for including the opinions of fisherfolk in decisions made about fisheries and marine resources? Briefly explain your answer.

Yes. The new Fisheries Act of 2018 established a National Fisheries Advisory Council with sector stakeholders including representation from small scale and commercial fishers. The Council is the mechanism whereby fishers and other representatives can consult, discuss and present their views on policy and resource management issues to the policy makers.

2. Does the organisation regularly and systematically include fisherfolk input in decisions about how fisheries and marine resources are managed? Briefly explain your answer.

Yes. As above.

Collaboration and partnerships - Please provide answers to the following questions about your organisation's collaboration and partnership practices

3. Select which of the following statements are true for the organisation. *Check/highlight all that apply.*
- **Fisherfolk generally view the organisation as a partner with whom they can collaborate on fisheries management (*participatory relationship*).**
 - **Fisherfolk generally view the organisation as an enforcer of fisheries management guidelines and regulations with whom they must comply (*top-down relationship*).**
 - The organisation regularly highlights sustainable use practices undertaken by fisherfolk.
 - **The organisation regularly highlights unsustainable use practices undertaken by fisherfolk.**
4. Does the organisation regularly partner/collaborate with fisherfolk and their organisations for fisheries management initiatives? If yes, please provide a recent of example.
- i. **Eco Reef Planting**
 - ii. **SFCA**
 - iii. **Coral Gardening**
 - iv. **Conch & Lobster Fisheries Management**
5. Does the organisation regularly facilitate collaboration/partnerships between fisherfolk and other fisheries and marine stakeholders? If, yes please provide a recent example.
- i. **Marine Police - Conducting Safety at Sea Training**
 - ii. **Coast Guard – Monitoring and Enforcement of the Lobster and Conch Close Seasons**
 - iii. **Jamaica Environment Trust (JET) – Example Better Beach Management Training**
 - iv. **Yamaja Engines – Conducting of Engine Maintenance Training**

Information collection and sharing – Please provide answers to the following question about your organisation's information collection and sharing practices.

6. Select which of the following statements are true for the organisation. *Check/highlight all that apply.*
- **The organisation collects local/traditional knowledge held by fisherfolk about fisheries and marine resources.**
 - The organisation does not collect local/traditional knowledge held by fisherfolk about fisheries and marine resources.
 - **The organisation uses local/traditional knowledge held by fisherfolk to inform management decisions about fisheries and marine resources.**
 - The organisation does not use local/traditional knowledge held by fisherfolk to inform management decisions about fisheries and marine resources.
 - **The organisation records best practices related to sustainable use and management of marine resources and shares this information regularly.**

-
- **The organisation provides information on sustainable fishing practices to fisherfolk in a manner that they can understand.**
 - The organisation does not provide information on sustainable fishing practices in a manner they can understand to fisherfolk.
 - **The organisation has a communication strategy to share the information with different stakeholders including fisherfolk.**
 - The organisation does not have a communication strategy to share the information with different stakeholders including fisherfolk.
 - **The organisation provides advice/guidance to fisherfolk for stewardship activities and initiatives.**
 - The organisation does not provide advice/guidance to fisherfolk for stewardship activities and initiatives.
7. How does the organisation share information with fisherfolk about sustainable use practices for fisheries and marine resources?

Through Focus Group Meeting, whatsapp, Social Media Platforms (eg. Instagram and Facebook), Posters, Radio and Television Advertisements, Community Town Criers

8. What has the organisation found to be the most effective way to share information with fisherfolk?

Face to face interaction works best

9. Do you have any additional information to share about your organisation's decision-making; collaboration and partnerships; and information collection and sharing practices as it relates to supporting ecosystem stewardship by fisherfolk and their organisations? You can also use this section to clarify any of the responses provided for questions S2.3 and S2.6.

No.

Section 3: Knowledge and Skills

This section looks at the organisation's capacity to support ecosystem stewardship by fisherfolk and fisherfolk organisations. It focuses in particular on the knowledge and skills held by technical staff (e.g. managers, researchers, policy development officers, field officers etc.).

1. Do technical staff have knowledge of the Ecosystem Approach to Fisheries (EAF)? Briefly explain your answer.

Yes. Through postgraduate training and implementation of projects and activities intended to encourage the ecosystem approach to fisheries.

2. Do technical staff have specialist knowledge on ecosystems, their functions and ecosystem changes? Briefly explain your answer.

Yes, Most Technical Staff are trained in the natural sciences

-
3. Do technical staff understand the socio-economic context of fisheries and marine resource use by fisherfolk and other stakeholders? Briefly explain your answer.

Yes.

4. Do technical staff have the skills to conduct socio-economic assessments? Briefly explain your answer.

Yes, Most Technical Staff have experience in carrying out an assessment. However, more training in socio-economic assessment would be welcomed

5. Do technical staff have knowledge of aquaculture and other alternative or complementary livelihood options for which fisherfolk may be well suited? Briefly explain your answer.

Yes. Technical staff have been promoting alternative livelihood options to fisherfolk such as coral reef gardening, aquaculture and mariculture (e.g., oysterculture).

6. Do technical staff have knowledge of how fisherfolk organisations function including key challenges that they may face and how they can be supported to resolve them? Briefly explain your answer. Briefly explain your answer.

Not all technical staff are aware of how fisherfolk organisations function. However, they are aware of key challenges that they may face and how they can be supported to resolve them. Some of the ways these challenges can be solved is through the writing of projects and encouraging participatory learning and action.

7. Does the organisation have the capacity to provide training for fisherfolk in different technical areas and organisational strengthening (these may include soft skills such as facilitation, development of training material, etc.)? Briefly explain your answer.

No.

8. Do technical staff have the skills to assist fisherfolk with mobilising funding for ecosystem stewardship activities and initiatives? Briefly explain your answer.

Yes, but Technical Staff also need more training in project writing.

9. Do technical staff have skills in participatory approaches (e.g. participatory monitoring and evaluation, participatory planning, participatory management etc.)? Briefly explain your answer

Yes. However the capacity is inadequate in terms of number of trained persons.

10. Do technical staff have communication skills needed to effectively communicate with a range of stakeholders including fisherfolk? Briefly explain your answer.

Yes

-
11. Does the organisation provide or access training and other kinds of capacity building for staff to regularly improve their technical knowledge and skills? Briefly explain your answer.

Yes. Staff are usually sent on various training course to build their capacity in areas of data analysis, Gis Mapping, Ghost Fishing.

12. Do you have any additional information to share about the knowledge and skills of your organisation's technical staff as it relates to supporting ecosystem stewardship by fisherfolk and their organisations?

Technical staff are always trying to upgrade themselves in different areas of study.

Section 4: Resources

This section looks at the organisation's capacity to support ecosystem stewardship by fisherfolk and fisherfolk organisations. It focuses in particular on the finance, equipment, materials, tools and methods that the organisation has access to for supporting fisherfolk with ecosystem stewardship activities and initiatives.

1. Does the organisation provide funding assistance to fisherfolk to support ecosystem stewardship activities or initiatives? Briefly explain your answer.

Yes, funding is provided to local community organisations to monitor and manage fish sanctuary activities through a specially developed Fisheries management and development.

2. Does the organisation provide materials, equipment or technology to fisherfolk to support ecosystem stewardship activities or initiatives? Briefly explain your answer.

No.

3. Does the organisation have access to tools, methods and good practices that can be used to support fisherfolk with ecosystem stewardship activities and initiatives? Briefly explain your answer.

Yes, networking can be done with other organizations in acquiring the necessary resources needed to disseminate to fisherfolk in support of ecosystem stewardship activities and initiatives.

4. Does the organisation provide access to or assist fisherfolk organisation with accessing networks or resources outside of itself (such as technical experts, funding, projects, etc.)? Briefly explain your answer.

Yes. Fisherfolk are made aware of any funding opportunity that becomes available and any technical assistance they may need whenever necessary.

5. Does the organisation have a dedicated website which can be used to share information and resources on ecosystem stewardship practices with fisherfolk? Briefly explain your answer.

No, however, there is a Facebook and intagram page. There are also fisherfolk whatsapp groups.

6. Do you have any additional information to share about your organisation's resources as it relates to supporting ecosystem stewardship by fisherfolk and their organisations?

The organization has a trained social scientist on board who is dedicated in helping fisherfolk build their capacity in all areas of fisheries governance and successive group formation.



Caribbean Natural Resources Institute

INSTITUTIONAL ANALYSIS AND ORGANISATIONAL ASSESSMENT OF FISHERIES-RELATED STATE AGENCIES FOR ENABLING ECOSYSTEM STEWARDSHIP IN THE FISHERIES SECTOR OF SAINT LUCIA

JUNE 2020



Cover photographs: St. Lucia coastline and view of Pitons (middle); boats docked at Micoud, water taxi boats moored close on a beach © Natalie Boodram

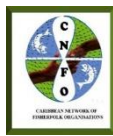
CARIBBEAN NATURAL RESOURCES INSTITUTE

INSTITUTIONAL ANALYSIS AND ORGANISATIONAL ASSESSMENT OF FISHERIES-RELATED STATE AGENCIES FOR ENABLING ECOSYSTEM STEWARDSHIP IN THE FISHERIES SECTOR OF SAINT LUCIA

JUNE 2020

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Disclaimer:

This publication has been produced by CANARI as an output of the StewardFish project. However, the views expressed herein are those of the authors, and can therefore in no way be taken to reflect the official opinions of the Department of Fisheries of the Ministry of Agriculture, Fisheries, Physical Planning, Natural Resources and Co-operatives in Saint Lucia, Global Environmental Facility, Food and Agriculture Organization of the United Nations or other co-executing partners of the StewardFish project.

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List of acronyms and abbreviations

ARIA	WRI's Adaptation: Rapid Institutional Analysis
CANARI	Caribbean Natural Resources Institute
CARICOM	Caribbean Community
CARIFICO	Caribbean Fisheries Co-Management Project
CBD	Convention on Biological Diversity
CNFO	Caribbean Network of Fisherfolk Organisations
CLME+ SAP	Strategic Action Programme for the Sustainable Management of the Shared Living Marine Resources of the Caribbean and North Brazil Shelf Large Marine Ecosystems
CRFM	Caribbean Regional Fisheries Mechanism
CSO	Civil Society Organisations
EAF	Ecosystem Approach to Fisheries
EEZ	Exclusive Economic Zone
ESDU	Environmental Sustainable Development Unit
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FMP	Fisheries Management Plan
GCFI	Gulf and Caribbean Fisheries Institute
GEF	Global Environmental Facility
GDP	Gross Domestic Product
ICCAT	International Commission for the Conservation of Atlantic Tunas
IWC	International Whaling Commission
JICA	Japan International Cooperation Agency
NIC	National Intersectoral Coordinating Mechanism
NFO	National Fisherfolk Organisation
OECS	Organisation of Eastern Caribbean States
UNCLOS	United Nations Convention for the Law of the Sea
UNFSA	United Nations Fish Stocks Agreement
UWI CIRP	Caribbean ICT Research Programme of the University of the West Indies
WECAFC	FAO Western Central Atlantic Fisheries Commission
WRI	World Resources Institute

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Executive Summary

The Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in the Caribbean Small-Scale Fisheries (StewardFish) project is aimed at implementing the 10-year 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) within seven Caribbean Regional Fisheries Mechanism (CRFM) member states (Antigua and Barbuda, Barbados, Belize, Guyana, Jamaica, Saint Lucia, St. Vincent and the Grenadines). The project aims to deliver enhanced stewardship of fisheries resources and livelihood benefits.

CANARI conducted an Institutional Analysis and Organisational Assessment of Saint Lucia to contribute to Outcome 1.2 “Fisheries-related state agencies have capacity to support fishing industry stewardship” and Output 1.2.1 “state agency implementation gaps are assessed regarding support for fisherfolk organisations and their role in stewardship” of the project. The aim of the analysis was to identify current strengths, as well as opportunities for improvement in Saint Lucia’s fisheries-related state agencies, in order to improve their capacity to support ecosystem stewardship by fisherfolk and their organisations as it related to the following areas (i) policies, laws and plans (ii) advisory and/or decision making mechanism (iii) fisheries related organisations (iv) processes and practices. The methods utilised included desk studies, interviews and validation webinars.

Saint Lucia fisheries institution includes a range of governmental, civil society, and private sector stakeholders with various roles, mandates, responsibilities and interests. Most fisherfolk organisations are formalised through the Cooperative Societies Act (2005) and are grouped according to the areas the fishers are from. Fisherfolk Cooperatives major functions include the sale of fishing supplies and fuel. The Saint Lucia Fisherfolk Organisations is the umbrella organisation and formed with representatives from each Cooperative chosen through proportional representation.

Laws, policies and plans in Saint Lucia were assessed to determine whether they were in line with the principles of the ecosystem-approach to fisheries (EAF) and if they were supporting or constraining ecosystem stewardship. Consideration was given to local laws such as the Fisheries Act (Revised 2001), Fisheries Regulations (1994), the National Fisheries Plan 2013, National Policy for Fisheries Sector, 2020-2030 (Draft), the Sectoral Adaptation Strategy and Action Plan for the Fisheries Sector 2018-2028 and the National Ocean Policy 2020 – 2035 (Draft). The ecosystem approach to fisheries is represented in all instruments identified. It should be noted that the Draft National Policy for the Fisheries Sector is yet to develop an action plan and monitoring-evaluating mechanisms.

To determine the extent to which fisherfolk were being included in decision-making processes, the institutional analysis examined the existence, composition and functioning of current National Intersectoral Coordinating Mechanisms (NICs) which are essential to successfully implementing and achieving ecosystem-based management and EAF. Although the main mechanisms for engaging fisherfolk in decision making at a national level, the Fisheries Advisory Committee, has not been established, there are opportunities for fisherfolk to engage in intersectoral decision making processes through the National Ocean Governance Committee (NOGC), as well as in community management through the Soufriere Marine Management Association (SMMA). However, fisherfolk are temporarily co-opted members on the NOGC, and their voice as co-managers in the SMMA needs to be strengthened.

Projects, programmes and initiatives in Saint Lucia that have provided or are providing finances, technology and equipment and capacity building to fisherfolk and their organisations were examined to determine whether fisherfolk have adequate support and resources to undertake ecosystem stewardship actions. Support and resources provided include technical support for proposal writing,

grant funding and training in alternate livelihoods. Examples of support and resources provided include (i) assistance with project scoping and proposal writing through the Department of Fisheries (ii) fisher learning exchange programme through the Climate Change Adaptation of the Eastern Caribbean Fisheries Sector Project (CC4Fish) (iii) training through coral restoration facilitated by Centre for Livelihoods, Ecosystems, Energy, Adaptation and Resilience in the Caribbean Limited (CLEAR Caribbean Ltd).

Partnerships and networks are important as they help facilitate information flows, fill knowledge gaps, and strengthen expertise for ecosystem management, including stewardship. Generally, fisherfolk are participants rather than partners. However, example of partnerships between fisherfolk and the Department of Fisheries include collaborating on the Fishers Clinic event as well as assisting in data collection for conch and sea urchin fisheries. Partnerships also exist between Saint Lucia Fisherfolk Cooperative Society Limited and a private business Alga Organics which led to the development of a Sargassum Seaweed Processing Facility.

The extent to which providers of fisheries information were using communication strategies, tools and channels to communicate with fisherfolk, as well as their capacity to use the tools and channels effectively was examined. The communication strategy of the Department of Fisheries is embedded in its regular work programme through its extension officers conducting on the ground, face to face meetings with fisherfolk to gain an understanding of issues facing fisherfolk. Focus groups and national consultations are also other strategies used to obtain feedback from fisherfolk

The structure and operational procedures of organisations such as government agencies, can reinforce local actions, as well as support in providing resources and facilitating learning as it relates to stewardship. The vision, mandate and culture of the Department of Fisheries is aligned to ecosystem stewardship values and is reflected through its practices of collaborating with fisherfolk in monitoring of fisheries resources. While most staff are well versed in the ecosystem approach to fisheries, there is a need to develop capacity in socio-economic assessments and facilitation of trainings.

Coming out of the report, the main enabling factors were the existence (current or in draft) of fisheries policies, plans and laws, the co-opting of fisherfolk on the National Ocean Governance Committee and the formalised cooperative structures. The major gap was the lack of a capacity / willingness for fisherfolk to be involved in ecosystem stewardship activities. Major recommendations included the development of regular / required training sessions to build capacity of fisherfolk along with increased community participation to better engage fisherfolk in decision making processes and stewardship activities.

1 Introduction

In 2013, countries bordering and/or located within the Caribbean and North Brazil Shelf Large Marine Ecosystems (CLME+ region) adopted a 10-year 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)¹. The 10-year CLME+ SAP aims to contribute to the achievement of the regionally adopted long-term vision of “a healthy marine environment in the CLME+ that provides benefits and livelihoods for the well-being of the people of the region.” The CLME+ SAP consists of 6 Strategies and 4 Sub-strategies. SAP strategies 1-3, with a focus on governance, are cross-cutting, while strategies 4-6 tackle the three main marine ecosystems (reef, pelagic and continental shelf) in the CLME+ region. One of the key strategies of the CLME+ SAP is to achieve sustainable fisheries, including of small-scale fisheries which are important economic drivers for the sustainability of coastal communities and rural livelihoods and a vital source of employment, food and income for Caribbean people.

The *Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in the Caribbean Small-Scale Fisheries (StewardFish)* project is therefore aimed at implementing the CLME+ SAP within seven Caribbean Regional Fisheries Mechanism (CRFM) member states (Antigua and Barbuda, Barbados, Belize, Guyana, Jamaica, Saint Lucia, St. Vincent and the Grenadines) that have politically endorsed the CLME+ SAP by empowering small-scale fisherfolk throughout fisheries value-chains to engage in resource management, decision-making processes and sustainable livelihoods with strengthened institutional support at all levels.² The project aims to deliver enhanced stewardship of fisheries resources and livelihood benefits through implementation of the four core project components (See Figure 1).

StewardFish recognises that there are several challenges that hinder the engagement of fisherfolk and their organisations in the sustainable use and management of fisheries in the region including fisheries-related state agencies not having adequate capacity to support fisherfolk and their organisations with ecosystem stewardship initiatives. Because state agencies, including fisheries authorities, vary widely in their support of fisherfolk organisations for different reasons, some within their control and others beyond, a situation specific analysis is required.

In support of this, CANARI conducted an Institutional Analysis and Organisational Assessment in each of the project countries to contribute to Outcome 1.2 “*Fisheries-related state agencies have capacity to support fishing industry stewardship*” and Output 1.2.1 “*state agency implementation gaps are assessed regarding support for fisherfolk organisations and their role in stewardship*” of the project.

The aim of the analysis was to identify current strengths, as well as opportunities for improvement in each project country’s fisheries-related state agencies, in order to improve their capacity to support ecosystem stewardship by fisherfolk and their organisations.

The analysis included:

- Designing an institutional analysis tool adapted from the Adaptation: Rapid Institutional Assessment (ARIA) methodology, including an organisational assessment survey targeted at the fisheries authorities

¹ CLME+ Strategic Action Programme <https://www.clmeproject.org/sap-overview/>

² CANARI. 2019. StewardFish – Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-Scale Fisheries (StewardFish) project. Posted on October 10, 2019 (March 20, 2020) by admin. Available: <https://canari.org/stewardfish-project/>

- Conducting desk studies, online surveys, focus groups and virtual and in-country interviews with fisheries authorities and other key state agencies in the project countries
- Facilitating national workshops/webinars³ to present, validate, refine and receive input on the preliminary findings and identify priorities for improvement, in each project country
- Producing country reports of findings, including recommended priorities for improvement

This report provides the findings and recommendations from the institutional analysis and organisational assessment that was conducted for Saint Lucia, between April to June 2020.

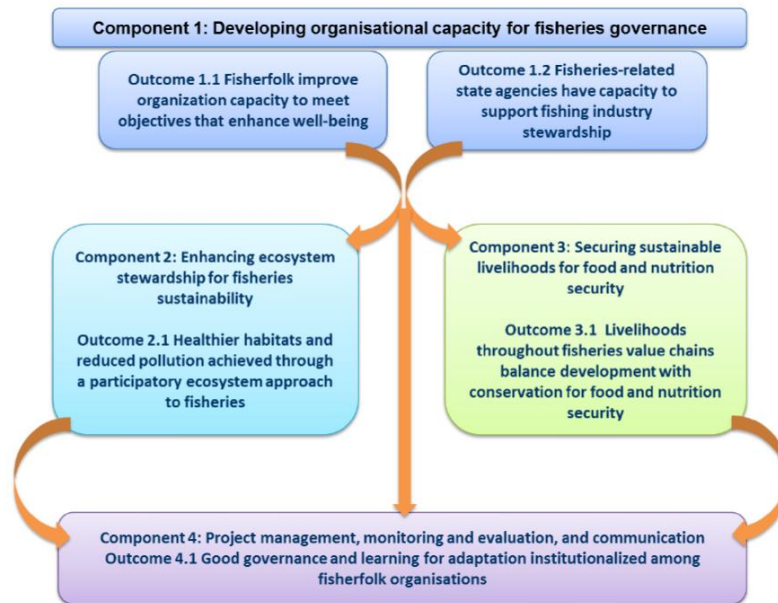


Figure 1: StewardFish Project Framework. Credit: FAO

1.1 How strong institutions can support ecosystem stewardship by fisherfolk

Stewardship is a terminology related to rights and responsibilities in governance processes. Application in natural resource management has expanded the understanding of stewardship to relay that “stewards” are stakeholders with responsibility for proper resource use, who will “take care” of a resource under communal or public property rights. The term also importantly encompasses responsibility not only for proper use of resources but also right to life of other species and for future generations.⁴ The concept of *ecosystem stewardship*, particularly in the fisheries sector; includes reducing the



Figure 2: Members of the Caribbean Network of Fisherfolk Organisations (CNFO), a regional fisherfolk organisation, at the StewardFish project Regional Fisherfolk Mentors training workshop Oct 28-Nov 1,

³ National workshops were initially carded to be conducted in-country for all project countries, however, due to the Covid19 pandemic as declared by the World Health Organisation on March 11, 2020, and subsequent restrictions on air travel, all workshops following the declaration date were conducted virtually through webinars.

⁴ Medeiros, Rodrigo Pereira, Thiago Zagonel Serafini, Patrick McConney. 2014. Enhancing Ecosystem Stewardship in Small-Scale Fisheries: Prospects for Latin America and the Caribbean. *Desenvolv. Meio Ambiente*, n. 32, p. 181-191.

vulnerability of the sector by promoting resilience and making use of opportunities to transform undesirable paths. Stewardship activities may range from actions targeted at species, habitats, ecosystems or even human-environment systems. Stewardship actions may include limiting / prohibiting harvest of vulnerable species, protecting/restoring degraded habitats, establishment of protected areas and promotion of alternate livelihoods so as to reduce dependency on limited resources. Purposeful in-action can be considered a form of stewardship through making a conscious choice not to extract resources so as to allow for regeneration.

A fundamental concern of stewardship is capacity – i.e. whether individuals or groups are able to steward their resources. Capacity, which is in part determined by broader governance -including systems of institutions (i.e. laws and policies, formal and informal organisations, and decision-making processes and structural processes related to power and politics (i.e. economic inequality, discrimination, exclusion from decision-making)—can either empower or constrain the sense of agency, available options and capacity of would-be stewards⁵. From the paper “Environmental Stewardship: A Conceptual Review and Analytical Framework” Bennet *et. al.* (2018) noted for the

LOCAL ENVIRONMENTAL STEWARDSHIP

Local environmental stewardship is the actions taken by individuals, groups or networks of actors, with various motivations and levels of capacity, to protect, care for or responsibly use the environment in pursuit of environmental and/or social outcomes in diverse social-ecological contexts. (Bennet *et al.* 2018)⁵

small-scale fisheries sector that stewardship efforts can be supported by national laws or policy frameworks that protect local fisher’s rights and tenure, formalise local fishers’ stewardship responsibilities, or that provide resources to support local community efforts to steward their own resources. Conversely, the paper notes that even when local small-scale fishers want to take action, the broader policy landscape may undermine their efforts by creating bureaucratic challenges.

Ensuring that the fisheries institution adequately enables ecosystem stewardship by fisherfolk and their organisations will not only contribute to sustainable fisheries but will also help to ease the burden of already under-resourced fisheries state agencies to monitor and enforce fisheries regulations.

2 Institutional Analysis Framework

An institution is the set of arrangements for making decisions about the development, management, and use of a natural resource, including the stakeholders, as well as, the laws, formal and informal policies, plans and structures that guide how these stakeholders interact with each other and with the resources ⁶.

To conduct the rapid analysis, CANARI developed and piloted an institutional analysis tool which was adapted from the World Resources Institute’s (WRI) Adaptation: Rapid Institutional Assessment (ARIA) ⁷ methodology, including an organisational assessment survey targeted at national fisheries authorities. The tool analyses the institutional and organisational capacity of fisheries-related state agencies to support stewardship in the small-scale fisheries sector. The tool was used to conduct a

⁵ Bennett Nathan J., Tara S. Whitty, Elena Finkbeiner, et. al. 2018. Environmental Stewardship: A Conceptual Review and Analytical Framework Environmental Management. Vol. 61, pp. 597-614. <https://doi.org/10.1007/s00267-017-0993-2>

⁶ CANARI. 2011. Facilitating participatory natural resource management: A toolkit for Caribbean Managers. Laventille: CANARI.

⁷ WRI’s Rapid Institutional Analysis for Adaptation Tool. <https://accessinitiative.org/resources/adaptation-rapid-institutional-analysis-phase-1-workbook>

baseline assessment and can subsequently be used for monitoring and evaluation as part of an institutional strengthening process.

The tool examines four conceptual components- fisheries-related policies, laws and plans, advisory and/or decision-making mechanisms, fisheries-related organisations and processes and practices to determine the capacity of the fisheries institution to support the role of fisherfolk and their organisations in ecosystem stewardship. Refer to Table 2.1 for a description of each conceptual component. Appendix 14.1 includes more detailed definitions of conceptual components.

Table 2.1 The four conceptual components assessed in the rapid institutional analysis

Conceptual component	Description of component
Policies, laws and plans	Examined fisheries and fisheries-related policies, plans and legislation (including rules and regulations) to determine how they may be empowering or constraining the ability to integrate ecosystem stewardship practices within the country's small-scale fisheries sector.
Advisory and/or decision-making mechanisms	Examined the presence, composition and functioning of existing multi-stakeholder mechanisms (e.g. Fisheries Advisory Committee) established for advising or making decisions for fisheries management.
Fisheries-related organisations	Examined the roles and responsibilities of fisheries-related state agencies, as well as other fisheries-related organisations [e.g. fisherfolk organisations, civil society organisation (CSOs), private sector organisations and academia] which play a key role in the fisheries-related institutional arrangements of the project country. Additionally, an organisational capacity assessment was carried out to examine the national fisheries authority's current ability to support ecosystem stewardship by small-scale fisherfolk and included an examination of the authority's: <ul style="list-style-type: none"> ○ Vision, mandate, culture ○ Knowledge and skills ○ Resources ○ Partnerships
Processes and practices	Examined the various processes and practices in the country's fisheries institution related to: <ul style="list-style-type: none"> ○ Good governance- assessed the application of good governance practices, particularly fisherfolk inclusion, in decision-making processes in the fisheries sector. ○ Collaborative management- assessed the extent to which cooperative management exists in practice between fisheries-related state agencies and small-scale fisherfolk and their organisations. The degree of stakeholder collaboration in management practices was also assessed. ○ Effective communication- assessed the extent to which providers of fisheries information in the project country were using defined communication strategies, tools and channels to communicate with fisherfolk, as well as their capacity to use the tools and

	channels effectively; including the structures and systems in place for clear communication.
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The tool was implemented using a variety of data collection methods (See Section 3 on Methodology) in order to capture a broad range of stakeholder perceptions and input; as well as to gather perspectives on the realised benefit of existing laws, rules, regulations, processes, practices and procedures of the fisheries institutions.

Based on the information collected the institutional analysis and organisational assessment report will discuss the following key aspects in regard to the capacity of the fisheries institution to support the role of fisherfolk and their organisations in ecosystem stewardship:

- Policy, legal and planning context for ecosystem stewardship
- Mechanisms for fisherfolk participation in decision-making
- Support and resources available to fisherfolk and their organisations for ecosystem stewardship
- Partnerships and networks for ecosystem stewardship
- Communication of information on sustainable practices for fisheries resources use
- Organisational capacity of the fisheries authority to support fisherfolk and their organisations with ecosystem stewardship

3 Methodology

A rapid analysis of the institutional and organisational capacity of fisheries-related state agencies to enable stewardship in the fisheries sector was conducted for Saint Lucia during the period April – June 2020. The analysis piloted an institutional and organisational capacity assessment tool developed by CANARI (Refer to Section 2). The rapid analysis included the following key research methods:

- **Desk study:** CANARI collated and reviewed information readily available (e.g. through online sources and those referenced at workshops) on the project country’s small-scale fisheries sector and its institutional environment; particularly as it relates to capacities to support ecosystem stewardship by small scale fisherfolk and their organisations. This was carried out at an early stage of the analysis to inform and guide the subsequent methods.
 - **Validation webinar⁸:** Following the initial desk study; a validation webinar was held on June 5th, 2020 which included participants from government (e.g. Department of Fisheries), and civil society (e.g. Saint Lucia National Trust, Castries Fishermen’s Cooperative Society Limited). The full participants list is attached at Appendix 13.2.1. The purpose of the webinar was to validate information collated during the desk study phase as well as acquire additional information from in-country sources.
 - **Interviews:** Virtual interviews were conducted during the month of May and June with government, and civil society stakeholders. A list of interviewees’ associated organisations is attached at Appendix 13.2.2.
- Survey:** an online organisational capacity assessment survey was administered to the Saint Lucia Department of Fisheries to collect information on the organisation’s current ability to support ecosystem stewardship by small-scale fisherfolk. Online surveys were also sent to validation webinar participants before the webinar, to collect information on relevant

⁸ National Institutional Analysis and Organisational Assessment Validation workshops were initially carded to be conducted in-country for all project countries, however, due to the Covid-19 pandemic as declared by the World Health Organisation on March 11, 2020, and subsequent restrictions on air travel and in-person gatherings, all workshops following the declaration date were conducted virtually through webinars.

policies, plans, laws and national decision making mechanisms relevant to the fisheries sector and after the webinar, to acquire information on support available to fisherfolk through various projects, programmes or initiatives as well as get input into recommendations for institutional strengthening.

4 Background

4.1 Geography

Saint Lucia belongs to the group of Windward islands, lying south of Dominica and north of Barbados, with an area of 616 km² and a coastline of 158 km with an exclusive economic zone of 15 470km². The island is volcanic in origin and has a mountainous interior that is bordered by sandy beaches. The highest peak on the island, Mt. Gimes at 948m, is a caldera on the west of the island. Gros Piton (771m) and Petit Piton (743m) are twin peak lava domes, which are remnants of Soufriere volcano. Sulphurous springs are present in a volcanic crater near Petit Piton. The rugged mountainous landscape allows for broad fertile valleys and rivers. The interior of the of the island consists of dense forests which leads outwards to coastal dry forests. Forested area accounts for 20,000 hectares. Marine and coastal ecosystems include mangroves, seagrass beds, corals beaches. Its climate is tropical maritime with a dry and wet season, associated with tropical disturbances. Due to agricultural activities, one third of land area is under cultivation. ^{9, 10, 11, 12}

As of 2018, the population of Saint Lucia was estimated at 181,889 with most of the population occupying the island's periphery and denser populations to the north of the island near the capital of Castries, which is the most urban area with an estimated 22,000 persons 2018. ¹⁰⁻¹³

4.2 Governance

Saint Lucia is a commonwealth country and is a parliamentary democracy under a constitutional monarch. The legal system is based on English common law. The chief of state is recognised as the Queen of England, represented by the Governor General. The Head of Government is the Prime Minister chosen through legislative elections and appointed by the Governor General. Saint Lucia has a bicameral parliament consisting of the Senate and the House of Assembly. The highest court is recognised as the Eastern Caribbean Supreme Court of the Organisation of Eastern Caribbean States (OECS).¹⁰

4.3 Economy

In 2018, Saint Lucia's Gross Domestic Product (GDP) was USD 1.9 billion with an annual growth rate of 0.9%.¹³ The broad sectors of agriculture, industry and services contributed 2.9%, 14.2% and 82.8% to the GDP respectively in 2017. The global financial crisis in 2008 slowed economic growth especially in the tourism sector.¹⁰ Tourism and Travel amounted to a total GDP of USD 622.6 million in 2017, contributing to 41.8% of the GDP with forecasts to increase in the next ten years. In 2017,

⁹ Commonwealth Secretariat'. "Saint Lucia". Available <https://thecommonwealth.org/our-member-countries/saint-lucia>. Accessed 20th May 2020.

¹⁰ The World Factbook. 2020. Saint Lucia. CIA. Accessed 20th May 2020. Available at <https://www.cia.gov/library/publications/the-world-factbook/geos/st.html>

¹¹ Ministry of Sustainable Development, Energy, Science and Technology. 2014. Fifth National Biodiversity Report Saint Lucia.

¹² Fishery and Aquaculture Country Profiles. Saint Lucia (2018). Country Profile Fact Sheets. In: FAO Fisheries and Aquaculture Department [online]. Rome. Updated 27 06 2019. [Cited 19 May 2020]. <http://www.fao.org/fishery/>

¹³ World Development Indicators database. 2018. World Bank. 2018. Saint Lucia Country Profile. Available at <https://data.worldbank.org/country/st-lucia?view=chart>. Accessed on 20th May 2020.

the tourism industry contributed 50.8% to total employment (estimated at 38,500 jobs) including indirect jobs that supported the industry.¹⁴

4.4 Overview of fisheries sector

Saint Lucia's fisheries sector includes both subsistence and commercial small-scale fisheries with a multi-species fisheries stock. Saint Lucia exploits most fisheries including pelagic, reef, deep water, conch, echinoderms (sea urchins) and sea turtles to some extent. Small-scale fisheries and recreational fisheries in Saint Lucia mostly focus on offshore migratory pelagics such as tuna (yellowfin and skipjack), dolphinfish and wahoo; demersal species is not allowed for recreational fisheries. Queen conch has also been one of the main species caught. Overall, the occurrence and extent of overfishing in Saint Lucia is unknown. Two important fishing banks are located at the south and northeast of Saint Lucia.^{12,15 16}

Fishing high season is typically from December to May due to landings of offshore migratory pelagic species. Multiple gear is used due to the multi-species nature of the fishing industry and these gears can include trolling lines, flyingfish nets, longlines, gillnets, handlines, and fishpots.¹⁶

Aquaculture is a growing industry in Saint Lucia, with a total annual production of 27.2 metric tonnes in 2016. Along with this, 61 persons were recorded in 2015 as being involved in sea moss production.¹⁵

As of 2016, there were 822 vessels operating in commercial fisheries with fishing vessels being 5-9m with outboard engines, and including either pirogues, small wooden canoes, transom, shalooop, longliners and whalers. For the period 2005-2016, average marine capture fish production was 1991 metric tonnes, with annual capture at 2299 metric tonnes estimated in 2016.¹⁵

The fisheries sector contributed an estimated 0.54% to GDP in 2016, with the value of marine capture fish production in 2016 estimating at USD 10 million. Whilst contribution to GDP is relatively small, the fisheries sector is an important source of income, employment and food security to coastal communities. Country estimates from 2015/2016 suggest a total of 3,172 persons employed directly and indirectly in the fisheries sector (3.4% of labour force), with FAO calculated estimates roughly four times that amount¹⁵. The majority of fish landed is sold locally and consumed fresh with a total fish consumption per capita at 20kg in 2016 and conch consumption being among the highest in the region.^{12, 15}

Fish imported in 2016 estimated at a total value of USD 8.8 million and weight of imports exceeded local capture in 2016. This was to supply demand from the tourism sector. For the same year, exports estimated at a total value of just USD 10,000, focusing mainly on fin fish.¹⁵

Saint Lucia's primary fisheries legislation includes the Fisheries Act, No. 10 of 1984, and the Fisheries Regulations, SI No. 9 of 1994. The legislation includes restrictions for species (such as conch, lobster, sea urchin), gear restrictions, access agreements, licensing systems, processing establishments, and

¹⁴ WTTTC. 2017. Travel and Tourism Economic Impact 2018 – Saint Lucia. Available at <https://www.wtttc.org/economic-impact/country-analysis/country-reports/>. Accessed 20th May 2020.

¹⁵ CRFM. 2018. CRFM Statistics and Information Report - 2016. 82pp.

¹⁶ Singh-Renton, S. & McIvor I. 2015. Review of current fisheries management performance and conservation measures in the WECAFC area. FAO Fisheries and Aquaculture Technical Paper No. 587, Bridgetown, Barbados, FAO. 293 pp.

considerations for marine reserves, priority areas, research and enforcement. The main management entity being the Department of Fisheries.

Saint Lucia is party to the following fisheries-related multi-lateral agreements¹⁶

- International Whaling Convention (IWC), the United Nations
- Convention on the Law of the Sea (UNCLOS), the Food and Agriculture Organization
- Compliance Agreement, 1995, the United Nations Fish Stocks Agreement, and the
- Protocol Concerning Specially Protected Areas and Wildlife (SPAW protocol).

The country is also a member of regional fisheries organisations / bodies such as Caribbean Regional Fisheries Mechanism (CRFM), the Western Central Atlantic Fishery Commission (WECAFC) and the Organisation of Eastern Caribbean States (OECS).

4.5 Stakeholder involvement in the fisheries institution of Saint Lucia

Saint Lucia's fisheries institution includes a range of governmental, civil society, and private sector stakeholders with various roles, mandates, responsibilities and interests. As part of the institutional analysis, key stakeholders were briefly identified and analysed to get an understanding of the range of stakeholders involved in the sector (Refer to Table 4.1). The stakeholder identification and analysis was informed through the desk study.

Table 4.1 below provides a list of key stakeholder types involved in the fisheries institution in Saint Lucia in the governmental, civil society, and private sectors. The list provided in the table is not meant to be exhaustive, but rather to give the reader some insight into the various stakeholder groups that are likely to benefit from improved ecosystems stewardship among fisherfolk.

There are nine fisherfolk cooperatives which are guided by the Cooperative Societies Act (Revised 2005) and regulated by the Department of Cooperatives. Fisheries Cooperatives are based in every major community and are not specified by type of fishing. In terms of membership and business capacity, the larger cooperatives are based in Castries, Goodwill, Choiseul and Dennery. Most are run by managers with a Board of Directors. Fisherfolk cooperatives are mainly involved in the sale of fishing supplies and fuel; they do not deal in marketing of fish. Most of these Cooperatives have fuel stations that they are able to sell fuel to the general public. However, good management systems are needed to ensure profitability. Sustainability of cooperatives and livelihoods of fishers were said to be affected by rising prices of inputs.^{17, 18}

A previous umbrella entity, the National Association of Fishermen's Cooperatives (NAFCOOP) failed due to lack of capacity in business management and ability to generate profits. The re-established umbrella entity, The Saint Lucia Fisherfolk Cooperative Society Ltd was formed with representatives from each Cooperative chosen through proportional representations based on assets base and membership. There is at least 1 member per Cooperative on the Board. It was noted that the meetings of the Saint Lucia Fisherfolk Cooperative Society Ltd were not as frequent as those of the individual Cooperatives.^{18, 18}

¹⁷ Celestial Self Development Centre. 2013. Final Technical Report: Improving Business Acumen in Fisher Cooperatives in Saint Lucia, Caribbean. ACPFish II "Strengthening Fisheries Management in ACP Countries."

¹⁸ Department of Cooperative. 2020. Personal Communication. 22nd May.

Table 4.1: Analysis of key stakeholders in the fisheries institution in Saint Lucia. ^{19,20}

Stakeholder type	Role/Interests	How will they benefit from improved ecosystem stewardship by fisherfolk/fisherfolk organisations?
Government		
Fisheries Department, Ministry of Agriculture, Fisheries, Physical Planning, Natural Resources and Co-operatives	<ul style="list-style-type: none"> • Responsible for the management and development of Saint Lucia’s fisheries sector • Has authority to create new regulations for the management of fishery resources 	Collaborative co-management improves partnership between Fisheries Department and resource users (i.e. fisherfolk), creating a sustainable environment for resource conservation alongside development of the fisheries industry as stakeholders will share aligned goals (makes use of opportunities to transform undesirable paths i.e. unsustainable exploitation of resources). Efficient utilisation of Division resources by ‘sharing the burden’ of management alongside ecosystem stewards.
Department of Cooperatives Ministry of Agriculture, Fisheries, Physical Planning, Natural Resources and Co-operatives	<ul style="list-style-type: none"> • Responsible for regulation and management of cooperatives • Interest in achieving viable and sustainable cooperatives 	Fishing cooperatives that adopt and promote more sustainable fishing practices among their membership are likely to have more sustainable and viable business enterprises. A positive reputation in this regard can potentially create opportunities for these cooperatives to form new partnerships with other organisations with similar values willing to provide capacity building and other resources to support development of these cooperatives. These partnerships may reduce the financial and administrative burden of the Department of Cooperatives to provide support to such fishing cooperatives. These partnerships can also serve to strengthen the enabling environment for these cooperatives consequently supporting the Department of Cooperatives in achieving its mission of having viable and sustainable cooperatives.
Sustainable Development and Environment Division Ministry of Sustainable Development, Energy, Science and Technology	To coordinate sustainable development goals through environmental management, climate change adaptation and mitigation, and	Greater support by fisherfolk and understanding for marine management decisions

¹⁹ Scott, Ian. 2013. “Support to Develop a Fisheries Policy for Saint Lucia (Programme Activity No. CAR-1.2-B2c2). European Union.

²⁰ This list is not exhaustive, but meant to give insight into the various stakeholders in stakeholder categories of government, civil society, academia and private sector that will be affected by improved ecosystems stewardship

	<p>development of green economy.²¹</p> <p>Links between a healthy fishery sector and a healthy environment and ecosystem.</p> <p>Chairs National Ocean Governance Committee</p>	
Marine Police Unit of the Royal Saint Lucia Police	<ul style="list-style-type: none"> Responsible for ensuring compliance with Fishery Regulations 	Reduced need for monitoring and enforcement due to increased compliance of fisherfolk with regulations
Saint Lucia Marketing Entity	<ul style="list-style-type: none"> Responsible for facilitation of exports and ensuring effective production and marketing to meet local, regional and international standards²² 	Increased support for management decisions
National Conservation Authority	<ul style="list-style-type: none"> Responsible for management and conservation of coastal and protected areas 	Increased interests in potential projects highlighting fishery-based tourism.
Soufriere Marine Management Association Inc.	<ul style="list-style-type: none"> Responsible for the management of SMMA via a multi-stakeholder Technical Advisory Committee which includes fisherfolk Interest in improving health of marine ecosystems including fisheries sustainability in the SMMA 	<p>Increased partnership and collaborative co-management by fisherfolk representatives sitting on SMMA board.</p> <p>Greater support by fisherfolk within SMMA and understanding for marine management decisions.</p>
Civil society		

²¹ Ministry of Sustainable Development, Energy, Science and Technology. n.d. About the Ministry of Sustainable Development, Energy, Science and Technology [Online]
<http://sustainabledevelopment.govt.lc/about> (Accessed 3rd August 2020)

²² Antoine, A. 2020. *Saint Lucia Marketing Board restructured*. Government of Saint Lucia [Online]. Available at: <http://www.govt.lc/news/saint-lucia-marketing-board-restructured> (Accessed 3 August 2020)

<p>Fisherfolk cooperatives – this includes the Saint Lucia Fisherfolk Cooperative Society Ltd which is an umbrella organisation and its primary cooperatives:</p> <ul style="list-style-type: none"> ○ Gros Islet Fishermen’s Cooperative Society ○ Castries Fishermen’s Cooperative Society ○ Soufriere Fishermen’s Cooperative Society ○ Laborie Fishers and Consumers Cooperative Society ○ Choiseul Fishermen’s Cooperative Society ○ Anse La Raye Fishers and Consumers Cooperative Society ○ Goodwill Fishermen’s Cooperative Society ○ East Coast Fishermen’s Cooperative Society ○ Dennery Fishermen’s Cooperative Society 	<ul style="list-style-type: none"> ● Interest in long-term sustainability of fish stocks to support livelihoods, including sustainable business enterprises ● Represents the interests of fisherfolk ● Fisherfolk cooperatives are mainly involved in the sale of fishing supplies and fuel 	<p>Fishing cooperatives that adopt and promote more sustainable fishing practices among their membership are likely to have more sustainable and viable business enterprises. A positive reputation in this regard can potentially create opportunities for these cooperatives to form new partnerships with other organisations with similar values willing to provide capacity building and other resources to support development of these cooperatives.</p> <p>Fisherfolk would be motivated to engage on issues related to management of fisheries resources leading to greater participation / collaboration at cooperatives meetings, and various consultations</p>
<p>Saint Lucia National Trust</p>	<ul style="list-style-type: none"> ● Responsible for conservation of natural heritage in Saint Lucia 	<p>Increased interest by fisherfolk in attending meetings / training sessions. Increased partnerships with fisherfolk organisations for conservation projects.</p>
<p>The Saint Lucia National Conservation Fund</p>	<ul style="list-style-type: none"> ● Management of CBF funds, and generation of additional sustainable funding to support focal areas including sustainable livelihoods. 	<p>Empowered fisherfolk organisations would be more motivated to access grant funding to support conservation activities and sustainable livelihoods projects</p>
<p>Private sector</p>		

Lucian Blue Ocean Seafoods Inc., assumed control of three facilities in Castries, Vieux Fort and Dennery (restructured from Saint Lucia Fish Marketing Corporation (SLFMC))	<ul style="list-style-type: none"> • Role in providing processing, storage and marketing of fish and fish products • Interest in long-term supply of fish for revenue generation 	Increased revenues from improved long-term sustainable supply of fish and fish products to market
Recreational fishers Saint Lucia Game Fish Association	Interest in conserving of game fish (e.g. Tuna, Blue Marlin) for recreational fishing	Increased collaboration with private sector entities as it relates to alternative livelihoods
Tikai/Saint Lucia Dive Association	Network of diving entities with aim of protecting environment	
Praslin Sea Moss Association	Private sea moss farmers	
Fish vendors	<ul style="list-style-type: none"> • Responsible for processing and marketing of fish and fish products • Interest in long-term supply of fish and fish products for livelihoods and revenue generation 	Increased revenues from improved long-term sustainable supply of fish and fish products to market
Exporters e.g. Superior Fish & Seafood Suppliers Ltd		
Fish processors e.g. Superior Fish and Seafood Suppliers Ltd, Lucian Blue Ocean		
Fish retailers e.g. <ul style="list-style-type: none"> ○ Markets / Supermarkets ○ Hotels and Restaurants ○ Fish Retail Outlets 		

5 Policy, legal and planning context for ecosystem stewardship

National policies, laws or plans can either encourage ecosystem stewardship by fisherfolk or undermine it.²³ To determine whether existing fisheries and coastal and marine related policies, laws and plans in Saint Lucia were supporting or constraining ecosystem stewardship, selected

²³ Bennett, N.J., Whitty, T.S., Finkbeiner, E., Pittman, J., Bassett, H., Gelcich, S. and Allison, E.H., 2018. Environmental stewardship: a conceptual review and analytical framework. *Environmental Management*, 61(4), pp.597-614.

priority policies, laws and plans were assessed to determine whether they were adequately in line with the principles of EAF, namely whether they considered:

- human well-being: a condition in which all members of society are able to determine and meet their needs and have a large range of choices to meet their potential; and
- ecosystem well-being: a condition in which the ecosystem maintains its diversity and quality — and thus its capacity to support people and the rest of life — and its potential to adapt to change and provide a viable range of choices and opportunities for the future.
- good governance: governance arrangements that enable broad stakeholder participation are similarly expected to confer support for management and foster stewardship among fisherfolk and other resource users.²⁴

EAF recognises the need to maintain the productivity of ecosystems for present and future generations, conserving critical habitats, reducing pollution and degradation, minimising waste and protecting endangered species. It also recognises that this will not be achieved without the cooperation of people, i.e. unless the ecosystem contributes to human well-being, providing sustainable goods and services and sources of livelihood.²⁵ Consideration of the latter is likely to encourage fisherfolk and other resource users to sustainably use, protect and conserve the resources they depend on for livelihoods. A holistic governance framework which considers importance of not only the ecological well-being of fisheries resources – but equally considers socio-economic well-being of fishery resource users and collaborative management mechanisms in the approach to fishery resources management – will increase the likelihood of ecosystem stewardship from fisherfolk in the small-scale fisheries industry.

5.1 *Findings for policy, legal and planning context for ecosystem stewardship in Saint Lucia*
Table 5.1 identifies some of the national fisheries and coastal and marine related policies, laws and plans within the fisheries institution in Saint Lucia. Policies, plans and laws identified are either directly related to the fisheries sector, for example the Fisheries Act which oversees fisheries management in Saint Lucia or indirectly related to the fisheries sector, for example the Food and Nutrition Security Policy, 2013 which seeks to address issues of food security including those related to the fisheries sub-sector.

Table 5.1 Policies, laws and plans related to the fisheries institution in Saint Lucia

Policies
<ul style="list-style-type: none"> • National Policy for Fisheries Sectors 2020-2030 (revised, in draft) • Food and Nutrition Security Policy and Action Plan (2013) • National Environment Policy 2004 • National Agriculture Policy 2009-2015 • Coastal Zone Management Policy and Guidelines (2004) • National Land Policy, 2007 • National Ocean Policy 2020 – 2035 (Draft)
Laws
<ul style="list-style-type: none"> • Fisheries Act (Revised 2001) • Fisheries Regulations, 1994

²⁴ Viability and Sustainability of Small-Scale Fisheries in Latin America and https://books.google.tt/books?id=WBtfdwAAQBAJ&pg=PA475&lpg=PA475&dq=good+governance+definition+McConney&source=bl&ots=KCYRgCdVBF&sig=ACfU3U2DE3Aa8CDQ47L1iAbqrSv_J2NFOw&hl=en&sa=X&ved=2ahUKewjQ96zQ0MjpAhWrmOAKHRQ9C0AQ6AEwDHoECAoQAQ#v=onepage&q=good%20governance%20definition%20McConney&f=false

²⁵ FAO. 2002. The ecosystem approach to fisheries. <http://www.fao.org/3/a-y4773e.pdf>

<ul style="list-style-type: none"> • Fisheries (Snorkelling Licence) Regulations 2000 • Fishing Industry (Assistance) 1973 • Cooperative Societies Act (Revised 2005) • National Conservation Act (1999) • Saint Lucia National Trust Act of 1975 • Parks and Beaches Commission Act, 1983
Plans
<ul style="list-style-type: none"> • National Fisheries Plan 2013 • Saint Lucia’s Sectoral Adaptation Strategy and Action Plan for the Fisheries Sector 2018-2028 • National Biodiversity Strategy and Action Plan 2000 • National Action Plan for the Programme of Work on Protected Areas (2000)

Selected key national policies, laws and/or plans were prioritised for deeper analysis. Instruments were selected based on their relevance to the fisheries sector and identified through desk-study as well as through the pre-webinar survey in which respondents were asked to select the national policies, laws and/or plans that they felt were most relevant to the sustainable development of the fisheries sector in Saint Lucia. Participants were informed that the policies, laws and/or plans identified and selected did not have to be directly related to the fisheries sector but could be broad and cross cutting such as a national climate change policy or biodiversity management plan. The following instruments were identified and analysed against the principles of EAF in Table 5.2.

- Fisheries Act (Revised), 2001
- Fisheries Regulations, 1994
- National Policy for Fisheries Sector 2020-2030 (Draft)
- National Fisheries Plan, 2013
- Saint Lucia’s Sectoral Adaptation Strategy and Action Plan for the Fisheries Sector 2018-2028 (Fisheries SASAP)
- National Ocean Policy (Draft), 2020 – 2035
- Coastal Zone Management Policy, 2004
- Physical Planning and Development Act, 2001
- Food and Nutrition Security Policy, 2013
- National Land Policy, 2016-2018

Additional information on selected instruments above is provided below.

National Policy for the Fisheries Sector

The draft National Policy for the Fisheries Sector references relevant policies within the fisheries sector including the National Ocean Policy (Draft), Saint Lucia’s Sectoral Adaptation Strategy and Action Plan for the Fisheries Sector 2018-2028, National Social Protection Policy (2015), and Saint Lucia’s National Quality Policy (Draft). The policy notes a review will be based on a five-year cycle or can be initiated at any time if the operation environment changes. The use of the regional Results Based Management System (RBM) was suggested as a potential guide for a monitoring and evaluation system feedback mechanism. This process is to be guided by the Department of Fisheries in collaboration with other public institutions.

The policy also notes that even though coordination amongst different policy and legislative developments exists, it is ad hoc, and suggests that the full implementation of this policy requires changes to existing legislation and regulations to move towards a structured administrative arrangement. Nine priority areas are given each with an overall objective statement and strategic action points. However, it was noted at the validation webinar, that an action plan for implementing this policy was not included to date due to financial and time constraints. It was noted as well that there was a need for a proper monitoring and evaluating mechanism within the policy so as to

ensure actions are guided by policy recommendations, and adaptive strategies can be taken in the next phase of policy life cycle so as to ensure longevity and relevance of policy. It was also noted that out of the Climate Change Adaptation in the Fisheries Sector of the Eastern Caribbean Project (CC4Fish), the Centre for Resource Management and Environmental Studies (CERMES) is collaborating to develop certain fisheries related plans that would build on action plan for implementing policy e.g. draft national sargassum plan.²⁶

It was also noted at the validation webinar that even though the policy has not been approved by Cabinet and given that the timeline for the policy has already begun, there is a need to build awareness of the Draft National Policy for the Fisheries Sector with various stakeholders. The timeline to start awareness building has been delayed due to the COVID-19 pandemic but the intention is to start this year through smaller groups.

National Fisheries Plan, 2013

The National Fisheries Plan (2013) includes a National Fisheries Strategy and a National operational plan. The plan defines key agencies, legal and policy frameworks including: the major fisheries legislation, the then existing Fisheries Management Plan, National Environment Policy, Climate Adaptation Policy, Agriculture Policy as well as regional mechanisms. Monitoring and evaluating would be done as required to response to progress made or changes to institutional frameworks with provisions made for annual monitoring exercises of the plan to identify achievements and shortcomings.

Saint Lucia's Sectoral Adaptation Strategy and Action Plan for the Fisheries Sector 2018-2028 (Fisheries SASAP)

The overarching plan of the Fisheries SASAP is Saint Lucia's National Adaptation Plan (NAP). The SASAP considers key adaptation measures from national documents such as the Second and Third National Communications to the United Nations Framework Convention on Climate Change (UNFCCC), the State of Environment Report (2015), the Green Economy Scoping Study for Saint Lucia (UNEP, 2016), the Impact Assessment and National Adaptation Strategy and Action and the Plan to Address Climate Change in the Tourism Sector of Saint Lucia (2015). Monitoring and evaluation of this plan would be done yearly through the National Climate Change Committee (NCCC) identifying progress and revisions made to implementation of plan. It was noted at the webinar that the development process of this policy engaged fisherfolk through community meetings.²⁷

National Ocean Policy 2020 – 2035 (Draft)

National Ocean Policy 2020 – 2035 (Draft) includes a Strategic Action Plan defining actions, indicators, responsibilities and due dates for short term (2020-2025), medium term (2026 – 2030) and long term (2030-2035) goals. There will be a midterm evaluation of the policy by the National Ocean Governance Committee to determine progress of achieving outcomes. Regional and international commitments are considered in the policy (e.g. Eastern Caribbean Regional Ocean Policy and United Nations Convention on the Law of the Sea (UNCLOS)). It gives consideration to the Fisheries Policy and includes considerations for: overfishing, Illegal, Unregulated, Unreported (IUU) fishing, ecosystem based management plans, access to markets by small scale fishers, potential socio-economic impacts of other activities on fishing, interaction of Fish Aggregating Devices (FADs) with other marine infrastructure, and importance fishing areas in planning. Recently, the Small Island Developing States Unit of the Division for Sustainable Development Goals contracted

²⁶ Cox, S., H.A. Oxenford and P. McConney. 2019. Summary report on the review of draft national sargassum plans for four countries Eastern Caribbean. Report prepared for the Climate Change Adaptation in the Eastern Caribbean Fisheries Sector (CC4FISH) Project of the Food and Agriculture Organization (FAO) and the Global Environment Facility (GEF). Centre for Resource Management and Environmental Studies, University of the West Indies, Cave Hill Campus, Barbados. 20 pp

²⁷ Sustainable Development and Environment Division. 2020. Webinar. 5th June

consultancy services for the development of a monitoring and evaluation framework for the Saint Lucia National Ocean Policy and its Strategic Action Plan.²⁸

²⁸ SIDS Unit, Division for Sustainable Development Goals Department of Economic and Social Affairs (UN-DESA). 2020 Terms of Reference for Development of a Monitoring and Evaluation Framework for Ocean Governance in Saint Lucia.

Table 5.2: Analysis of key fisheries-related policies, laws and plans in Saint Lucia against the principles of EAF

Name of Policy, Law, Plan	Description	The policy/law/plan considers the ecological well-being of fisheries resources	The policy/law/plan considers socio-economic well-being of resource users including fisherfolk	The policy/law/plan considers collaborative management and inclusion of stakeholders in decision-making
Fisheries Act (Revised), 2001	Promotes and regulates fishing and fisheries in fishery waters of Saint Lucia	<p>The Act speaks to the protection of fisheries resources including the following:</p> <ul style="list-style-type: none"> • Minister may declare any fishery area as a marine reserve so as to ensure protection of breeding grounds, species and ecosystem or to promote research (Section 22) • Minister can specify conditions to licences to support proper management measures (Section 13) • Minister may cancel or suspend a fishing licence to follow proper management (Section 15) • Prohibited Fishing Methods included are Explosive poison / noxious substance (Section 24) • Prohibited Fishing Gear include any net, trap or gear which isn't in line with prescribed standards (Section 25) 	<p>The Act considers socio-economic wellbeing of resource users, by supporting their access to fishing resources, including through the following:</p> <ul style="list-style-type: none"> • No application for licence cannot be refused provided certain conditions are met – Section 11(4) • Minister may declare any area of fishing waters to be a fishing priority area and ensure that authorised fishing is not impeded with (Section 20) • Governor General may lease land areas of foreshore and seabed for aquaculture (Section 21) 	<p>The Act notes that the:</p> <ul style="list-style-type: none"> • Chief Fisheries Officer required to consult with fishers in preparation and review of fisheries plan - Section 4(1) • Section 5(1) speaks to possible formation of Fishery Advisory Committee by Minister, which should include 3 professional fishermen • Minister may designate any area as a local fisheries management area as well as designate any entity representing fishermen as the local fisheries management authority for that area. Chief Fisheries Officer shall provide assistance for such entities. (Section 18) • Local fisheries management authority can make bylaws (Section 19)

Fisheries Regulations, 1994	Subsidiary Legislation that supports management and regulation of fisheries	<p>Regulations set out extensive conservation measures including the following:</p> <ul style="list-style-type: none"> • Catch limit for sportfishing as it relates to migratory fisheries, conch, and lobster (Section 27) • Conservation measures (Part 7) for the protection of lobster, turtles, corals, sponges, marine algae, conch, sea urchins, marine mammals. • Restrictions on closed seasons, gear such as use of traps (Section 41), spear fishing (Section 44), pollution in marine waters (Section 45) and use of marine reserves (Section 46). 	<p>Regulations consider socio-economic wellbeing of resource users, by supporting their access to fishing resources, including through the following:</p> <ul style="list-style-type: none"> • Protects fishing priority areas from building developments (Section 39) • Prohibits interference with fishing activities (Section 42) 	<ul style="list-style-type: none"> • Refers to Fisheries Advisory Committee and the mandated requirement for 3 professional fishermen to be on Fisheries Advisory Committee (Section 6)
National Policy for Fisheries Sector (Draft), 2020-2030	<p>Guides operational decision making that supports the sustainability of fisheries resources and contributes to the socioeconomic development.</p> <p>The Policy has eight priorities with associated objectives and strategies.</p>	<ul style="list-style-type: none"> • Priority 1 focuses on ecosystem health and integrity and aims to follow EAF to reduce degradation to fish habitat, maintain stocks at sustainable levels through strategies such as monitoring of fish stocks and habitats, development of plans for main fisheries, collaboration with stakeholders to prioritise activities damaging fish habitats with development of action plans to minimise damage or restore habitats 	<ul style="list-style-type: none"> • Priority 2 focuses on developing strategies for security of fisheries dependent livelihoods, including considering impacts from climate change via implementation of the Adaptation Strategy and Action Plan for the Fisheries Sector (2018-2028) and other regional initiatives • Priority 3 speaks to equal opportunities for women and youth to ensure socio-cultural development • Priority 6 speaks to ensuring sustainably managed capture fisheries that would contribute to employment opportunities and improved earnings • Priority 7 speaks to contribution of sustainable aquaculture to economic growth, food security and income diversification 	<ul style="list-style-type: none"> • Priority 1 speaks to collaboration between government and stakeholders to develop action plans and minimise habitat damage • Priority 3 gives consideration to traditional knowledge to develop socio-cultural strategies to complement ecological and economic objectives in fisheries • Priority 4 gives consideration to stakeholder capacity and stakeholder roles in decision making through actions such as stakeholder identification, establishing mechanisms for stakeholder participation and supporting self-organisation of stakeholders (including fisherfolk)

				<ul style="list-style-type: none"> Priority 8 speaks to collaboration with fisher organisations to identify responsibilities for the management of infrastructure at important fish landing sites
National Fisheries Plan, 2013	<p>Ensures the sustainability of natural resource use in the context of ecosystem protection and interests of person's dependent on fisheries to maximise economic and social benefits in a sustainable manner.</p> <p>The Plan is a 'living document' and highlights need for monitoring and evaluation procedures.</p> <p>It includes a National Fishing Strategy which guides the implementation of the Plan</p> <p>The Plan includes seven result outcomes.</p>	<p>Result 4 speaks to application of EAF and includes specific actions such as:</p> <ul style="list-style-type: none"> Zoning of coastal areas available for fishing Implementing public awareness campaigns to support sustainable use of natural resources Developing and enforcing environmental regulations to reduce risk of pollution from developments affecting fisheries 	<ul style="list-style-type: none"> Result 3 deals with improving average income of fishers (actions are to include a training plan, increased availability in FADs, fuel subsidies, tax incentives, reducing risk of larceny, potential credit line for investments by new fishers, and reduced pricing from cooperative purchasing). Result 6 focuses on onshore ancillary support which recognizes need for supporting livelihoods, having supporting infrastructure and services, and need to identify potential areas for widening economic benefits to fisheries communities so as to increase earning and reduce catch effort. 	<p>Result 2 speaks to strengthening stakeholder input into the decision-making process (result actions include the establishment of Fisheries Advisory Committee with stakeholder representation, training with cooperatives and establishments for fish farmers).</p>

<p>Sectoral Adaptation Strategy and Action Plan for the Fisheries Sector (SASAP), 2018-2028</p>	<p>Looks at strengthening the fisheries sector and dependent livelihoods through climate change adaptation</p> <p>Includes 31 Adaptation Measures grouped under 8 objectives that contribute to four main expected outcomes.</p>	<p>Outcome 2 focuses on enhancement of coastal habitats to build resilience e.g. artificial reefs, more tolerant species (linked to protecting food security)</p>	<p>Outcomes 1 and 4 consider the socio-economic well-being of resource users including through the following:</p> <ul style="list-style-type: none"> • Regulation of entry into selected fisheries to increase yield and productivity • Capacity building for fisherfolk to identify fishing grounds • Focus on nutrition and food security with strategic objective improving fisheries productivity through climate resilience systems, aquaculture, alternative livelihoods, alternative fisheries and developing resilience in fisheries dependent business. • Expanding of social benefits e.g. compensation schemes to fishers and their families for climate related impacts • Establishment of early warning systems for fishers to reduce risks from climate change related impacts (including seaweed) and post disaster recovery support • Application of hard defenses to protect fisheries livelihoods and infrastructure • Application of soft defenses (ecosystem-based solutions) to reduce impacts on livelihoods (wetland rehabilitation) • Consideration of gender in plan 	<ul style="list-style-type: none"> • Recommends that during the SASAP’s execution efforts are made to coordinate, and collaborate on actions which directly or indirectly involve fishing-related activities or fishery value chains
<p>National Ocean Policy (Draft), 2020 – 2035</p>	<p>Framework for integrated planning and management of Saint Lucia’s marine space.</p> <p>The Policy defines 8 outcomes</p>	<ul style="list-style-type: none"> • Outcome 2 includes a goal aimed at effective marine pollution contingency planning • Outcome 3 speaks to ecosystem integrity with goals aimed at protecting marine environment, managing human impact on marine resources, conservation 	<p>Outcome 4 speaks to sustainable socio-economic development including prioritising opportunities in marine sectors to support Blue Economy e.g. diversification of fisheries. Outcome 6 speaks to promoting health and wellbeing benefits of oceans</p>	<p>Outcome 6 considers ocean stewardship and supporting needs and aspirations of communities in planning and decision making</p>

		of marine species and habitats through Marine Protected Areas		
Coastal Zone Management Policy, 2004	<p>Policy vision speaks to protection of coastal resources, socioeconomic benefits and empowering communities in coastal management processes</p> <p>Outlines a number of strategies and actions in line with stewardship, collaboration, and equity of benefits from resources</p>	<p>Strategies and actions speak to:</p> <ul style="list-style-type: none"> • Restoration and rehabilitation of coral reefs and beaches • Revising current system of marine reserves with intention to include more • Maintaining and enhancing coastal habitats (wetland, coral reefs, mangroves, seagrass) • Considering the protection of watersheds, water quality management, waste disposal 	<p>Strategies and actions speak to:</p> <ul style="list-style-type: none"> • Enhancement of waterfront villages- ease of marine access and tourism product in some cases. • Development and enhancing of business and income generating opportunities e.g. supporting small businesses through sustainable use of coastal resources • Encouraging financial institutions to support non-traditional businesses in coastal zones. 	<p>Strategies and actions speak to:</p> <ul style="list-style-type: none"> • Promoting participatory and collaborative management (through mobilization of communities with respect to conservation of resources, establishing community-based arrangements to conserve resources and sustainable use, and delegation of some coastal management responsibility to communities)
National Land Policy, 2016	<p>Provides guidelines for sustainable management of land for socio-economic development, environmental sustainability and cultural needs.</p> <p>Policy guided by various strategic outcomes.</p>	<p>Outcome 1 speaks to conserving land resources including coastal ecosystems</p>	<p>Outcome 2 speaks to optimising contribution of land to support livelihoods including the use of the marine space to support fisheries</p>	<p>Participation and shared responsibility listed as a guiding principle in the Policy indicating devolving or sharing authority where practicable and promotion of stakeholder participation</p>
Physical Planning and Development Act, 2001	<p>Focuses on development of land, environmental impacts, and regulating use of land. Land definition includes land covered with water and land underlying the sea surrounding the coast</p>	<p>Section 34 of the Act “Protection of Natural Areas” speaks to:</p> <ul style="list-style-type: none"> • Special protection of any area including submarine areas; • Declaration (by the Minister) of an environmental protection area or provision for the control over the use of land for the purposes of fisheries 	<p>Section 34 – Act does not specifically address socioeconomic wellbeing for coastal and marine resource users.</p> <p>Only states any land within an area declared an environmental protection area in accordance with the provisions of subsection (2) depreciates in value as a result of any restriction placed on its use or development by the order, adequate compensation shall be paid to the owners of that land.</p>	<p>Act notes that the:</p> <ul style="list-style-type: none"> • Head of Physical Planning and Development Division shall consult with any person interested in matters being proposed as it relates to a draft physical plan as it relates to natural resources with adequate opportunity for representation • Minister may establish Physical Planning and Development Advisory

		<ul style="list-style-type: none"> • Protection of coastal zone, zoning marine parks • Requiring environmental impacts assessments for coastal zone development and development in wetlands, marine parks • Lands being allocated for protection of marine life 		Committee (3 or 5 members of non-governmental organisations and community-based organisations)
Food and Nutrition Security Policy, 2013	<ul style="list-style-type: none"> • Provides guidelines for promoting food security. Fisheries guidelines include - promoting self-sufficiency through increased production and to develop the fishing industry to ensure its sustainability; - establishing a vibrant fish trade; and - expanding aquaculture and mariculture. <p>The Policy sets out 8 Policy Directions.</p>	<ul style="list-style-type: none"> • Policy Direction 3 calls to intensify sustainable production and productivity (fishery products included) e.g. includes promoting best practices, research in fish production, sustainably managed fisheries resources and increased availability of fish through investing in aquaculture, promoting sustainable fishery practices • Policy 5 speaks to sustainable management of natural resources (land and water) 	<ul style="list-style-type: none"> • Policy Direction 2 encourages local production of food commodities through small producers (including fisherfolk with focus on gender and youth) • Policy Direction 7 highlights fiscal policy incentives for producing and marketing local food • Policy Direction 5 speaks to enhancing coordination and strengthening of community support systems through capacity building of community-based organisations, non-governmental organisations, faith-based organisations and producer organisations to provide greater support to their members and communities for livelihood creation and enhancement • The Policy also considers development and implementation of a communication plan to disseminate accurate and timely climate and weather information to the farming/fishing community as well as development of sustainable fishery management systems inter alia to protect the natural resource base in the face of climate change 	<ul style="list-style-type: none"> • Institutional Framework for implementing policy includes establishing a National Food and Nutrition Security Advisory Council to provide policy advice, inter-sectoral coordination, and food and nutrition security planning and monitoring. Committee composition includes fishing cooperatives.

6 Mechanisms for fisherfolk participation in decision-making

Taking action is a fundamental part of ecosystem stewardship. Stewardship actions include the range of approaches, activities, behaviours, and technologies that are applied to protect, restore or sustainably use the environment. In the case of small-scale fisheries, stewardship actions by fisherfolk and/or their organisations are influenced by formal or informal decision-making processes about the use of fisheries resources that may or may not involve fisherfolk. Participatory decision-making, however, allows the views and knowledge of fisherfolk to be considered, including on decisions that would facilitate cooperation by fisherfolk in becoming better stewards. It gives a voice to an often-marginalised group and mitigates against the overshadowing of their opinions by more powerful or influential stakeholders. To determine the extent to which fisherfolk were being included in decision-making processes related to the management of fisheries and other coastal and marine resources the institutional analysis examined the existence, composition and functioning of current NICs.

The CLME+ SAP identified interactive governance arrangements such as NICs essential to successfully implementing and achieving ecosystem-based management and EAF. In the CLME+ region NICs can be broad or narrow based on the scope and ecosystem approach being used. Examples of NICs include: Fisheries Advisory Committees or Councils, Ocean Governance Committees, sustainable development commissions, integrated coastal management institutions and climate change bodies. NICs operate within the policy cycle and involve interactions across multiple scales, stakeholders, sectors and levels of governance (local, national, regional and international). A NIC can be considered as the operational arm of good and effective governance or policy processes.²⁹

6.1 Findings for mechanisms for fisherfolk participation in decision-making in Saint Lucia

During the validation webinar, participants were asked to validate current NICs identified during the desk study and pre-webinar survey, as well as identify any additional current NICs related to the coastal and marine sector in Saint Lucia. Participants were also asked to note whether the NICs identified included fisherfolk or not, or if this information was unknown, to share where additional information could be sourced for further analysis. Table 6.1 shows the NICs that were identified during the desk study and by participants during the pre-webinar survey. Additional information on selected mechanisms from Table 6.1 is provided below.

Fisheries Advisory Committee

The analysis found that the mechanism which would allow fisherfolk a substantial voice at the national level, the Fishery Advisory Committee, has not been established. While the Fishery Advisory Committee is not legally mandated, as the Fisheries Act (Revised 2001) states that the Minister 'may' appoint a Fishery Advisory Committee, the Fisheries Regulations (1994) state, that if established, the Fishery Advisory Committee shall include three persons from professional fishermen appointed by the Minister. In the absence of the Fishery Advisory Committee, consultations are utilised to engage fisherfolk in decision-making processes. During the webinar, Castries Fishermen's Cooperative Society opined that the current mechanism of engagement is satisfactory but noted that the input of fisherfolk is not often reflected in the outcomes of discussions such as policies.

The representative for the Department of Cooperatives at the webinar also noted that the Department is not engaged in decision-making mechanisms and consultations. He noted that

²⁹ Compton, S. 2020. *Identifying suitable national intersectoral coordination mechanisms (NICs)*. Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-scale Fisheries (StewardFish) project. Project Report to FAO. 18 pp.

engagement with the Department as the regulatory authority of Fishermen Cooperative can be helpful to fisherfolk organisations as the Department would then be able to encourage and support engagement of the fisherfolk cooperatives¹⁸. Participants agreed that there was a need for fisherfolk organisation representation at the national level.

To facilitate engagement of fisherfolk organisations in development initiatives for the fisheries sector, it was suggested at the webinar that multi-stakeholder project steering committees can be established under national coastal/marine/ fisheries related projects (such as the Climate Change Adaptation of the Eastern Caribbean Fisheries Sector Project (CC4Fish) steering committee) to ensure a platform for fisherfolk at the national level.

National Ocean Governance Committee

The National Ocean Governance Committee was approved by Cabinet in 2018 and is chaired by the Department of Sustainable Development and co-chaired by the Saint Lucia Air and Sea Ports Authority (Maritime Division). However, to date the committee has not met officially as set out by its Terms of Reference. Currently members are involved in consultation meetings as it relates to the development of the National Ocean Policy and other related coastal/marine plans. The Terms of Reference of the National Ocean Governance Committee allows for the co-opting of members as required for specific tasks / projects. Through this, leaders of fisherfolk cooperatives have been engaged in the consultative meetings with the National Ocean Governance Committee members as it relates to the development of the National Ocean Policy. During these consultations, all participants have the opportunity to provide input and receive feedback. There is no issue with engagement of fisherfolk at this level as the representatives co-opted understand the issues being discussed. Although, there are no provisions as yet to designate fisherfolk as members of the National Ocean Governance Committee, they are engaged through these open consultations on issues that are relevant to the fisheries sector.³⁰

When the National Ocean Governance Committee meetings are formalised, co-opted representatives such as fisherfolk would serve on ad-hoc sub committees and working group for specific tasks.³¹

Under the past GEF-United Nations Environment Programme project “Mitigating the Threat of Invasive Alien Species in the Insular Caribbean”, an Ad-Hoc Lionfish Task Force was established to oversee control responses for the invasive lionfish. This Task Force comprised of Fisheries Department, Environment Department, Saint Lucia Divers Association, Ministry of Tourism, the Information and Communication Unit of the Ministry of Agriculture) with the roles of the respective members clearly articulated. However, the Task Force was not sustained beyond project.³²

³⁰ Sustainable Development and Environment Division. 2020. Personal Communications. 22nd May.

³¹National Ocean Governance Committee Terms of Reference

³² Mohammed, E. 2016. Implementation Report (2013-2015): Regional Strategy for the Control of the Invasive Lionfish in CRFM Member States. CRFM Technical & Advisory Document, No. 2016/02. 58pp.

Table 6.1 Coastal and marine related NICs in Saint Lucia

Name of NIC	Purpose	Composition	Are fisherfolk members of the mechanism?	Active/ Inactive
Fisheries Advisory Committee	To advise the Minister on management and plans for fisheries development, legislation amendments as required, proposals for access agreements / joint ventures / development projects as well as coordination of policies and activities across governmental organisations	<ul style="list-style-type: none"> • Permanent Secretary, Ministry of Agriculture, • Chief Fisheries Officer • Three professional fishermen • Two other persons chosen by Minister 	Yes	Inactive; yet to be established
National Oceans Governance Committee ³¹	<ul style="list-style-type: none"> • To advise the Government on management of the marine space including providing advice on coordination of the National Ocean Policy, Strategy and Action Plan • To integrate local communities and industries in development of policies and management strategies and to stimulate stakeholder participation in implementation of the policy 	<ul style="list-style-type: none"> • Sustainable Development and Environment Division/Coastal Zone Management Unit • Department of Fisheries • Department of Tourism • Saint Lucia Air and Sea Ports Authority • Ministry with responsibility for foreign affairs • Department of Economic Development • Enforcement – Royal Saint Lucia Police Force (marine police) • Attorney General’s Chambers • Customs and Excise Department • Agency with responsibility for immigration 	No	Active

Soufriere Marine Management Association ³³	To coordinate management of the Soufriere Marine Management Area	<ul style="list-style-type: none"> • Saint Lucia Dive Association • Saint Lucia Hotel and Tourism Association • Soufriere Fishermen Cooperative • Soufriere Regional Development Foundation • Soufriere Water Taxi Association • Ministries responsible for planning, fisheries and tourism • National Conservation Authority • Saint Lucia and Sea Ports Authority 	Yes	Active
National Climate Change Committee ^{2929 34}	<ul style="list-style-type: none"> • To provide advice on the implementation of the National Action Plan. • To facilitate and guide efforts on climate change adaptation, resilience building, vulnerability assessments, policies, action plans, capacity building and public awareness 	<ul style="list-style-type: none"> • Sustainable Development and Environment Division • Renewable Energy Division • Protected Areas Management • Agriculture Department • Fisheries Department • Forestry Department • Water Department? • Ministry for Physical Planning • Ministry for Education • Ministry of Tourism • Ministry of Finance • Office of the Prime Minister – National Emergency Management Organisation • Meteorological Services Department • National Insurance Council of Saint Lucia • Saint Lucia Bankers Association • National Conservation Authority • Saint Lucia Electricity Services Limited • Saint Lucia Solid Waste Management Authority • Saint Lucia Air and Sea Ports Authority • Water and Sewerage Company • Agencies and individuals can be co-opted as required 	No	Active

³³ Soufriere Marine Management Association. 2002. Conflict Resolution and Participatory Planning: The Case of the Soufriere Marine Management Area.

³⁴ Government of Saint Lucia. (2018). Saint Lucia’s National Adaptation Plan (NAP): 2018–2028. Department of Sustainable Development, Ministry of Education, Innovation, Gender Relations and Sustainable Development.

		<ul style="list-style-type: none"> • Among regular invitees is the Soufriere Marine Management Association 		
Protected Areas Coordinating Committee ³⁵	<ul style="list-style-type: none"> • Coordinate the development of plans, policies, and legislation related to protected areas • Recommend procedures in governing protected area systems 	Ministry responsible for: <ul style="list-style-type: none"> • Agriculture, • Forestry, • Fisheries, • Water resources, • Finance, • Police, • Ocean governance, • Parks and management areas including the Soufriere Marine Management Area, Pitons Management Area, and the Canaries/Anse la Raye Marine Management Area, • Tourism, • Cultural heritage, • Physical planning, • Economic planning and development, • Beaches; Others: <ul style="list-style-type: none"> • Department of Sustainable Development; • National Conservation Authority • Attorney General’s Chambers; • Saint Lucia National Trust; • Saint Lucia National Youth Council; and • Saint Lucia Chapter of Caribbean Youth Environment Network. • Two community-based organisations representing environmental and sustainable development concerns; • One organisation representing local industries that depends on extracting resources from protected areas One business organisation, such as the Chamber of Commerce or the Trade Export Promotion Agency	No	Inactive; currently a proposed committee

³⁵ Saint Lucia Environmental Management Bill 2018

National Biodiversity Coordinating Committee (NBCC), ³⁶	<ul style="list-style-type: none"> • Subcommittee to National Environmental Commission (an inter-agency collaboration on environmental planning and management) • Develops the National Biodiversity Strategic Action Plan • Provides input as it relates to Access Benefit Sharing under the Nagoya Protocol 	Ministries: <ul style="list-style-type: none"> • Agriculture • Sustainable Development • Physical Development • Health • Education • Tourism • Commerce and Industry • Planning Others: <ul style="list-style-type: none"> • Saint Lucia National Trust • Agrico Ltd. • Marisule Seven Day Adventist Church 	No	Active
National Land Policy Committee	To guide the formulation of the National Land Policy and revise the National Land Policy (2016) which proposes the formation of a coordinating mechanism – the National Land Commission – that will facilitate policy coordination and information sharing amongst agencies, assess and review the National Land Policy, support land policy implementation and provide guidance in land related decision-making processes	National Land Policy (2007) states the composition of National Land Policy Committee as including: <ul style="list-style-type: none"> • Ministry of Physical Development, Environment, Housing • Ministry of Agriculture • Chamber of Commerce • Survey and Mapping Section • Sustainable Development and Environment Section • Commissioner of Crown Lands • Physical Planning Section • Forestry Department • Water Resource Management Unit 	No	Confirmed active until 2016 for policy revision
National Food and Nutrition Security Council	To monitor implementation of policy of the Food and Nutrition Security Policy for Saint Lucia (2013)	<ul style="list-style-type: none"> • Ministry of Health • Ministry of Agriculture • Ministry of Education • Ministry of Tourism • Bureau of Statistics • Saint Lucia Marketing Corporation 	Yes	(Unsure)

³⁶ Ministry of Agriculture, Food Production, Fisheries, Cooperatives and Rural Development, Government of Saint Lucia. 2015. Final Saint Lucia Country Report on the State of Biodiversity for Food and Agriculture. Prepared for the FAO publication, The State of the World's Biodiversity for Food and Agriculture.

		<ul style="list-style-type: none"> • Chamber of Commerce • Investment Promotion (Foreign Direct Investment) Authority • Fishermen Cooperatives • Agro-Processors Association • Agricultural Cooperative Society 		
Oil Pollution Action Committee (OPAC); some members overlap with the National oil spill committee lead by the National Emergency Management Organisation (NEMO) ^{37, 38}	To respond to the threats related to oil pollution in Saint Lucia	<ul style="list-style-type: none"> • Saint Lucia Air and Seaports Authority (Chair) • Sustainable Development and Environment • Royal Saint Lucia Police Force • Saint Lucia Marine Police Unit • Fire Service • Fisheries Department • Saint Lucia Solid Waste Management Authority • Shell Antilles & Guiana's Ltd. Bulk Station • Texaco Bulk Station • HESS Oil (Saint Lucia Ltd.) • Ministry of External Affairs • Caribbean Environmental Health Institute (CEHI) • Pesticides Control Board • Saint Lucia Bureau of Standards 	No	Active; assembled when there is a threat of oil pollution to Saint Lucia

³⁷ Government of Saint Lucia. 2002. Oil Spill Contingency Plan. Document of the Saint Lucia National Emergency Management Plan.

³⁸ Government of Saint Lucia. 2007. National Emergency Management System Companion to the National Emergency Management Plan (Revised 2011)

7 Support and resources available to fisherfolk and their organisations for ecosystem stewardship

To undertake ecosystem stewardship, would-be stewards must have the support and resources to do so. In this case “support and resources” refer to the finances, technology and equipment and education, skills and knowledge needed to effectively undertake ecosystem stewardship actions. Access to these resources may also ensure that aspects of fisherfolk’s human well-being (e.g. access to training to ensure safety at sea) are considered by support agencies and may provide motivation for stewardship actions 5.

To determine whether fisherfolk have adequate support and resources to undertake ecosystem stewardship actions the institutional analysis examined some projects, programmes and initiatives in Saint Lucia that have provided or are providing finances, technology and equipment and capacity building (e.g. education, skills and knowledge) to fisherfolk and their organisations.

7.1 Findings for support and resources for ecosystem stewardship by fisherfolk and their organisations

Through desk study, interviews and the national validation webinar, various projects, programmes and initiatives aimed at providing support and resources to fisherfolk and fisherfolk organisations, set out in Table 7.1, were identified by stakeholders. While what is listed is not meant to be comprehensive, it provides some general insight into the type of support and resources that are available to fisherfolk and their organisations in Saint Lucia.

The findings in Table 7.1. show that support and resources for fisherfolk in Saint Lucia are available from a range of sources including from government, civil society and intergovernmental agencies. Support and resources provided include technical support for proposal writing, grant funding and training in alternative livelihoods. In terms of government programmes, the Department of Fisheries supports fisherfolk with applications for projects including conducting scoping for potential projects and preparing grant proposals. Plans to support climate change resilience have also been developed through collaborations with civil society and international agencies.

As part of the meetings held by the National Oceans Governance Committee, a training / awareness-building session was held on the Blue Economy for all committee members, including the leaders of the fisherfolk cooperative. This training provided an understanding of the Caribbean Regional Oceanscape Project (CROP), the Blue Economy, and what would be expected of members moving forward as it related to the work of the Committee. An output of a recent consultancy regarding the development of a monitoring and evaluation framework for the Saint Lucia National Ocean Policy and its Strategic Action Plan will be a training workshop targeted to members and co-opt members of the National Oceans Governance Committee. This training workshop would be based on the monitoring and evaluation framework as it relates to data collection and its contribution to indicators within the framework. It is expected that the fisherfolk representative co-opted in the Committee would benefit from such training.^{28,30}

Projects implemented by civil society and international organisations are also an important source of support and resources for fisherfolk in Saint Lucia. The “Caribbean Fisheries Co-management” (CARIFICO) project, was implemented by the Japan International Cooperation Agency (JICA) and aimed at developing a fisheries co-management approach through pilot projects. In Saint Lucia, this project dealt with expanding the use of fish aggregating devices (FADs) for offshore fisheries and sustaining the conch fisheries through co-management approaches. Trainings were conducted, with the assistance of the Department of Fisheries, on techniques to design, construct and submerge FADs to maintain the lifespan of FAD systems. Also, legislation was modified to incorporate deployment and ownership of FADs to reduce conflicts related to unauthorised fishing around FADs. These rules were widely distributed. However, to date there has been no firmly establish FAD Fishing

Cooperative. The CARIFICO project provided support to conch fisheries through basic fisheries management training by the Department of Fisheries and led to an improved co-management approach with the informal organisation of conch fishers who are now more willing to participate in fishing ground rotation practices to avoid juveniles.^{39, 40}

Under the Saint Lucia's Fisheries Sectoral Adaptation Strategy and Action Plan 2018–2028 (Fisheries SASAP) there are plans to support fisherfolk and strengthen their resilience to climate change impacts that include:

- Piloting a financial system to strengthen fisherfolk capacity to adapt to climate change through access to affordable financing.
- Increasing safety at sea for fisherfolk through access to meteorological data from software applications (apps).
- Improving alternative livelihood opportunities through strengthening of the aquaculture and mariculture sector.
- Upgrading fishing facilities and landing sites to increase resilience to climate change impacts.
- Piloting fuel efficient and climate resilient fishing fleets.

Civil society organisations such as the Saint Lucia National Trust have engaged in community training as it relates to alternative livelihoods through which fisherfolk have also benefited.

³⁹ Japan International Cooperation Agency and Florida Sea Grant. 2018. Facilitating Co-managed Fisheries in the Caribbean Region: Good Practices and Guidance from the CARIFICO Experience

⁴⁰ CRFM, 2017. Report of the CRFM / CARIFICO Seminar: Strengthening Fisheries Co-management in the Region. CRFM Technical & Advisory Document, No. 2017 / 4. 68p.

Table 7.1 Programmes and initiatives providing support and resources to fisherfolk and fisherfolk organisations in country

Name of project/programme/initiative	Description of programme/initiative	Type of support /resources provided	Organisation delivering programme/initiative	Organisation type
Regular work programme of the Department of Fisheries ⁴¹ ⁴² ⁴³	Support to fisherfolk as required for technical, financial and equipment needs.	<ul style="list-style-type: none"> • Duty-free concessions for imported fishing equipment and materials; • Fuel rebates for registered fishers. • Letters of endorsement to facilitate visas, bank loans etc. • Assistance with scoping for projects and writing project proposals • Fisheries infrastructure, fishing vessels, fishing gear • Technical training on fishing methods 	Department of Fisheries	Government
Lionfish Project ⁴³	Project aimed at curbing the increase of lionfish (invasive species)	Training in catching, handling, preparing and processing lionfish	Department of Fisheries	Government
Regular work programme of the Department of Cooperatives ¹⁸	Training provided to fisherfolk cooperative as need to support better functioning as a cooperative	<ul style="list-style-type: none"> • Training in: <ul style="list-style-type: none"> - Business Development - Administration - Operational Procedures <p><i>Training can be tailored to deal with any other issues impacting cooperatives.</i></p>	Department of Cooperatives	Government

⁴¹ Government of Saint Lucia. 2019. Draft National Policy for the Fisheries Sector 2020-2030.

⁴² Government of Saint Lucia. n.d. Services Directory: Services about Agriculture/Fisheries. Available at <http://www.govt.lc/services#>. Accessed 19th June 2020

⁴³ Department of Fisheries. 2020. Personal Communication. 27th May.

Sustainable Agribusiness for Laborie and Environs Project (SABLE) ⁴⁴	Project aimed at supporting farmers and fishers in the southern part of the country to transition to agri-business operations and improve their resilience to climate change	<ul style="list-style-type: none"> • Financial support for climate resilient practices and technology • Development of an insurance facility • Capacity building for the Laborie Fishers and Consumer Cooperative in quality assurance and marketing of their products 	Laborie Co-operative Credit Union (LCCU) in collaboration with Inter-American Development Bank and Caribbean Development Bank	Private Sector and International Development Agency
Improving Business Acumen in Fisher Cooperatives in Saint Lucia ¹⁷¹⁷	Project aimed at improving management of cooperatives and the services provided to fishers through cooperatives. <i>Training modules were developed in collaboration with Department of Fisheries</i>	<ul style="list-style-type: none"> • Training in: <ul style="list-style-type: none"> - Governance - Credit Management - Inventory management - Membership development and management • Training materials <p>Another outcome of the project was the establishment of a committee with representatives from four fishing cooperatives to plan for joint procurement of fishing supplies with technical input from the Department of Fisheries and Cooperatives.</p>	Celestial Self Development Centre Under the European Union “Programme for strengthening Fisheries Management in African, Caribbean and Pacific Group of states (ACP Countries (ACPFish II)” project	Private Sector and International Development Agency
Coastal/Wetland Ecosystem Conservation and Sustainable Livelihoods sub-project under the OECS Protected Areas and	Sub-project aimed at supporting conservation and protected area management at national and local levels	<ul style="list-style-type: none"> • Equipment – this was mostly provided to fishers from Savannes Bay Fishers and the Au Picon Seamoss Farmers Group (which includes fisherfolk) 	Saint Lucia National Trust	Civil Society

⁴⁴ Mejicanos, L, Dookiesingh, V. 2018. Creating more sustainable and profitable agribusinesses for St Lucia. March 7th. Inter-American Development Bank Available at <https://blogs.iadb.org/caribbean-dev-trends/en/creating-sustainable-agribusiness-for-st-lucia/>. Accessed 20 June 2020.

Associated Livelihoods (OPAAL) project ^{45 46}	<i>(Regional project with Saint Lucia as one of its target countries)</i>	<ul style="list-style-type: none"> Licensing of boat owners and fisherfolk to become licensed boat captains 		
Caribbean Fish Sanctuary Partnership Initiative (C-FISH) ^{46 47}	<p>Project aimed at strengthening community-based marine protected area management. The project sought to provide resources, training, and alternative livelihood opportunities to communities around marine protected areas.</p> <p><i>(Regional project with Saint Lucia as one of its target countries)</i></p>	<p>Technical training in seamoss production - Au Picon Seamoss Farmers Group (which includes some fisherfolk) obtained National Vocational Qualification in Sustainable Seamoss Production developed through the Technical Vocational Education Training Unit within the Ministry of Education</p>	<p>Saint Lucia National Trust in partnership with Fisheries Division and Ministry of Education</p> <p>CARIBSAVE Caribbean Fish Sanctuary Partnership Initiative (C-FISH) sponsored project</p>	Civil Society (national and regional), Government
Climate -Resilient Eastern Caribbean Marine Managed Areas Network (ECMMAN) Project ^{46, 48}	<p>Project aimed at establishing a network of marine management areas which would also provide for improved livelihoods opportunities within the project countries. In Saint Lucia, the project focused on the Point Sables</p>	<ul style="list-style-type: none"> Training in rainwater harvesting- Fisherfolk from surrounding local communities would have benefitted from this training Training in construction, deployment and maintenance of demarcation of buoys in order to properly delineate boundaries of the Maria Island Marine Reserve⁴⁹ - Fisherfolk were 	The Nature Conservancy and the Saint Lucia National Trust	Civil Society (international and national)

⁴⁵ Saint Lucia National Trust. 2019. "OPAAL Outcome Brief". Available at <https://slunatrust.org/news/opaal-outcome-brief>. Accessed 20 June 2020.

⁴⁶ Saint Lucia National Trust. 2020. Personal Communication. 11th June

⁴⁷ Saint Lucia National Trust. 2016. Seamoss Farmers to be certified in Sustainable Seamoss Production. Available at <https://slunatrust.org/news/seamoss-farmers-to-be-certified-in-sustainable-seamoss-production>. Accessed 20 June 2020.

⁴⁸ The Nature Conservancy. n.d. Climate-Resilient Eastern Caribbean Marine Managed Areas Network (ECMMAN) Project: Project Accomplishments 2013-2017.

⁴⁹ Henry, C. 2016 " Locally Made Demarcation Buoys Installed in Maria Island Marine Reserve. St Lucia National Trust. Available at https://slunatrust.org/assets/content/documents/Demarcation_TrainingOct2016.pdf Accessed 20 June 2020.

	<p>Environmental Protection Area</p> <p><i>(Regional project with Saint Lucia as one of its target countries)</i></p>	<p>involved in this training carried out in partnership with the Fisheries Division</p> <ul style="list-style-type: none"> Improving capacity in conducting eco-tours – the capacity of Eco-South Tours was improved to expand community based eco-tourism. 		
<p>Coral Restoration Programme⁵⁰</p>	<p>Programme aimed at creating livelihood opportunities in vulnerable fishing communities and increasing the resilience of inshore coral reefs</p>	<p>Project, involved fisherfolk and included:</p> <ul style="list-style-type: none"> Expanding existing coral nurseries and planting programmes in the Soufriere Marine Management Area Training in the first National Vocational Qualification (NVQ) in Coral Restoration developed by CLEAR and Ministry of Education to allow for formal recognition 	<p>Centre for Livelihoods, Ecosystems, Energy, Adaptation and Resilience in the Caribbean Limited (CLEAR Caribbean Ltd).</p> <p>Public-private partnership with the Department of Fisheries, the SMMA and Sandals Foundation</p> <p>Supported by Caribbean Aqua-Terrestrial Solutions (CATS)</p>	<p>Civil society, Government, Private Sector</p>

⁵⁰ CLEAR Caribbean. n.d. Current Work [Online]. Available at <https://www.clearcaribbean.org/our-work/current/>. Accessed 20 June 2020.

Fisher Learning Exchange Programme ⁵¹	Initiative aimed at strengthening the capacity of fisherfolk through exchange programmes with other Caribbean islands	Learning/knowledge exchange with fisherfolk from Saint Lucia who visited Grenada to learn about community-based management of marine areas and FAD management initiated by fishers.	The learning exchanges was an activity under the Climate Change Adaptation in the Eastern Caribbean Fisheries Sector (CC4Fish) project. CC4Fish is regional project which targets Saint Lucia as one of its project countries. CC4Fish is funded by the GEF and is being implemented by FAO and executed by the national fisheries authorities in each project country	International Development Agency, Government
Entrepreneurship in the Fisheries Sector ⁵²	Initiative aimed at providing training to improve the capacity of fishers to better manage fishing operations	Training in: <ul style="list-style-type: none"> - work planning - goal setting - managing risks, - product pricing, and - record keeping amongst others. 	Department of Fisheries through the CC4FISH project	International Development Agency, Government
Strengthening Caribbean Fisherfolk to Participate in	Project aimed at building capacity of fisherfolk organisations to be engaged in fisheries governance	<ul style="list-style-type: none"> • Funding - the project included a small grant facility, the Fisherfolk Strengthening Fund, targeted at fisherfolk organisations to support fisherfolk organisational 	The Strengthening Caribbean Fisherfolk to Participate in Governance project was implemented by	Civil Society (regional) Academia, Regional and International

⁵¹ CC4FISH Saint Lucia (2019) 18th July. Available at <https://www.facebook.com/CC4FISH758/> (Accessed 20 June 2020)

⁵² CC4FISH Saint Lucia (2019) 21st June. Available at <https://www.facebook.com/CC4FISH758/> (Accessed 20 June 2020)

Governance project ^{53 54}	<i>(Regional project with Saint Lucia as one of its target countries)</i>	strengthening project. The Saint Lucia Fisherfolk Cooperative Society Limited and Castries Fishermen's Cooperative Society Limited applied to and were rewarded grants from this fund. <ul style="list-style-type: none"> • Capacity building in governance – the project included a number of capacity building workshops aimed at improving the skills and knowledge of fisherfolk leaders to better participate in governance 	CANARI in partnership with UWI-CERMES, Panos Caribbean, CNFO and CRFM. The project was funded by the European Union	Development Agencies,
Ridge to Reef Ecosystem Rehabilitation Climate Change Adaptation ⁵⁵	Project aimed at improving Fish Biomass in two Coastal Communities in Saint Lucia	<ul style="list-style-type: none"> • Establishment of a community managed coral nursery • Livelihood development through the establishment of a community dive operation 	The Ridge to Reef Ecosystem Rehabilitation Climate Change Adaptation project is being implemented by Caribbean Community Climate Change Centre (CCCCC) in collaboration with the	Government, International and Regional Development Agencies, Civil Society, Private Sector

⁵³ CANARI (2015). Report of the National Fisherfolk Workshop, Saint Lucia. Held as part of the Strengthening Caribbean Fisherfolk to Participate in Governance project. October 14- 15, 2015. Saint Lucia, Vieux Fort: Vieux Fort Fishing Complex

⁵⁴ CANARI. n.d. Strengthening Caribbean fisherfolk to participate in governance [Online]. Available at [https://canari.org/coastal-marine-governance-and-livelihoods/strengthening-caribbean-fisherfolk-to-participate-in-governance/#:~:text=The%20small%20grants%20facility%20\(now,capacity%20to%20participate%20in%20governance.](https://canari.org/coastal-marine-governance-and-livelihoods/strengthening-caribbean-fisherfolk-to-participate-in-governance/#:~:text=The%20small%20grants%20facility%20(now,capacity%20to%20participate%20in%20governance.) (Accessed 20 June 2020)

⁵⁵ Government of Saint Lucia. (2018). Saint Lucia's Sectoral Adaptation Strategy and Action Plan for the Fisheries Sector (Fisheries SASAP) 2018- 2028, under the National Adaptation Planning Process. Department of Sustainable Development, Ministry of Education, Innovation, Gender Relations and Sustainable Development and Department of Agriculture, Fisheries, Natural Resources and Cooperatives, Ministry of Agriculture, Fisheries, Physical Planning, Natural Resources and Cooperatives.

			Ministry of Agriculture, Ministry of Sustainable Development, Ministry of Tourism and other relevant private, public and community-based organisations including Inter-American Institute for Cooperation on Agriculture (IICA) and SMMA	
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8 Partnerships and networks for ecosystem stewardship

Partnerships and networks connect institutions and organisations across levels and scales. For fisherfolk organisations seeking to engage in ecosystem stewardship, partnerships and networks are important as these arrangements help facilitate information flows, fill knowledge gaps, and strengthen expertise for ecosystem management, including stewardship.⁵⁶ This section discusses a few current or past partnerships or networks in Saint Lucia that included fisherfolk organisations and how these have impacted ecosystem management.

8.1 Findings for partnerships and networks for ecosystem stewardship

Fisherfolk cooperatives in Saint Lucia engage in partnerships with government, private sector and civil society organisations for various initiatives related to ecosystem management including livelihood development. Among government agencies, fisherfolk organisations liaise with both the Department of Fisheries and the Department of Cooperatives most frequently. The Department of Cooperatives is guided by the Co-operative Societies Act (Revised 2005) and provides guidance to the fisherfolk cooperatives as it relates to governance, organisation, procedures and regulation of cooperatives, while the Department of Fisheries provides technical support and guidance as it relates to the fisheries sector.

The Department of Cooperatives follows the principles of the Cooperative Societies Act in providing autonomy for Cooperatives to manage their organisations. The Department provides oversight to the Cooperatives through ensuring adherence to the regulations. Whenever fisherfolk cooperatives engage in projects, the Department of Cooperatives ensures that actions taken do not infract on societies' by-laws and other such legal considerations. Procedurally, agencies should liaise with the Department of Cooperatives regarding any projects / initiatives that are to involve fisherfolk cooperatives so that the Department understands how these cooperatives will be engaged and can provide support as needed or adjust for duplication of effort. However, the Department of Cooperatives, is not engaged in this manner and is often informed by the fisherfolk cooperatives and other agencies after the fact. If engaged, in a more meaningful way, the Department can facilitate improved participation by fisherfolk in decision making / management initiatives.¹⁸

The Department of Cooperatives has noted that low engagement of fisherfolk in initiatives may also be due to the perception of some fisherfolk that they are not knowledgeable enough to engage or a preference among fisherfolk to focus on their livelihoods to ensure income generation. Thus, fisherfolk cooperatives are considered to be mostly engaged as participants (in workshops/training) rather as partners (on projects) and are reliant on the Department of Fisheries for technical support. Through the Department, fisherfolk organisations are able to source grassroots funding, but it is perceived that fisherfolk organisations may pursue initiatives that are more in line with revenue generation rather than ecosystem stewardship activities. While the Department would encourage fisherfolk in ecosystem stewardship initiatives, fisherfolk may not necessarily 'champion' these causes and are focused on the business aspect of their cooperatives rather than natural resource management. While some fishers are interested in management partnerships, most fishers focus on earning their living rather than participating hands on in management. While it may be difficult for fisherfolk to see themselves in an advocacy role relating to ecosystem stewardship programmes, there are a few fishers who do engage and champion their causes e.g. there were fishers who

⁵⁶ Olsson, P., Bodin, Ö. and Folke, C., 2010. Building transformative capacity for ecosystem stewardship in social-ecological systems. In *Adaptive capacity and environmental governance* (pp. 263-285). Springer, Berlin, Heidelberg.

expressed concerns with damage done to coral reefs by ships and asked the Department for support. However, within their own organisations, these fisherfolk may not get much support to push their agenda forward. It is perceived that fisherfolk organisations would categorise leading and advocating for ecosystem stewardship activities/ initiatives as the role of the Department of the Fisheries. Most fishers understand concerns in fisheries management but see the Department as being the main stewards. ⁴³

Also, the cooperatives are not structured in a way that supports the role of a programme officer who can support partnerships between fisherfolk and the Department. Currently managers of cooperatives focus on selling fuel, accounting and payment of staff, and not necessarily on project development, collaboration or advocacy. ⁴³

The Saint Lucia National Trust, a civil society organisation, also seeks to engage/partner with the fisherfolk cooperatives through various initiatives. The membership of the Trust is open to the public, once approved by the Board and a fee is paid. Through these meetings, members have the opportunity to be updated and engaged in ongoing projects such as the turtle monitoring night patrols. Members of the Trust also have the opportunity to be voted on to the Board. This structure provides a framework for fisherfolk to formally partner in ecosystem stewardship initiatives. However, it was noted that fisherfolk are often not interested in attending these meetings even when offers are made to waive their membership fees. It was suggested that the meeting type setting may be intimidating to some fisherfolk, hence there have been efforts to have more informal meetings at landing sites. It was, further noted that fisherfolk are mainly more involved in projects with direct tangible benefits. ⁴⁶

Despite some of the challenges outlined above, there are a number of examples of partnerships between fisherfolk and other stakeholders in the following areas related to ecosystem management outlined in Table 8.1.

Table 8.1: Examples of partnerships between fisherfolk and other stakeholders

Area	Description of partnership
Monitoring and enforcement	Fisherfolk share information with on the Department of Fisheries Illegal, Unregulated and Unreported Fishing. ^{43 43}
Data collection	<ul style="list-style-type: none"> ○ Fisherfolk assist the Department of Fisheries with conch data collection under the CARIFICO project. ⁴³ ○ Currently, the Department of Fisheries works with fisherfolk to conduct site assessments, data collection and information sessions on closed seasons for the sea urchin fishery. ^{43, 57}. In previous years, specific community management strategies existed for the sea urchin fisheries as it related to restrictions, harvest and user access. Unfortunately, due to overexploitation of the resources, this has been discontinued but the experience demonstrated how user groups can be involved in management of resources.

⁵⁷ Pena, M. H.; Oxenford, H.A.; Parker, C.; Johnson, A. Biology and fishery management of the white sea urchin, *Tripneustes ventricosus*, in the eastern Caribbean. *FAO Fisheries and Aquaculture Circular*. No. 1056. Rome, FAO. 2010. 43p.

<p>Awareness building/Information sharing</p>	<ul style="list-style-type: none"> ○ As part of the Caribbean Fisherfolk Day / Fishermen’s Feast commemoration a Fisher’s Clinic was hosted by the Department of Fisheries in collaboration with the Castries Fishers Cooperative along with other agencies. The Clinic was aimed at strengthening the relationship with fisherfolk through provision of information and promoting health and wellness. Information provided through various booths and agencies (e.g. insurance agencies and suppliers) included engine maintenance and repair, engine diagnostic testing, cooperative membership drives, financial planning, marine pollution, maintaining fish quality and associated sanitary practices.⁵⁸
<p>Collaborative management and management planning</p>	<ul style="list-style-type: none"> ○ Fisherfolk island wide are currently collaborating, through consultations, with the Department of Fisheries to develop a FAD fisheries management plan ○ The SMMA management framework is participatory comprising of a Board and Stakeholder Committee to manage sustainable use of the SMMA. ⁵⁹ Fisherfolk have representation on the SMMA (though they are perceived to be side-lined by other agencies e.g. tourism.) Issues that are raised from fisherfolk are also communicated to the Department of Fisheries. ○ The Saint Lucia National Trust has engaged fisherfolk in marking foraging grounds of turtles along with local divers as part of the general work of the Trust. Currently one fisher is involved in conducting tours to the Maria Island Nature Reserve, which has increased interests for other fisherfolk to be involved. The Trust also informally engages with fisherfolk located in Point Sable near the Pointe Sable Environmental Protection Area for various initiatives including upkeep of landing sites, mangrove protection, addressing resource user conflicts, alternative livelihood training opportunities, and building awareness of ongoing projects. ○ The Saint Lucia Fisherfolk Cooperative Society Limited has partnered with a local entrepreneur who runs Alga Organics (a biotech manufacturing company utilising seaweed as bio-stimulant for plants). Through this partnership, which received funding from external agencies and the Government, 298 tonnes of seaweed were removed from beaches on the eastern side of the island from 2015-2018. Apart from providing livelihood for local community members, the partnership has also led to the first Sargassum Seaweed Processing Facility in the Caribbean being established. ⁶⁰

⁵⁸ Department of Fischeires. 2019. Fisheries Department – Fisher’s Clinic 2019. Government of Saint Lucia [Online]. Available at <http://www.govt.lc/news/fisheries-department--fisher-s-clinic-2019>. Accessed on 20 June 2020.

⁵⁹ Government of Saint Lucia. Ministry of Sustainable Development, Energy, Science and Technology. 2014. Fifth National Biodiversity Report for Saint Lucia.

⁶⁰ Global Environment Facility. 2018. Communities innovate to address Sargassum seaweed on coasts of Saint Lucia [Online]. Available at <https://www.thegef.org/news/communities-innovate-address-sargassum-seaweed-coasts-saint-lucia> (Accessed 20 June 2020)

Livelihood development	Fisherfolk were part of a team, which included the Department of Fisheries, in developing occupational standards for boat safety. Included in this was an understanding of traditional knowledge as it related to using the stars as a navigational tool. It was not necessarily a part of boat masters training but it was considered necessary to maintain that ability in absence of equipment. ⁴³

Future considerations for partnerships are included in the draft Saint Lucia Lionfish Response and Action Plan which identifies fisherfolk as a partner as it relates to research and education⁶¹

9 Communication of information on sustainable practices for fisheries resources use

Communication is the means to share information on best practices, lessons learnt, available support/resources, training, networking, and opportunities for participatory decision-making that can support effective ecosystem stewardship. The institutional analysis examined the extent to which providers of fisheries information in the project country were using defined communication strategies, tools and channels to communicate with fisherfolk, as well as their capacity to use the tools and channels effectively; including the structures and systems in place for clear communication.⁴³⁴³

The Department of Fisheries is one of the key providers of fisheries information in Saint Lucia including closed seasons, grant opportunities and invasive species. The Department has a Communication and Information officer who supports communication for the department. While the Department does not have an established communication strategy, key stakeholders are identified on a case-by-case basis during periods of information dissemination. The Department utilises both in-person and online communication methods.

Communication with fisherfolk, is largely done through the Department's extension officers who engage with fisherfolk at the grassroots level. Communication methods used by extension officers to engage fisherfolk include one-on-one and focus group meetings to get on-the-ground feedback from fisherfolk who do not typically attend national consultations and workshops.

National consultations and workshops are also methods used to share information with fisherfolk, including getting their input into draft policies and plans that concern the fisheries sector. The development of all major plans and policies that are related to the fisheries sector have included consultations with fisherfolk. To encourage the attendance of fisherfolk in consultations, reimbursement is often provided for their transport. Compensation, when funds permit, may also be provided to compensate for lost wages from fishing due to their participation.

The Department of Fisheries has found that the most effective means to communicate with fishers is through on-the-ground meetings at sites within their communities (e.g. landing sites). This type of environment is believed to be more comfortable for fisherfolk and allows them to be more open to sharing their opinions on policies, plans and other fisheries related issues. Extension officers also place hardcopies of informative flyers/posters developed by the Department of Fisheries at strategic

⁶¹ Joseph, A. n.d. Saint Lucia Lionfish Response and Action Plan – First Working Draft.

sites. Additionally, documents concerning fisheries plans, policies or projects are not circulated for public viewing but instead are translated for easier understanding e.g. through pictorial presentations at focus group meetings or through word of mouth by extension officers.

It was noted that that there was room for improvement as it related to considering and documenting traditional knowledge which is often communicated during conversations with fisherfolk at landing sites and sometimes gathered through consultations. There is also need to engage a wider representation of stakeholders at consultations so as to ensure that those persons with the relevant knowledge, institutional knowledge, and historical understanding are specifically invited e.g. specific age groups can provide more information on traditional knowledge. The current approach is just to ensure meetings are well attended. There is also a need to actively include more females within the industry in consultations.

In terms of online communication methods, the Ministry of Agriculture, Fisheries, Physical Planning, Natural Resources and Co-operatives, under which the Department of Fisheries falls, has a Facebook Page which the Department uses to share information (see Figure 3). However, a website is currently being developed for the Ministry and all its Departments. The Communication and Information Officer in the Department of Fisheries also utilises television programmes to communicate on fisheries related issues and extension officers disseminate electronic copies of informative flyers/brochures to fisherfolk organisations for onward dissemination to their members. There is also a WhatsApp group which is used as a communication channel between the Department of Fisheries and fisherfolk organisations.

The Department of Cooperatives is also a key provider of information for the fisheries sector, specifically as it relates to providing information for the efficient management and regulation of fishing cooperatives. The Department of Cooperatives liaises directly with the fishing cooperatives and receives updates on cooperative meetings and are at times invited to the board meetings of the umbrella fishing cooperative – Saint Lucia Fisherfolk Cooperative Society Limited, as issues arise, allowing for communication between the fishing cooperatives and the regulatory body.

Department of Fisheries

Public Notice
Consumer Guide for Jounen Kweyol

Vendors and consumers **DO NOT** buy, sell or eat

- ✗ River Crayfish (Kwèbìsh)
- ✗ White Sea Eggs (Chadòn)

CLOSED	OPEN
River Crayfish – Kwèbìsh Sea Urchin – Chadòn	Conch – Lambi Lobster –Hóma Sea Turtles – Toti

*Take note of the **CLOSED** and **OPEN** fisheries*
Help Protect our Fisheries Resources

Figure 3 Example of material shared by the Department of Fisheries and Ministry of Agriculture, Fisheries, Physical Planning, Natural Resources and Cooperatives. Credit: Ministry of Agriculture, Fisheries, Physical Planning, Natural Resources and Cooperatives Facebook Page.

10 Organisational assessment of the fisheries authority in Saint Lucia

While fisheries authorities have adopted EAF principles as an approach; evidenced by their inclusion in policies and plans (see Table 5.2), many have not yet adopted these principles within their administrative procedures and/or do not currently possess the capacities to facilitate effective collaborative management procedures.

As part of the institutional analysis, an organisational assessment of the of the state agency with direct responsibility for fisheries management was conducted in Saint Lucia to identify gaps and develop recommendations to better adopt the EAF approach and subsequently support fisherfolk and their organisations in actioning ecosystem stewardship. The assessment was conducted via survey to provide a rapid assessment of the state agency’s internal capacity to support ecosystem stewardship by fisherfolk and their organisations. The questions in the survey examined the following four capacity areas to explore the organisational motivation and capacity for supporting ecosystem stewardship by fisherfolk:

1. Vision, mandate and culture
2. Practices
3. Knowledge and skills
4. Resources

The assessment was conducted as an organisational self-assessment – where the selected agency, either through a small focus group (including relevant and knowledgeable staff members) or via an elected representative, completed the survey.

In the case of Saint Lucia, the organisational assessment focused on the Department of Fisheries. The survey instrument including the responses provided can be found at Appendix 13.3.

10.1 Findings from organisational assessment of the fisheries authority in Saint Lucia.

In Saint Lucia, the main fisheries management authority is the Department of Fisheries under the Ministry of Agriculture Fisheries, Physical Planning, Natural Resources and Co-operatives which manages marine capture fisheries under the Fisheries Act (2001) and Fisheries Regulations (1994). Ecosystem stewardship within the Department is supported through its plans and policy guidelines, as well as through the support provided and partnerships with fisherfolk organisations.

The Department of Fisheries is a key stakeholder in the fisheries institution in Saint Lucia and plays an important role in supporting ecosystem stewardship by fisherfolk. Improved ecosystem stewardship by fisherfolk and their organisations can benefit the Department by reducing or minimising the burden on the Department’s limited financial and human resources for enforcement of fisheries regulations and contributing to the sustainable use, conservation and protection of costal and marine resources for which the Department has management responsibility.

The Fisheries Department is guided by the vision statement in its draft Fisheries Policy 2020-2030 which is based on “strong partnerships between civil society, private sector and public sector, to advance a sustainably governed fisheries sector that will enhance profitability and contribute to food security”. Ecosystem stewardship is supported by the policy’s recognition that sustainable fisheries can be advanced through partnerships with all stakeholders. The core values of the Department reflect the EAF principles and importance of fisherfolk as it relates to ecosystem stewardship, participatory processes and traditional knowledge.

The mandate to support ecosystem stewardship is stated by the Fisheries Act and focuses on promoting “the management and development of fisheries, so as to ensure the optimum utilization of the fisheries resources in the fishery waters for the benefit of Saint Lucia”. This mandate is to be

achieved through the draft fisheries policy and its associated strategic objectives relating to social-ecological sustainability and EAF principles.

Table 10.1 provides a synthesis of the organisational assessment survey findings for the Department of Fisheries, Saint Lucia, and recommendations for addressing gaps related in the four capacity areas evaluated. Each capacity area is also given an overall ranking based on the findings using a traffic light rating system, where:

	Indicates that the agency is effectively supporting ecosystem stewardship by fisherfolk and their organisations in the capacity area, with non-critical gaps to be addressed
	Indicates that the agency is adequately supporting ecosystem stewardship by fisherfolk and their organisations in the capacity area, but there are some critical gaps to be addressed
	Indicates that the agency factor is not adequately supporting ecosystem stewardship by fisherfolk and their organisations in the capacity area and there are critical gaps to be addressed

Table 10.1 Organisational assessment of Saint Lucia, Department of Fisheries

Capacity area	Evaluation question and explanation	Response provided by agency	Overall ranking for section based on responses	Gaps/Recommended areas for strengthening
Vision, Mandate and Culture	Organisation has a vision statement that is supportive of /promotes ecosystem stewardship by fisherfolk	Yes		
	Organisation's mandate supports ecosystem stewardship by fisherfolk	Somewhat		
	<p>Explanatory notes provided by agency:</p> <ul style="list-style-type: none"> • Department's vision statement is <i>"Strong partnerships between civil society, private sector and public sector, to advance a sustainably governed fisheries sector that will enhance profitability and contribute to food security"</i> and reflects supporting/promotion of ecosystem stewardship • Department's mandate supports ecosystem stewardship to promote the management and development of fisheries, so as to ensure the optimum utilisation of the fisheries resources in the fishery waters for the benefit of Saint Lucia (Fisheries Act Cap 7.15). Policy objectives considers socioecological priorities with priorities 1 and 3 speaking to principles of an ecosystem approach to fisheries management and sociocultural sustainability. • Core values/beliefs that the Division identifies as its culture are: <ul style="list-style-type: none"> ○ belief that ecosystem stewardship by fisherfolk is important for sustainable use of fisheries and marine resources; ○ belief that fisherfolk should be included in decision-making on management; ○ values local and/or traditional knowledge; and ○ believes in the EAF. 			
Practices	Organisation has a clear process for including opinions of fisherfolk in decisions made about fisheries and marine resources	No		<ul style="list-style-type: none"> • Department can formalise its process for including opinions of fisherfolk in decision making • Need to strengthen capacity of fisherfolk to engage in collaborative partnership with Department in fisheries management initiatives. • Strengthening of information collection and sharing through development of a communication strategy
	Organisation regularly and systematically includes fisherfolk's input in decisions about how fisheries and marine resources are managed	Yes		
	Organisation regularly partners/collaborates with fisherfolk and their organisations for fisheries management initiatives	No		
	Organisation regularly facilitates collaboration/partnerships between fisherfolk and other fisheries and marine stakeholders	Yes		
	<p>Explanatory notes provided by agency:</p> <ul style="list-style-type: none"> • Apart for the development of the fisheries plan, the process for engaging fisherfolk in decisions is not mandated by law nor is there a documented process e.g. 			

	<p>procedural manual, to guide such. However, the Department as part of its planning process for any initiative would discuss the process for communicating, consultation and who should be consulted.</p> <ul style="list-style-type: none"> • The legislation requires that the Chief Fisheries Officer shall consult with the local fishermen, local authorities, and with other stakeholders as it relates to the fishery plan. Where decisions are to be made, the Department would consult the fisherfolk and all other interest groups. • The Department would engage the fisher folk on fisheries management initiatives. However, it is usually to participate or support. e.g. Fisher Clinic Fair; Development of occupational standards. Fisherfolk have both a participatory relationship and a top-down relationship with the Department. • Examples of facilitating collaboration between fisherfolk and other fisheries and marine stakeholders include training in lionfish preparation, safety at sea, conch data collection under the CARIFICO project, sea urchin monitoring. • The Department uses fisherfolk traditional knowledge to inform management decisions. Despite not having a formal communication strategy to engage with fisherfolk, information and guidance is provided to fisherfolk as it relates to sustainable fishing practices and initiatives for stewardship activities through processes mentioned in Section 9. Out of the communication strategies used to engage with fisherfolk, focus group meetings, one on one meetings, radio and television have been the most effective. 													
Knowledge and Skills	<table border="1"> <tr> <td>Technical staff have knowledge of EAF</td> <td>Yes</td> </tr> <tr> <td>Technical staff have specialist knowledge on ecosystems, their functions and ecosystem changes</td> <td>Somewhat</td> </tr> <tr> <td>Technical staff understand socio-economic context of fisheries and marine resource use by fisherfolk and other stakeholders</td> <td>Yes</td> </tr> <tr> <td>Technical staff have knowledge of aquaculture and other alternative or complementary livelihood options for which fisherfolk may be well suited</td> <td>Yes</td> </tr> <tr> <td>Technical staff have knowledge of how fisherfolk organisations function including key challenges that they may face and how they can be supported to resolve them</td> <td>Yes</td> </tr> <tr> <td>Organisation has the capacity to provide training for fisherfolk in different technical areas and organisational strengthening (these may include soft skills such as facilitation, development of training material, etc.)</td> <td>No</td> </tr> </table>	Technical staff have knowledge of EAF	Yes	Technical staff have specialist knowledge on ecosystems, their functions and ecosystem changes	Somewhat	Technical staff understand socio-economic context of fisheries and marine resource use by fisherfolk and other stakeholders	Yes	Technical staff have knowledge of aquaculture and other alternative or complementary livelihood options for which fisherfolk may be well suited	Yes	Technical staff have knowledge of how fisherfolk organisations function including key challenges that they may face and how they can be supported to resolve them	Yes	Organisation has the capacity to provide training for fisherfolk in different technical areas and organisational strengthening (these may include soft skills such as facilitation, development of training material, etc.)	No	<ul style="list-style-type: none"> • Department can improve its staff knowledge on ecosystems, their functions and ecosystem changes through professional development training • Need to strengthen monitoring and evaluation of socioeconomic related initiatives and to strengthen socioeconomic assessment related to design and data analysis • Technical staff to be trained in developing and implementing a
Technical staff have knowledge of EAF	Yes													
Technical staff have specialist knowledge on ecosystems, their functions and ecosystem changes	Somewhat													
Technical staff understand socio-economic context of fisheries and marine resource use by fisherfolk and other stakeholders	Yes													
Technical staff have knowledge of aquaculture and other alternative or complementary livelihood options for which fisherfolk may be well suited	Yes													
Technical staff have knowledge of how fisherfolk organisations function including key challenges that they may face and how they can be supported to resolve them	Yes													
Organisation has the capacity to provide training for fisherfolk in different technical areas and organisational strengthening (these may include soft skills such as facilitation, development of training material, etc.)	No													

	Technical staff has the skills to assist fisherfolk with mobilising funding for ecosystem stewardship activities and initiatives	Somewhat		<p>livelihood business plan and assessing the viability and benefits of different business models.</p> <ul style="list-style-type: none"> • There is a need for training of staff to develop capacity in train the trainer programmes, project planning and project writing skills, report writing, and negotiation skills.
Technical staff has skills in participatory approaches (e.g. participatory monitoring and evaluation, participatory planning, participatory management etc.)	Yes			
Technical staff has communication skills needed to effectively communicate with a range of stakeholders including fisherfolk	Yes			
Organisation provides or accesses training and other kinds of capacity building for staff to regularly improve their technical knowledge and skills	Yes			
<p>Explanatory notes provided by agency:</p> <ul style="list-style-type: none"> • Department's technical staff have: <ul style="list-style-type: none"> ○ the relevant knowledge of EAF, ○ knowledge of functioning of fisherfolk organisations. Collaboration is also frequently held with the fisherfolk organisations regulatory authority (Department of Cooperative) which is within the same Ministry. ○ skills in participatory approaches as is seen through initiatives such as the joint monitoring of sea urchin fishery and delegations with fisherfolk to view new technology and practices in overseas territories ○ Training opportunities through the Public Service and through international and regional development partners such as JICA. • Limited number of staff have specialist knowledge of ecosystems. Some exposed through professional development training but most have basic to working knowledge • Whilst technical staff have an understanding of socioeconomic context of fisheries, monitoring and evaluation of development initiatives on the socio-economic context could be improved. Technical skills in socio-economic assessment could be strengthened as it relates to assessment design and data analysis, however, delivery of assessment as well done. • Technical staff also have knowledge of alternative livelihood options for fisherfolk but this mostly focuses on technical aspects that deal with highlighting the end products / result e.g. coral restoration projects, agricultural outputs. There is a need for this to be expanded to incorporate the business aspects • The capacity of the Department to provide training for fisherfolk is limited. • Technical staff provide guidance to fisherfolk in scoping projects but can benefit from project planning and project writing skills 				

	<ul style="list-style-type: none"> Staff have necessary skills to communicate effectively though report writing, negotiation and facilitation skills can be enhanced 			
Resources	Organisation provides funding assistance to fisherfolk to support ecosystem stewardship activities or initiatives	No		<ul style="list-style-type: none"> Most of the funding for fisheries development is made available to the Department through projects funded by donor agencies. Donor and/or project objective restrictions may limit the amount of funding that can be directed toward fisherfolk and their organisations. Supporting development of capacity of fisherfolk organisations to seek out / apply for direct funding may assist.
	Organisation provides materials, equipment or technology to fisherfolk to support ecosystem stewardship activities or initiatives	Yes		
	Organisation has access to tools, methods and good practices that can be used to support fisherfolk with ecosystem stewardship activities and initiatives	Yes		
	Organisation provides access to or assists fisherfolk organisation with accessing networks or resources outside of itself (such as technical experts, funding, projects, etc.)	Yes		
	Organisation has a dedicated website which can be used to share information and resources on ecosystem stewardship practices with fisherfolk	No		
	Explanatory notes provided by agency: <ul style="list-style-type: none"> National Funding for the Fisheries programme of work is mainly for recurrent expenses. Majority of funding is through donor agency support. Materials, equipment or technological support to fisherfolk built into projects. Resources available to technical staff to support fisherfolk with ecosystem stewardship initiatives include case studies, shared experiences and lessons learnt in regional projects. Fisherfolk are usually invited with technical staff to visit and learn from other countries Through the Department's network, information on funding opportunities are shared with fisherfolk e.g. GEF small grants, CCRFI grassroots and Japan grass roots project funding. There is no website for the Department, but the line Ministry is working on a website for all Departments. 			

11 Enabling and constraining factors and recommendations for strengthening fisheries institution to support ecosystem stewardship by fisherfolk

Table 11.1 set out some of the key enabling and constraining factors based on the findings from the institutional analysis and organisational assessment, it also provides recommendations to improve strengthening of the fisheries institution in Saint Lucia to better support fisheries ecosystem stewardship by fisherfolk and their organisations. Enabling and constraining factors and recommendations are presented below under the categories of:

- Policy, legal and planning context for ecosystem stewardship
- Mechanisms for fisherfolk participation in decision-making
- Support and resources available to fisherfolk and their organisations for ecosystem stewardship
- Partnerships and networks for ecosystem stewardship
- Communication of information on sustainable practices for fisheries resources use

Gaps and areas for strengthening the organisational capacity of Saint Lucia's Fisheries Department to support ecosystem stewardship by fisherfolk are presented in Table 10.1.

Table 11.1 Stewardship enabling and constraining factors, and Recommendations to strengthen fisheries institution

Area	Enabling factors	Constraining factors	Recommendations
Policy, legal and planning context for ecosystem stewardship	<ul style="list-style-type: none"> • Policies, plans (including a plan dedicated for climate change adaptation strategies in the fisheries sector) and laws related to the fisheries sector (both existing and in draft) reflect EAF principles. 	<ul style="list-style-type: none"> • There is currently no monitoring and evaluation framework in place for the fisheries sector e.g. there is no action plan or monitoring and evaluation plan to support the Draft National Policy for the Fisheries Sector • There is low stakeholder awareness of the draft National Policy for the Fisheries Sector as awareness building has been delayed due to the COVID-19 pandemic. 	<ul style="list-style-type: none"> • A detailed Action Plan and Monitoring and Evaluation framework should be developed to support effective implementation of the National Policy for Fisheries Sectors 2020-2030. There is still opportunity for these supporting instruments to be included in the current policy cycle as the policy is still in the drafting process. • Given that the timeline for the policy has already begun, there is a need to build awareness of the Draft National Policy for the Fisheries Sector with various stakeholders through tailored outreach sessions.
Mechanisms for fisherfolk participation in decision-making	<ul style="list-style-type: none"> • Efforts are made to engage fisherfolk in management planning and decision-making, this includes through: <ul style="list-style-type: none"> - consultations: for example, consultations were held with fisherfolk in developing the National Policy for Fisheries Sector, 2020-2030 (Draft), National Fisheries Plan 2013 and Adaptation Strategy and Action Plan for the Fisheries Sector 2018-2028; and - decision-making mechanisms, for example, leaders of fisherfolk organisations were co-opted to the National Oceans Governance Committee to participate in the process for developing the National Ocean Policy 2020 – 2035 (Draft). 	<ul style="list-style-type: none"> • There is low representation of fisherfolk on more permanent and formalised decision-making mechanisms related to the fisheries sector and currently there is no decision-making mechanism directly related to the fisheries sector on which fisherfolk are represented. 	<ul style="list-style-type: none"> • Establish the Fisheries Advisory Committee as a decision-making mechanism directly related to the fisheries sector and include appropriate representation for fisherfolk. • In the absence of a Fisheries Advisory Committee, the membership of the National Ocean Governance Committee could be expanded to include fisherfolk.

<p>Support and resources available to fisherfolk and their organisations for ecosystem stewardship</p>	<ul style="list-style-type: none"> Support and resources are available to fisherfolk from various local government agencies, civil society organisations and regional projects as it relates to training, provision of equipment and financial aid. Additionally, most fisherfolk cooperatives are formalised through the Cooperative Societies Act and are supported both through the Department of Cooperative and Department of Fisheries. 	<ul style="list-style-type: none"> Capacity among fisherfolk organisations for co-management may be low e.g. although there is a fisherfolk cooperative representative on the SMMA, they may not be engaged as co-managers due, in part, to their high dependency on support agencies to lead ecosystem stewardship initiatives. 	<ul style="list-style-type: none"> Support provided to fisherfolk and their organisations should include regular training programmes to develop their capacity (e.g. in project development, proposal writing, and leadership development) to participate in management and governance of the fisheries sector to reduce their dependency on support agencies for this type of representation.
<p>Partnerships and networks for ecosystem stewardship</p>	<ul style="list-style-type: none"> Efforts to encourage co-management between fisherfolk and government are evident e.g. The Department of Fisheries and fisherfolk collaborate to collect data on the conch and sea urchin fisheries. 	<ul style="list-style-type: none"> Engagement of fisherfolk cooperatives in long-term partnerships for ecosystem management is limited. This may be due to a lack of capacity of fisherfolk organisations to engage in these types of partnerships, as well as low interest among fisherfolk in ecosystem management initiatives compared to more livelihood/income generating focused activities. 	<ul style="list-style-type: none"> Follow and improve on community-based participatory models used previously for the sea urchin fisheries and SMMA community approach to engage grassroots participation by fisherfolk to create more ownership of ecosystem stewardship initiatives.
<p>Communication of information on sustainable practices for fisheries resources use</p>	<ul style="list-style-type: none"> Department of Fisheries has a Communication and Information officer who supports communication for the department. Communication specifically with fisherfolk, is largely done through the Department's extension officers who engage with fisherfolk at the grassroots level. 	<ul style="list-style-type: none"> Collection and documentation of traditional knowledge from fisherfolk is limited. Lack of wide stakeholder representations at consultations Lack of established communication strategy within Department of Fisheries. 	<ul style="list-style-type: none"> Develop a strategy for capturing and documenting fisherfolk traditional knowledge. Strengthen inter-agency communication as it relates to activities of fisherfolk organisations and ongoing projects. Develop an overall communication strategy within Department of Fisheries which can identify wide range of stakeholders

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13 Appendices

13.1 Definitions of conceptual components for the institutional analysis framework

Conceptual component	Worksheet
<p>A. Policies. Laws and plans</p>	<p>This component focuses on the existing legal framework within the target country to address and guide fisheries management and planning. It involves the formal governance of a nation’s fisheries management which can either empower or constrain the ability to integrate <i>ecosystem stewardship</i>⁶² practises within small-scale fisheries. The assessment of this component also involves regulations, rules and management plans that resulted from the policies and legislation identified. This can be used as an indicator of fisheries-related state agencies capacity to support fishing industry stewardship. For example, to determine whether legislation is adequate as Stewardship is an evolving concept for management of natural resources such as fisheries. Policy and legislation need to be assessed in order to identify the barriers at the institutional level that may hinder the promotion of ecosystem stewardship. This component is divided into:</p> <p>A.1 Fisheries Policy A.2 Fisheries Management Plan A.3 Fisheries Legislation</p>
<p>B. Advisory and/or decision-making mechanisms</p>	<p>Institutional arrangements - examine the institutional frameworks and mechanisms established for governing fisheries management and fostering ecosystem stewardship. This includes the establishment of multi-stakeholder committees or similar structures, which play an advisory or decision-making role in resource management. The relationship between these mechanisms and the agencies/stakeholders involved will also be analysed.</p>
<p>C. Fisheries-related Organisations</p>	<p>This conceptual component will map the fisheries-related state agencies as well as other fisheries-related organisations which play a key role in the fishery-related institutional arrangements of each country. This includes the core fisheries management organisations such as Fisheries Divisions/Departments/Authorities/Agencies and other associated departments, such as Environment, Coastal Management, Agriculture, Cooperatives, Markets and others. It will also include non-state organisations such as fisherfolk organisations, civil society organisation (CSOs), private sector and academia, where relevant. Given that the level of involvement in the fisheries sector will differ within and among project countries. This section will investigate agencies roles and particularly their mandated role in fisheries management. Furthermore, an organisational capacity assessment will be carried out to examine the core fisheries state agencies’ current ability to support stewardship activity.</p> <p>Organisational Capacity Assessment:</p>

⁶² *Ecosystem Stewardship* is understood as “a strategy to respond to and shape social-ecological systems under conditions of uncertainty and change to sustain the supply and opportunities for use of ecosystem services to support human well-being”.

	<p>Under this key conceptual component, core capacitiesⁱ of fisheries-related state agencies capacity to support and enable ecosystem stewardship will be assessed. The capacities to be examined are:</p> <ol style="list-style-type: none"> I. Vision, mandate, culture- this section looks at the organisation’s visions and goals, its operational culture and its internal governance mechanisms and how they promote ecosystem stewardship. It is reflected in the everyday organisational culture, how they communicate with fisherfolk and their organisations and the relationships they build. II. Knowledge and skills- this focuses on assessing the fisheries-related state agency’s capacity to provide fisherfolk and fisherfolk organisations with the relevant knowledge and skills support required for improved stewardship actions. This section assesses the capacity in technical knowledge, skills and ability related to ecosystem stewardship. III. Resources- assesses the capacity, availability, and efficient access to resources related to organisations– in particular the resource support made available to from the state agency, as well as resources provided for execution of any ecosystem stewardship actions and practices. IV. Partnerships - is an assessment of the organisations capacity to foster partnerships and link activities, plans, projects and initiatives which involves ecosystem stewardship. It will look at their ability to build networks, and assist in building the networks of fisherfolk organisations, as resource users and ecosystem stewards.
<p>D. Processes and practices</p>	<p>For this conceptual component, the operational procedures for fisheries-related state agencies will be examined more closely. The processes and practices will be assessed in three sub-components. These are:</p> <p>C.1 Promotion of good governance- This is determined by probing the inclusivity of the decision-making process in fisheries governance. The system of institution (i.e. the decision-making process applied) determines the relative success of the structural processes to a certain degree in institutional capacity for improved fisheries management that integrates ecosystem stewardship (i.e. levels of exclusion, discrimination). This also assesses organisations internal structures and systems ability to create an environment that encourages and facilitates stewardship. It includes the channels of communication for sharing or receiving information from fisherfolk, and transparent and accountable systems. This will also assess the structures and systems in places for clear communication, involvement and integration within and among fisheries-related state agencies.</p> <p>C.2 Collaborative management- This sub-component focuses on the extent of cooperative management that exists in practice between fisheries-related state agencies and small-scale fisheries groups such as fisherfolk organisations, as well as fisherfolk individuals and the local communities. It also identifies the degree</p>

	<p>of stakeholder collaboration in management practises (government, private sector and civil society/local communities).</p> <p>C.3 Adaptive management This assesses the ability of the fisheries-related state agencies to budget, manage and implement activities, using internal structures and mechanisms which are flexible and adaptive to internal or external changes, changes in the resources, or changes in the resource users. This looks at the organisations ability to learn actively, develop practices and policies for promoting stewardship; and implement, monitor and evaluate plans, projects, programmes of work for actions or systems enabling stewardship.</p> <p>C.4 Communication This sub-component assesses the extent to which fisheries information providers in StewardFish project countries are using communication tools/channels to communicate with fisherfolk, as well as their capacity to use the tools/channels effectively. It includes the channels of communication for sharing or receiving information from fisherfolk, and transparent and accountable systems. This will also assess the structures and systems in places to for clear communication, involvement and integration within and among fisheries-related state agencies.</p>
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13.2 In-country contacts/participants

13.2.1 List of webinar participants – June 5, 2020

Name	Organisation	Position/Title	Email Address
Alva Lynch	Castries Fishermen's Cooperative	Manager	alynch@cfcooperative.org
Annette Rattigan-Leo	Sustainable Development and Environment Division	Chief Sustainable and Development Environment Officer	annetteleo.sde@gmail.com
Charlie Prospere	Department of Fisheries	-	-
Christopher Alexander	Director of Maritime Affairs	Saint Lucia, Air and Sea Ports Authority	christopher.alexander@slaspa.com
Corporal Bailey	Police Marine Unit	-	-
Craig Henry	Saint Lucia National Conservation Fund	-	po@sluncf.org info@sluncf.org
Egbert Steven	Department of Cooperatives	Registrar	Egbert.stevens@govt.lc
Ernie Pierre	Environmental Health	-	environmental.health@govt.lc

Name	Organisation	Position/Title	Email Address
Hardin Pierre	Department of Fisheries	-	-
Jacintha Lee	National Conservation Authority	-	Jacintha.lee@govt.lc nca@govt.lc
Jeanine Compton-Antoine	Saint Lucia National Trust	Corporate Services Manager	jeanninecantoine@slunatrust.org
Joanna Rosemond	(Organisation name not submitted)	-	-
Lavina Alexander	Sustainable Development and Environment Division / National Ocean Governance Committee	Sustainable Development and Environment Officer III	alexander.sde@gmail.com
Lydia Cox	(Organisation name not submitted)	-	-
Makeba Felix	Department of Fisheries	-	-
Margaret Rita Straughn	Department of Fisheries	Fisheries Assistant	rita.harrison@govt.lc / rita.straughn@gmail.com
Marius Felix	Soufriere Marine Management Association		felixsquared@hotmail.com
Sergeant Reece Auguste	Police Marine Unit	-	-
Thomas Nelson	Department of Fisheries	Deputy Chief Fisheries Officer	-
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Maren Headley	Caribbean Regional Fisheries Mechanism (CRFM) Secretariat	Programme Manager-Fisheries Management and Development	maren.headley@crfm.int
June Masters	CRFM Secretariat	Statistics and Information Analyst	june.masters@crfm.net
Terrence Phillips	Food and Agriculture Organisation of the United Nations (FAO)	Regional Project Coordinator – Stewardfish Project	Terrence.Phillips@fao.org

13.2.2 List of key informant organisations

Representatives from the following organisations were interviewed as key informants:

- Department of Fisheries
- Saint Lucia National Trust
- Department of Cooperatives
- Sustainable Development and Environment Division

13.3 Organisational Capacity Assessment Survey

Respondent information

Country:	Saint Lucia
Name of national fisheries authority:	Fisheries Department, Ministry of Agriculture, Fisheries, Physical Planning, Natural Resources and Co-operatives
Name of lead respondent:	Sarita Williams-Peter (Mrs.)
Position of lead respondent:	Chief Fisheries Officer
Email address of lead respondent:	Sarita.peter@govt.lc
Contact number of lead respondent:	(758) 468-4135/83

Section 1: Vision, Mandate and Culture

This section looks at the organisation's *motivation* to support ecosystem stewardship by fisherfolk and fisherfolk organisations. It is reflected in the organisation's vision, mandate and culture.

1. Does the organisation have a vision statement that is supportive of /promotes ecosystem stewardship by fisherfolk? Briefly explain your answer.

The Organisation's vision statement is "Strong partnerships between civil society, private sector and public sector, to advance a sustainably governed fisheries sector that will enhance profitability and contribute to food security (draft Fisheries Policy 2020 - 2030". Yes, it is supportive of stewardship as it recognize Partnerships and all stakeholders working together as the way we can advance sustainable fisheries.

2. Does the organisation's mandate support ecosystem stewardship by fisherfolk? Briefly explain your answer.

The mandate is to promote the management and development of fisheries, so as to ensure the optimum utilization of the fisheries resources in the fishery waters for the benefit of Saint Lucia (Fisheries Act Cap 7.15). The draft Fisheries policy articulates how this will be achieved and in policy the strategic objectives the social–ecological sustainability is considered. Particularly noting Priority #3 To ensure that social and cultural development considerations are clarified and used to guide the evolution and modernisation of Saint

Lucia's fisheries sector and Priority #1 To follow the principles of an ecosystem approach to fisheries management, reduce the degradation of fish habitat, harvest fish stocks at sustainable levels and, where necessary, take a precautionary approach to fisheries development

3. Which of the following core values/beliefs reflect the culture of the organisation?
Check/highlight all that apply.
- **The organisation believes that ecosystem stewardship by fisherfolk is important for sustainable use of fisheries and marine resources.**
 - The organisation believes that ecosystem stewardship by fisherfolk is not important for sustainable use of fisheries and marine resources.
 - The organisation believes that fisherfolk can be effective ecosystem stewards.
 - The organisation believes that fisherfolk are not effective ecosystem stewards.
 - **The organisation believes that fisherfolk should be included in decisions made about how fisheries and marine resources are managed.**
 - The organisation believes that fisherfolk input into decisions about how fisheries and marine resources are managed is not important.
 - **The organisation values local and/or traditional knowledge held by fisherfolk.**
 - **The organisation believes in the ecosystem approach to fisheries (EAF).**
4. Do you have any additional information to share about your organisation's vision, mandate and culture as it relates to supporting ecosystem stewardship by fisherfolk and their organisations? You can also use this section to clarify any of the responses provided for question S1.3.

Section 2: Practices

This section looks at the how the organisation's core values and beliefs are translated into actions (practices). It focuses in particular on the actions that support ecosystem stewardship by fisherfolk and fisherfolk organisations in the following areas: decision-making; collaboration and partnerships; and information collection and sharing.

Decision-making - Please provide answers to the following questions about your organisation's decision-making practices.

1. Does the organisation **have a clear process** for including the opinions of fisherfolk in decisions made about fisheries and marine resources? Briefly explain your answer.

The process for inclusion of opinions is not documented in a procedural manual or legislated. However, the Department as part of its planning process for any initiative would discuss the process for communicating, consultation and who should be consulted.

2. Does the organisation regularly and systematically include fisherfolk input in decisions about how fisheries and marine resources are managed? Briefly explain your answer.

The legislation requires that in the preparation and review of the fisheries plan the Chief Fisheries Officer shall consult with the local fishermen, local authorities, other persons affected by the

fishery plan and with any Fishery Advisory Committee appointed. Where decisions are to be made, the Department would consult the fisherfolk and all other interest groups.

Collaboration and partnerships - Please provide answers to the following questions about your organisation's collaboration and partnership practices

3. Select which of the following statements are true for the organisation. *Check/highlight all that apply.*
- Fisherfolk generally view the organisation as a partner with whom they can collaborate on fisheries management (*participatory relationship*).**
 - Fisherfolk generally view the organisation as an enforcer of fisheries management guidelines and regulations with whom they must comply (*top-down relationship*).**
 - The organisation regularly highlights sustainable use practices undertaken by fisherfolk.
 - The organisation regularly highlights unsustainable use practices undertaken by fisherfolk.**
4. Does the organisation regularly partner/collaborate with fisherfolk and their organisations for fisheries management initiatives? If yes, please provide a recent of example.

The Department would engage the fisher folk on fisheries management initiatives. However, it is usually to participate or support. E.g. Fisher Clinic Fair; Development of occupational standards

5. Does the organisation regularly facilitate collaboration/partnerships between fisherfolk and other fisheries and marine stakeholders? If, yes please provide a recent example.

Yes, training in lionfish preparation, safety at sea, conch data collection under the CARIFICO project, sea urchin monitoring.

Information collection and sharing – Please provide answers to the following question about your organisation's information collection and sharing practices.

6. Select which of the following statements are true for the organisation. *Check/highlight all that apply.*
- The organisation collects local/traditional knowledge held by fisherfolk about fisheries and marine resources.
 - The organisation does not collect local/traditional knowledge held by fisherfolk about fisheries and marine resources.
 - The organisation uses local/traditional knowledge held by fisherfolk to inform management decisions about fisheries and marine resources.**
 - The organisation does not use local/traditional knowledge held by fisherfolk to inform management decisions about fisheries and marine resources.
 - The organisation records best practices related to sustainable use and management of marine resources and shares this information regularly.
 - The organisation provides information on sustainable fishing practices to fisherfolk in a manner that they can understand.**
 - The organisation does not provide information on sustainable fishing practices in a manner they can understand to fisherfolk.

- The organisation has a communication strategy to share the information with different stakeholders including fisherfolk.
 - **The organisation does not have a communication strategy to share the information with different stakeholders including fisherfolk.**
 - **The organisation provides advice/guidance to fisherfolk for stewardship activities and initiatives.**
 - The organisation does not provide advice/guidance to fisherfolk for stewardship activities and initiatives.
7. How does the organisation share information with fisherfolk about sustainable use practices for fisheries and marine resources?

Focus group meetings, one on one discussions, Meeting type settings, radio and Television.

8. What has the organisation found to be the most effective way to share information with fisherfolk?

Focus group meetings, one on one, radio and television.

9. Do you have any additional information to share about your organisation's decision-making; collaboration and partnerships; and information collection and sharing practices as it relates to supporting ecosystem stewardship by fisherfolk and their organisations? You can also use this section to clarify any of the responses provided for questions S2.3 and S2.6.

Section 3: Knowledge and Skills

This section looks at the organisation's capacity to support ecosystem stewardship by fisherfolk and fisherfolk organisations. It focuses in particular on the knowledge and skills held by technical staff (e.g. managers, researchers, policy development officers, field officers etc.).

1. Do technical staff have knowledge of the Ecosystem Approach to Fisheries (EAF)? Briefly explain your answer.

Most have undergone professional development training where they have received knowledge on the EAF.

2. Do technical staff have specialist knowledge on ecosystems, their functions and ecosystem changes? Briefly explain your answer.

Limited number have specialist knowledge of ecosystems through formal training. Some exposed through professional development training. Most have basic to working knowledge.

3. Do technical staff understand the socio-economic context of fisheries and marine resource use by fisherfolk and other stakeholders? Briefly explain your answer.

Generally well –understood and incorporated into planning. Monitoring and Evaluation of development initiatives on the socio-economic context could be improved.

4. Do technical staff have the skills to conduct socio-economic assessments? Briefly explain your answer.

Could be strengthened, particularly design of the assessment and scientific analysis of data. Delivery of assessments are generally well done.

5. Do technical staff have knowledge of aquaculture and other alternative or complementary livelihood options for which fisherfolk may be well suited? Briefly explain your answer.

Yes there are technical staff with this capacity. However, it is focused on the capacity to produce a product e.g. Coral restoration, Agricultural outputs. There is need to develop strategies for alternate livelihoods beyond the technical aspects but inclusive of the business aspects such as developing and implementing a livelihood business plan and assessing the viability and benefits of different business models.

6. Do technical staff have knowledge of how fisherfolk organisations function including key challenges that they may face and how they can be supported to resolve them? Briefly explain your answer. Briefly explain your answer.

Yes, the technical staff have worked also with the Fisherfolk organisations for many years. The regulating authority is within the same Ministry and we frequently collaborate.

7. Does the organisation have the capacity to provide training for fisherfolk in different technical areas and organisational strengthening (these may include soft skills such as facilitation, development of training material, etc.)? Briefly explain your answer.

Very Limited capacity. There is need to both develop these skills in house and to also train people to develop the knowledge, skill and the confidence to train others.

8. Do technical staff have the skills to assist fisherfolk with mobilising funding for ecosystem stewardship activities and initiatives? Briefly explain your answer.

Provides a lot of guidance to fisher folk in scoping projects. Can benefit from project planning and project writing skills.

9. Do technical staff have skills in participatory approaches (e.g. participatory monitoring and evaluation, participatory planning, participatory management etc.)? Briefly explain your answer.

Yes, technical staff are very well versed. For example, we have engaged in joint monitoring of sea urchin fishery; Formed delegation with technical officers and fisher folk to view new technology and practises in overseas territories.

10. Do technical staff have communication skills needed to effectively communicate with a range of stakeholders including fisherfolk? Briefly explain your answer.

Yes, report writing, negotiation and facilitation skills can be further enhanced.

11. Does the organisation provide or access training and other kinds of capacity building for staff to regularly improve their technical knowledge and skills? Briefly explain your answer.

Yes, training opportunities are provided directly through the Public Service and through international and regional development partners such as JICA.

12. Do you have any additional information to share about the knowledge and skills of your organisation's technical staff as it relates to supporting ecosystem stewardship by fisherfolk and their organisations?

Section 4: Resources

This section looks at the organisation's capacity to support ecosystem stewardship by fisherfolk and fisherfolk organisations. It focuses in particular on the finance, equipment, materials, tools and methods that the organisation has access to for supporting fisherfolk with ecosystem stewardship activities and initiatives.

1. Does the organisation provide funding assistance to fisherfolk to support ecosystem stewardship activities or initiatives? Briefly explain your answer.

National Funding for the Fisheries programme of work is mainly for recurrent expenses such as payment of salary and maintenance of the office and equipment. Majority of funding is through donor agency support.

2. Does the organisation provide materials, equipment or technology to fisherfolk to support ecosystem stewardship activities or initiatives? Briefly explain your answer.

Yes, these are usually built into projects.

3. Does the organisation have access to tools, methods and good practices that can be used to support fisherfolk with ecosystem stewardship activities and initiatives? Briefly explain your answer.

Yes, various case studies are used as well as through experiences shared and lessons learnt in regional projects. Inclusive of visits to other countries to learn from experience – fisherfolk are usually invited to attend with the technical staff.

4. Does the organisation provide access to or assist fisherfolk organisation with accessing networks or resources outside of itself (such as technical experts, funding, projects, etc.)? Briefly explain your answer.

Yes, information on funding opportunities are shared with fisherfolk e.g. GEF small grants, CCRIF grassroots, and Japan grass roots project funding.

5. Does the organisation have a dedicated website which can be used to share information and resources on ecosystem stewardship practices with fisherfolk? Briefly explain your answer.

No, the Ministry is working on a website to house all its divisions.

6. Do you have any additional information to share about your organisation's resources as it relates to supporting ecosystem stewardship by fisherfolk and their organisations?



Caribbean Natural Resources Institute

INSTITUTIONAL ANALYSIS AND ORGANISATIONAL ASSESSMENT OF FISHERIES-RELATED STATE AGENCIES FOR ENABLING ECOSYSTEM STEWARDSHIP IN THE FISHERIES SECTOR OF ST. VINCENT AND THE GRENADINES

JUNE 2020



Cover photographs: Fisher out at sea (middle); fish vendor cleaning fish at market (left); and pirogues pulled on beach in St. Vincent (right) © Winsbert Harry and the St. Vincent and the Grenadines National Fisherfolk Organisation (SVGNFO).

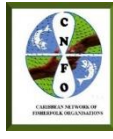
CARIBBEAN NATURAL RESOURCES INSTITUTE

INSTITUTIONAL ANALYSIS AND ORGANISATIONAL ASSESSMENT OF FISHERIES-RELATED STATE AGENCIES FOR ENABLING ECOSYSTEM STEWARDSHIP IN THE FISHERIES SECTOR OF ST. VINCENT AND THE GRENADINES

JUNE 2020

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Disclaimer:

This publication has been produced by CANARI as an output of the StewardFish project. However, the views expressed herein are those of the authors, and can therefore in no way be taken to reflect the official opinions of Fisheries Division of Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour in St. Vincent and the Grenadines, Global Environmental Facility, Food and Agriculture Organization of the United Nations or other co-executing partners of the StewardFish project.

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List of acronyms and abbreviations

ARIA	WRI's Adaptation: Rapid Institutional Analysis
CANARI	Caribbean Natural Resources Institute
CARICOM	Caribbean Community
CARIFICO	Caribbean Fisheries Co-Management Project
CCA	Caribbean Conservation Association
CCCFP	Caribbean Community Common Fisheries Policy
CNFO	Caribbean Network of Fisherfolk Organisations
CLME+ SAP	Strategic Action Programme for the Sustainable Management of the Shared Living Marine Resources of the Caribbean and North Brazil Shelf Large Marine Ecosystems
CMBP	Caribbean Marine Biodiversity Program
CRFM	Caribbean Regional Fisheries Mechanism
CC4FISH	Climate Change Adaptation in the Eastern Caribbean Fisheries
EAF	Ecosystem Approach to Fisheries
ECMMAN	Climate -Resilient Eastern Caribbean Marine Managed Areas Network
EEZ	Exclusive Economic Zone
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FAD	Fishing Aggregating Devices
FMP	Fisheries Management Plan
GEF	Global Environmental Facility
GDP	Gross Domestic Product
ICCAT	International Commission for the Conservation of Atlantic Tunas
IUU	Illegal, Unreported and Unregulated
IWC	International Whaling Commission
JICA	Japan International Cooperation Agency
NIC	National Intersectoral Coordinating Mechanism
NFO	National Fisherfolk Organisation
NOCC	National Ocean Coordination Committee
OECS	Organization of Eastern Caribbean States
OGC	Ocean Governance Committee
SusGren	Sustainable Grenadines Inc.
MARTFF	Ministry of Agriculture, Forestry, Fisheries and Rural Transformation, Industry & Labour

TCMP	Tobago Cays Marine Park
UNCLOS	United Nations Convention for the Law of the Sea
UNFSA	United Nations Fish Stocks Agreement
USAID	United States Agency for International Development
UWI-CERMES	Centre for Resource Management and Environmental Studies of the University of the West Indies
UWI CIRP	Caribbean ICT Research Programme of the University of the West Indies
WECAFC	FAO Western Central Atlantic Fisheries Commission
WRI	World Resources Institute

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Executive Summary

The Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in the Caribbean Small-Scale Fisheries (StewardFish) project is aimed at implementing the 10-year 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) within seven Caribbean Regional Fisheries Mechanism (CRFM) member states (Antigua and Barbuda, Barbados, Belize, Guyana, Jamaica, Saint Lucia, St. Vincent and the Grenadines). The project aims to deliver enhanced stewardship of fisheries resources and livelihood benefits.

CANARI conducted an Institutional Analysis and Organisational Assessment in St. Vincent and the Grenadines to contribute to Outcome 1.2 “Fisheries-related state agencies have capacity to support fishing industry stewardship” and Output 1.2.1 “state agency implementation gaps are assessed regarding support for fisherfolk organisations and their role in stewardship” of the project. The aim of the analysis was to identify current strengths, as well as opportunities for improvement in St. Vincent and the Grenadine’s fisheries-related state agencies, in order to improve their capacity to support ecosystem stewardship by fisherfolk and their organisations as it related to the following areas (i) policies, laws and plans (ii) advisory and/or decision making mechanism (iii) fisheries related organisations (iv) processes and practices. The methods utilised included desk studies, interviews and validation webinars.

St. Vincent and the Grenadines fisheries institution includes a range of governmental, civil society, and private sector stakeholders with various roles, mandates, responsibilities and interests. Most fisherfolk organisations are formalised through the Cooperative Societies Act (2012) and are grouped according to the areas the fishers are from. It has been found that some of these fisherfolk organisations lack management skills and understanding of proper accountability. It should be noted that there is no formal fisherfolk organisation that represent the interests of fisherfolk in the Grenadines islands; their representation is through an informal group.

Laws, policies and plans in St. Vincent and the Grenadines were assessed to determine whether they were in line with the principles of the ecosystem-approach to fisheries (EAF) and if they were supporting or constraining ecosystem stewardship. Consideration was given to local laws such as the Fisheries Act (1986), Fisheries Regulations (1987), the recently approved National Fisheries and Aquaculture Policy (2018) and the National Ocean Policy and Strategic Action Plan, 2018 (Draft). Even though the Fisheries Regulations does not directly speak to socio-economic wellbeing of resource users, it is a supporting legislation to the Fisheries Act (1986) and so the principles of EAF can be considered as represented in all instruments identified. It is to be noted that the Fisheries Act and Regulations are currently being updated.

To determine the extent to which fisherfolk were being included in decision-making processes, the institutional analysis examined the existence, composition and functioning of current National Intersectoral Coordinating Mechanisms (NICs) which are essential to successfully implementing and achieving ecosystem-based management and EAF. Although the Fisheries Advisory Committee, the main mechanism for engaging fisherfolk in decision making on matters directly related to the fisheries sector at a national level, has not been established, there are opportunities for fisherfolk to engage in intersectoral decision making processes through the National Ocean Coordination Committee, National Taskforce on Illegal, Unreported and Unregulated (IUU) Fishing and the Seaweed Invasion Task Force. However, on the National Ocean Coordination Committee, there is inadequate representation from the selected fisherfolk organisation.

Projects, programmes and initiatives in St. Vincent and the Grenadines that have provided or are providing finances, technology and equipment and capacity building to fisherfolk and their organisations were examined to determine whether fisherfolk have adequate support and resources

to undertake ecosystem stewardship actions. Support and resources for fisherfolk are available from a range of sources including from government, civil society and international organisations either through ongoing programmes, or ad hoc efforts. Examples of support and resources provided include (i) loan and grant programmes facilitated by the Government, (ii) capacity building of fishers in new fishing methods through the Japan International Cooperation Agency (JICA) programmes and (iii) training through programmes facilitated by Sustainable Grenadines Inc. such as training in quality assurance relating to fish and seamount cultivation

Partnerships and networks are important as they help facilitate information flows, fill knowledge gaps, and strengthen expertise for ecosystem management, including stewardship. Generally, partnerships exist between fisherfolk and the Fisheries Division. For example, the Fisheries Division supports the development of fishing aggregating devices (FAD) fishers and receives support from fisherfolk through data collection. Partnerships also exist between fisherfolk organisations and the National Parks, Rivers and Beaches Authority for the preparation of zoning plans for the proposed South Coast Marine Conservation Area.

The extent to which providers of fisheries information were using communication strategies, tools and channels to communicate with fisherfolk, as well as their capacity to use the tools and channels effectively was examined. The Fisheries Division is the main provider of fisheries information in St. Vincent and the Grenadines with much of its communication efforts being embedded in its regular work programme through its extension unit. Regular meetings with the national umbrella fisherfolk organisation, St. Vincent and the Grenadines National Fisherfolks Cooperatives Limited (SVGNFO), are also convened to share information and to gain understanding of issues facing fisherfolk. Technical information on sustainable practices are mainly communicated to fisherfolk through the Fisheries Division and the various fisherfolk organisations through the training sessions for obtaining licenses. It was noted that communication with fisherfolk on the Grenadine islands is lacking.

The structure and operational procedures of organisations such as government agencies, can reinforce local actions, as well as support in providing resources and facilitating learning as it relates to stewardship. The vision, mandate and culture of the Fisheries Division is aligned to ecosystem stewardship values and is reflected through its practices of collaborating with fisherfolk and using external networks to seek resources for fisherfolk. Senior staff are well versed in the ecosystem approach to fisheries. However, skills in participatory approaches is at a basic level and knowledge limited only.

Overall, from the analysis, the main enabling factor was found to be the strong partnerships between fisherfolk and Fisheries Division and other governmental agencies. These partnerships provided opportunities for fisherfolk and their organisations to receive capacity building and voice their issues. The major constraining factor was the lack of a capacity for fisherfolk to be involved in decision-making mechanisms. Major recommendations included the development of regular / required training sessions to build capacity of fisherfolk to better engage in decision making processes, allowing for further engagement in ecosystem stewardship initiatives.

1 Introduction

In 2013, countries bordering and/or located within the Caribbean and North Brazil Shelf Large Marine Ecosystems (CLME+ region) adopted a 10-year 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)¹. The 10-year CLME+ SAP aims to contribute to the achievement of the regionally adopted long-term vision of “a healthy marine environment in the CLME+ that provides benefits and livelihoods for the well-being of the people of the region.” The CLME+ SAP consists of 6 Strategies and 4 Sub-strategies. SAP strategies 1-3, with a focus on governance, are cross-cutting, while strategies 4-6 tackle the three main marine ecosystems (reef, pelagic and continental shelf) in the CLME+ region. One of the key strategies of the CLME+ SAP is to achieve sustainable fisheries, including of small-scale fisheries which are important economic drivers for the sustainability of coastal communities and rural livelihoods and a vital source of employment, food and income for Caribbean people.

The *Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in the Caribbean Small-Scale Fisheries (StewardFish)* project is therefore aimed at implementing the CLME+ SAP within seven Caribbean Regional Fisheries Mechanism (CRFM) member states (Antigua and Barbuda, Barbados, Belize, Guyana, Jamaica, Saint Lucia, St. Vincent and the Grenadines) that have politically endorsed the CLME+ SAP by empowering small-scale fisherfolk throughout fisheries value-chains to engage in resource management, decision-making processes and sustainable livelihoods with strengthened institutional support at all levels.² The project aims to deliver enhanced stewardship of fisheries resources and livelihood benefits through implementation of the four core project components (See Figure 1).

StewardFish recognises that there are several challenges that hinder the engagement of fisherfolk and their organisations in the sustainable use and management of fisheries in the region including fisheries-related state agencies not having adequate capacity to support fisherfolk and their organisations with ecosystem stewardship initiatives. Because state agencies, including fisheries authorities, vary widely in their support of fisherfolk organisations for different reasons, some within their control and others beyond, a situation specific analysis is required.

In support of this, CANARI conducted an Institutional Analysis and Organisational Assessment in each of the project countries to contribute to Outcome 1.2 “*Fisheries-related state agencies have capacity to support fishing industry stewardship*” and Output 1.2.1 “*state agency implementation gaps are assessed regarding support for fisherfolk organisations and their role in stewardship*” of the project.

The aim of the analysis was to identify current strengths, as well as opportunities for improvement in each project country’s fisheries-related state agencies, in order to improve their capacity to support ecosystem stewardship by fisherfolk and their organisations.

The analysis included:

- Designing an institutional analysis tool adapted from the Adaptation: Rapid Institutional Assessment (ARIA) methodology, including an organisational assessment survey targeted at the fisheries authorities

¹ CLME+ Strategic Action Programme <https://www.clmeproject.org/sap-overview/>

² CANARI. 2019. StewardFish – Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-Scale Fisheries (StewardFish) project. Posted on October 10, 2019 (March 20, 2020) by admin. Available: <https://canari.org/stewardfish-project/>

- Conducting desk studies, online surveys, and virtual interviews with fisherfolk, fisheries authorities and other key state agencies in the project countries
- Facilitating national webinars³ to present, validate, refine and receive input on the preliminary findings and identify priorities for improvement, in each project country
- Producing country reports of findings, including recommended priorities for improvement

This report provides the findings and recommendations from the institutional analysis and organisational assessment that was conducted for St. Vincent and the Grenadines, between April to June 2020.

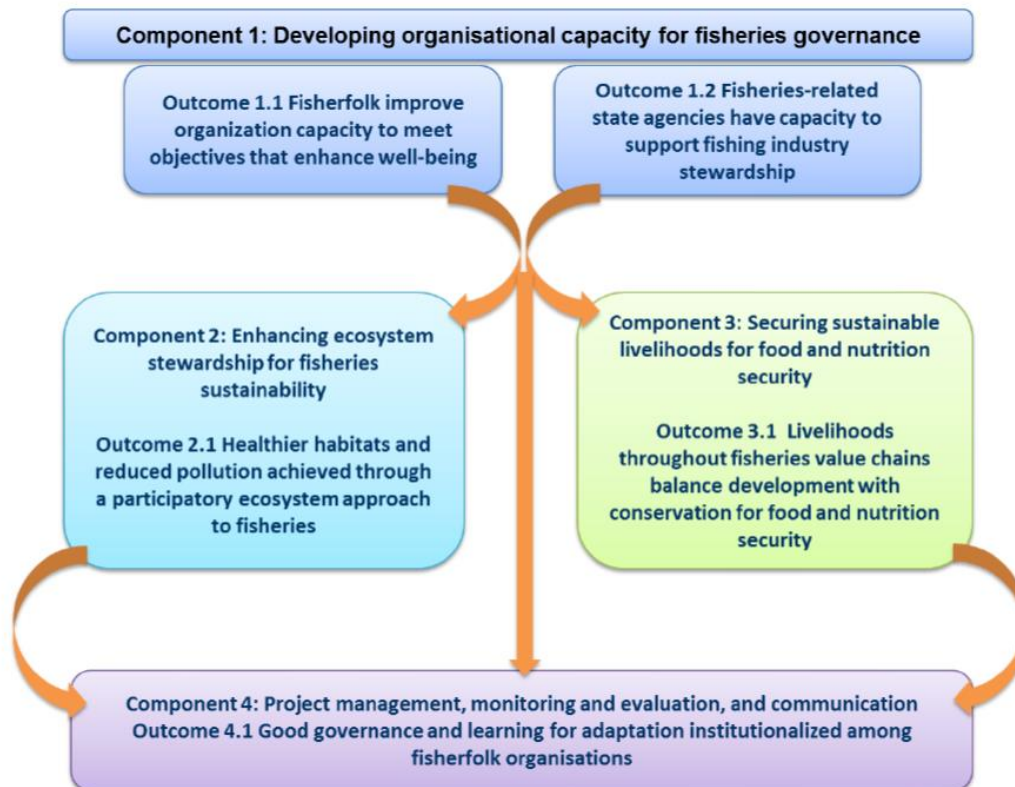


Figure 1: StewardFish Project Framework. Credit: FAO

³ National workshops were initially carded to be conducted in-country for all project countries, however, due to the Covid19 pandemic as declared by the World Health Organisation on March 11, 2020, and subsequent restrictions on air travel, all workshops following the declaration date were conducted virtually through webinars.

1.1 How strong institutions can support ecosystem stewardship by fisherfolk

Stewardship is a terminology related to rights and responsibilities in governance processes. Application in natural resource management has expanded the understanding of stewardship to relay that “stewards” are stakeholders with responsibility for proper resource use, who will “take care” of a resource under communal or public property rights. The term also importantly encompasses responsibility not only for proper use of resources but also right to life of other species and for future generations.⁴ The concept of *ecosystem stewardship*, particularly in the fisheries sector; includes reducing the vulnerability of the sector by promoting resilience



Figure 2: Members of the Caribbean Network of Fisherfolk Organisations (CNFO), a regional fisherfolk organisation, at the StewardFish project Regional Fisherfolk Mentors training workshop Oct 28-Nov 1,

and making use of opportunities to transform undesirable paths. Stewardship activities may range from actions targeted at species, habitats, ecosystems or even human-environment systems. Stewardship actions may include limiting / prohibiting harvest of vulnerable species,

protecting/restoring degraded habitats, establishment of protected areas and promotion of alternate livelihoods so as to reduce dependency on limited resources. Purposeful in-action can be considered a form of stewardship through making a conscious choice not to extract resources so as to allow for regeneration.⁵

LOCAL ENVIRONMENTAL STEWARDSHIP

“Local environmental stewardship is the actions taken by individuals, groups or networks of actors, with various motivations and levels of capacity, to protect, care for or responsibly use the environment in pursuit of environmental and/or social outcomes in diverse social-ecological contexts”- (Bennet et al. 2018)⁵

A fundamental concern of stewardship is capacity – i.e. whether individuals or groups are able to steward their resources. Capacity, which is in part determined by broader governance -including

systems of institutions (i.e. laws and policies, formal and informal organisations, and decision-making processes and structural processes related to power and politics (i.e. economic inequality, discrimination, exclusion from decision-making)—can either empower or constrain the sense of agency, available options and capacity of would-be stewards⁵. From the paper “Environmental Stewardship: A Conceptual Review and Analytical Framework” Bennet *et. al* noted for the small-scale fisheries sector that stewardship efforts can be supported by national laws or policy frameworks that protect local fisher’s rights and tenure, formalise local fishers’ stewardship responsibilities, or that provide resources to support local community efforts to steward their own resources. Conversely, the paper notes that even when local small-scale fishers want to take action, the broader policy landscape may undermine their efforts by creating bureaucratic challenges.

⁴ Medeiros, Rodrigo Pereira, Thiago Zagonel Serafini, Patrick McConney. 2014. Enhancing Ecosystem Stewardship in Small-Scale Fisheries: Prospects for Latin America and the Caribbean. *Desenvolv. Meio Ambiente*, n. 32, p. 181-191.

⁵ Bennett Nathan J., Tara S. Whitty, Elena Finkbeiner, et. al. 2018. Environmental Stewardship: A Conceptual Review and Analytical Framework *Environmental Management*. Vol. 61, pp. 597-614. <https://doi.org/10.1007/s00267-017-0993-2>

Ensuring that the fisheries institution adequately enables ecosystem stewardship by fisherfolk and their organisations will not only contribute to sustainable fisheries but will also help to ease the burden of already under-resourced fisheries state agencies to monitor and enforce fisheries regulations.

2 Institutional Analysis Framework

An institution is the set of arrangements for making decisions about the development, management, and use of a natural resource, including the stakeholders, as well as, the laws, formal and informal policies, plans and structures that guide how these stakeholders interact with each other and with the resources ⁶.

To conduct the rapid analysis CANARI developed and piloted an institutional analysis tool which was adapted from the World Resources Institute’s (WRI) Adaptation: Rapid Institutional Assessment (ARIA) ⁷ methodology, including an organisational assessment survey targeted at national fisheries authorities. The tool analyses the institutional and organisational capacity of fisheries-related state agencies to support stewardship in the small-scale fisheries sector. The tool was used to conduct a baseline assessment and can subsequently be used for monitoring and evaluation as part of an institutional strengthening process.

The tool examines four conceptual components- fisheries-related policies, laws and plans, advisory and/or decision-making mechanisms, fisheries-related organisations and processes and practises to determine the capacity of the fisheries institution- to support the role of fisherfolk and their organisations in ecosystem stewardship. Refer to Table 2.1 for a description of each conceptual component. Appendix 13.1 includes more detailed definitions of conceptual components.

Table 2.1 The four conceptual components assessed in the rapid institutional analysis

Conceptual component	Description of component
Policies, laws and plans	Examined fisheries and fisheries-related policies, plans and legislation (including rules and regulations) to determine how they may be empowering or constraining the ability to integrate ecosystem stewardship practices within the country’s small-scale fisheries sector.
Advisory and/or decision-making mechanisms	Examined the presence, composition and functioning of existing multi-stakeholder mechanisms (e.g. Fisheries Advisory Committee) established for advising or making decisions for fisheries management.
Fisheries-related organisations	Examined the roles and responsibilities of fisheries-related state agencies, as well as other fisheries-related organisations [e.g. fisherfolk organisations, civil society organisation, private sector organisations and academia] which play a key role in the fisheries-related institutional arrangements of the project country. Additionally, an organisational capacity assessment was carried out to examine the national fisheries authority’s current ability to support ecosystem stewardship by small-scale fisherfolk and included an examination of the authority’s: <ul style="list-style-type: none"> ○ Vision, mandate, culture

⁶ CANARI. 2011. Facilitating participatory natural resource management: A toolkit for Caribbean Managers. Laventille: CANARI.

⁷ WRI’s Rapid Institutional Analysis for Adaptation Tool. <https://accessinitiative.org/resources/adaptation-rapid-institutional-analysis-phase-1-workbook>

	<ul style="list-style-type: none"> ○ Knowledge and skills ○ Resources ○ Partnerships
Processes and practices	<p>Examined the various processes and practices in the country's fisheries institution related to:</p> <ul style="list-style-type: none"> ○ Good governance- assessed the application of good governance practices, particularly fisherfolk inclusion, in decision-making processes in the fisheries sector. ○ Collaborative management- assessed the extent to which cooperative management exists in practice between fisheries-related state agencies and small-scale fisherfolk and their organisations. The degree of stakeholder collaboration in management practices was also assessed. ○ Effective communication- assessed the extent to which providers of fisheries information in the project country were using defined communication strategies, tools and channels to communicate with fisherfolk, as well as their capacity to use the tools and channels effectively; including the structures and systems in place for clear communication.

The tool was implemented using a variety of data collection methods (See Section 3 on Methodology) in order to capture a broad range of stakeholder perceptions and input; as well as to gather perspectives on the realised benefit of existing laws, rules, regulations, processes, practices and procedures of the fisheries institutions.

Based on the information collected the institutional analysis and organisational assessment report will discuss the following key aspects in regard to the capacity of the fisheries institution to support the role of fisherfolk and their organisations in ecosystem stewardship:

- Policy, legal and planning context for ecosystem stewardship
- Mechanisms for fisherfolk participation in decision-making
- Support and resources available to fisherfolk and their organisations for ecosystem stewardship
- Partnerships and networks for ecosystem stewardship
- Communication of information on sustainable practices for fisheries resources use
- Organisational capacity of the fisheries authority to support fisherfolk and their organisations with ecosystem stewardship

3 Methodology

A rapid analysis of the institutional and organisational capacity of fisheries-related state agencies to enable stewardship in the fisheries sector was conducted for St. Vincent and the Grenadines during the period April – June by CANARI (Refer to Section 2). The rapid analysis included the following key research methods:

- **Desk study:** CANARI collated and reviewed information readily available (e.g. through online sources and those referenced at workshops) on the project country's small-scale fisheries sector and its institutional environment; particularly as it relates to capacities to support

ecosystem stewardship by small scale fisherfolk and their organisations. This was carried out at an early stage of the analysis to inform and guide the subsequent methods.

- **Validation webinar**⁸: Following the initial desk study; a validation webinar was held on June 3rd which included participants from government (e.g. Fisheries Division), civil society (e.g. Sustainable Grenadines Inc.) and a representative from Goodwill Fishermen Cooperative Society Ltd. The full participants list is attached at Appendix 13.2.1. The purpose of the webinar was to validate information collated during the desk study phase as well as acquire additional information from in-country sources.
- **Interviews**: Virtual interviews were conducted during the month of May and June with key government, fisherfolk and civil society stakeholders. A list of interviewees' associated organisations is attached at Appendix 13.2.2.

Survey: an organisational capacity assessment survey was administered to the St. Vincent and the Grenadines Fisheries Division to collect information on the organisation's current ability to support ecosystem stewardship by small-scale fisherfolk. Online surveys were also sent to validation webinar participants before the webinar, to collect information on relevant policies, plans, laws and national decision-making mechanisms relevant to the fisheries sector and after the webinar, to acquire information on support available to fisherfolk through various projects, programmes or initiatives as well as get input into recommendations for institutional strengthening.

4 Background

4.1 Geography

St. Vincent and the Grenadines are among the Windward islands located near the southern part of the Caribbean archipelago. The country is comprised of the northernmost island of St. Vincent (344 km²) and 32 smaller islands and cays, known as the Grenadines (45.3km² in total) located north east of Grenada. The larger islands in the northern Grenadines include Bequia, Canouan, Mayreau, Mustique, Isle D'Quatre and Union Island. Overall, the country covers a total land area of 389.2km² with a coastline of 84km and an exclusive economic zone of 36,381km². The climate is tropical with little variation in seasonal temperature. The mountainous interior of St. Vincent experiences heavier rainfall.^{9, 10, 11}

La Soufrière (1234m) is an active volcano on St. Vincent which last erupted in 1979 and is part of the mountain range running from La Soufrière in the north to Mt. St. Andrews in the South. Off the main mountain ridge, there are forested valleys and freshwater streams. Tropical forest accounts for 69% land cover and is common in the mountainous areas of St. Vincent while the Grenadines and coastal edges of St. Vincent consist of coral island vegetation. While there are some black volcanic sand beaches in St. Vincent, it is the Grenadines that are mostly known for their white sands and clear water⁹.

⁸ National Institutional Analysis and Organisational Assessment Validation workshops were initially carded to be conducted in-country for all project countries, however, due to the Covid-19 pandemic as declared by the World Health Organisation on March 11, 2020, and subsequent restrictions on air travel and in-person gatherings, all workshops following the declaration date were conducted virtually through webinars.

⁹ Commonwealth Secretariat.n.d. "St Vincent and the Grenadines". Available at <https://thecommonwealth.org/our-member-countries/st-vincent-and-grenadines>. Accessed 13th May 2020.

¹⁰ FAO.2018. Fishery and Aquaculture Country Profile – St. Vincent and the Grenadines. Available at <http://www.fao.org/fishery/facp/VCT/en#CountrySector-Overview>. Accessed 13th May 2020.

¹¹ The World Factbook. 2020. St. Vincent and the Grenadines. CIA. Accessed 13th May 2020. Available at <https://www.cia.gov/library/publications/the-world-factbook/geos/vc.html>

St. Vincent is mountainous and fertile while the Grenadines are low dry islands surrounded by coral reefs. St Vincent has a central mountain range running from the north to the south of the island with steep ridges projecting to the east and west. The Soufrière mountains are the highest mountains located in the north of the island where the Soufrière volcano is located. The terrain of St. Vincent is rugged with around half of the slopes having an incline of 30 degrees or more. Ridges formed off the north-south mountain range may culminate in vertical cliffs on the leeward coast while there are flatter valleys leading to the windward coasts. Due to the mountain range on the island, there are various microclimates on St. Vincent. Vegetation types in St. Vincent include rainforests, elfin woodlands, littoral woodlands and mangrove forests. The Grenadines have gentler relief, with lower rainfalls and no perennial streams (with the exception of Bequia). Grenadines are known for their beaches and fringing reefs.¹²

Due to its topography, most of the population of St. Vincent is located in the flat coastal regions along the East, West and South Coasts as well as the southern interior. The population of the country is 110,210 as of 2018 with the most urban areas being the capital of Kingstown with a population of 27,000 in 2018.^{11 1111, 13}

4.2 Governance

St. Vincent and the Grenadines is a commonwealth country with a parliamentary democracy under a constitutional monarch. The legal system is based on English Common law. The chief of state is recognised as the Queen of England, represented by the Governor General. The Head of Government is the Prime Minister and is appointed by the Governor General, along with the Cabinet, following legislative elections. The parliament is a unicameral House of Assembly with the highest court of the country being the Eastern Caribbean Supreme Court of the Organisation of Eastern Caribbean States (OECS)¹¹.

4.3 Economy

In 2018, the GDP of St. Vincent and the Grenadines was USD 811,300,000 with an annual growth rate of 0.7% in 2017.^{11,13} The economy is dependent on agriculture, tourism and construction activity with a small offshore banking sector. Most of the workforce is employed in the agricultural (which is centred around banana production) and tourism sectors. In 2017, the services sector contributed 75.5% of GDP, with industry and agriculture contribution 17.4% and 7.1% respectively.¹¹ In 2017, the travel and tourism sector accounted for 23.4% of the country's GDP at USD 184.6 million and directly supported 5.5% of total employment with an investment of USD 39.9 million.¹⁴

4.4 Overview of fisheries sector

St. Vincent and the Grenadines has a small-scale, artisanal fishing industry, with most fishermen operating close to shore. While near shore fisheries use gear such as nets, fish pots and some spear guns, deep sea fishers use hooks and lines¹⁰. Approximately 882 vessels are used in commercial capture fisheries with most being engine powered open vessels between 6-12m, including fibreglass pirogues, open boats, and long liners. Annual marine fish production for the period 2005 – 2016 averaged at 881 tonnes (live weight). The value of marine capture fish in 2016 was estimated at USD

¹² Government of St. Vincent and the Grenadines. 2017. Revised National Biodiversity Strategy and Action Plan (2015-2020).

¹³ World Development Indicators database. 2019. World Bank. 2019. St. Vincent and the Grenadines Country Profile. Available at <https://data.worldbank.org/country/st-vincent-and-the-grenadines>. Accessed on 13th May 2020.

¹⁴ WTTC. 2018. Travel and Tourism Economic Impact 2018 – St. Vincent and the Grenadines. Available at <https://www.wttc.org/economic-impact/country-analysis/country-reports/>. Accessed 13th May 2020.

3.5 million for an estimated 892 tonnes. The fisheries harvested include coastal and offshore pelagic fishery, shallow shelf and reef finfish and lobster, conch, turtles and whales¹⁵. The most common coastal species are balahoo jacks, and robin and deep water species include dolphin, snapper, tuna and cavallie. Fishers in Barrouallie are known for catching pilot whale or blackfish which is marked by a community event. The black fish industry includes production of meat, oil and crisps. There has been no reported decline in major species caught, though there is a decline in fish caught by beach seines due to coastal development¹⁰.

There are 36 landing sites (20 on mainland and 16 on the Grenadines), most of which lack modern fishing facilities, and those that have the facilities are underutilised due to the limited demand for unprocessed fish. As a result, most fish are sold unprocessed to consumers. Lobster and conch are sold mainly to restaurants and hotels. Fishing communities to the north of St. Vincent are farthest away from the economic centres of the island. However, communities closer to the economic centres, have multiple sources of income apart from fishing¹⁰.

Even though, contribution of the fisheries sector to GDP was 0.5% in 2016, fishing provides employment, food security and a safety net for fisherfolk in the country. Country estimates puts employment at 1,642 jobs in the fisheries sector for the period 2015-2016 (2.9% of the labour force). FAO estimates for the same period are 4568 jobs (8 % of the labour force). Total fish consumption for 2016 was estimated at 11 kg per capita, while an important source of protein, the per capita consumption is among the lowest within the OECS region for that particular year. Although distribution of catch is uneven throughout the country, supply often meets local demand through imports. There is also a trade deficit, as in 2016 642 tonnes of fish were imported at a value of USD 2.4 million, while export only accounted for 105 tonnes at a value of USD 0.6 million. Most popular fisheries exported are lobster, conch and other fin fish.^{10, 15}

There are no commercial aquaculture operations and sport fishing is limited as the main purpose for fishing is often to support livelihoods. Challenges in the fisheries sector include land-based pollution, unsustainable harvesting, limitations in quality assurance for export markets, institutional frameworks, conflict over resource use, limited capacity and financial resources^{10, 16}.

St. Vincent and the Grenadines' primary fisheries legislation includes the Fisheries Act (1986) and Regulations (1987) (part of the OECS harmonised legislation) which promotes management and development of fisheries to ensure optimum utilisation of fisheries resources in fisheries waters¹⁶. Management of the sector falls under the Fisheries Division in the Ministry of Agriculture, Forestry, Fisheries and Rural Transformation, Industry and Labour. The legislation includes conservation measures for lobster, turtle, conch and coral with restrictions on gear such as spear guns and nets.

The legislation makes provisions for a Fisheries Advisory Committee which acts as a National Inter-sectoral Coordinating Mechanism (NIC) that is aimed at managing and improving the fishing industry in the country. However, up to 2020 a Fisheries Advisory Committee had not been established. Despite not having a Fisheries Advisory Committee, participatory fisheries management is practiced.

St. Vincent and the Grenadines is also a member of a number of regional fisheries organisations / bodies such as the International Whaling Commission (IWC), the Western Central Atlantic Fisheries Commission (WECAFC), the International Commission for the Conservation of Atlantic Tunas (ICCAT),

¹⁵ CRFM. 2018. CRFM Statistics and Information Report - 2016. 82pp

¹⁶ FAO. 2016. Caribbean Fisheries Legal and Institutional Study: Findings of the comparative assessment and country reports, by Cristina Leria. FAO Fisheries and Aquaculture Circular No. 1124. Bridgetown, Barbados

the Caribbean Regional Fisheries Mechanism (CRFM) and the Organisation of Eastern Caribbean States. The country is party to the following fisheries-related multi-lateral agreements¹⁶:

- United Nations Convention of the Law of the Sea
- United Nations Fish Stocks Agreements
- the Convention on the International Trade in Endangered Species of Wild Flora and Fauna,
- the Convention on Biological Diversity

4.5 Stakeholder involvement in the fisheries institution of St. Vincent and the Grenadines

St. Vincent and the Grenadines' fisheries institution includes a range of governmental, civil society, and private sector stakeholders with various roles, mandates, responsibilities and interests. As part of the institutional analysis, key stakeholders were briefly identified and analysed to get an understanding of the range of stakeholders involved in the sector. The stakeholder identification was informed by the desk study. Table 4.1 provides a list of key stakeholder types involved in the fisheries institution in St. Vincent and the Grenadines in the governmental and civil society sectors. The list provided in the table is not meant to be exhaustive, but rather to give the reader some insight into the various stakeholder groups that are likely to benefit by improved ecosystems stewardship among fisherfolk.

In regard to fisherfolk organisations there are six legally registered fisherfolk cooperatives [Barrouallie Fisheries Development Cooperative Society Ltd., Calliaqua Fisherfolk Cooperative Society FAD Fishers Cooperative, Fish Vendors Cooperative, Goodwill Fishermen Cooperative Society and Union Island Fishing Cooperative] and one informal fisherfolk organisation (Southern Grenadines Fisherfolk Organisation) in St. Vincent and the Grenadines. The FAD Fishers Cooperative and the Fish Vendors Cooperative (comprising mostly women who are engaged in marketing and processing)¹⁷ are relatively new.

The fishing cooperatives are legally registered with the Cooperatives Division under the Cooperative Societies Act, 2012 and are members of the umbrella organisation of the St. Vincent and the Grenadines National Fisherfolks Cooperatives Limited (SVGNFO). The SVGNFO's Board of Directors are voted in by members and guided by the organisation's by-laws. The main objectives among the six cooperatives include the promotion of socio-economic wellbeing, trading fishing equipment and supplies, seeking training for members and other fishermen, partnering with the Ministry of Agriculture to promote local self-sufficiency in fish and to ensure compliance with international standards as it relates to harvesting, processing and marketing of fish.¹⁸

¹⁷ National Fisherfolk Organisation. 2020. Personal Communications. 11th May.

¹⁸ James. D. 2013. Final Technical Report – Promoting Good Practices in Service Delivery by Fisheries Cooperatives in St. Vincent and the Grenadines. "Strengthening Fisheries Management in ACP Countries"

Table 4.1: Analysis of key stakeholders in the fisheries institution in St. Vincent and the Grenadines¹⁹

Stakeholder type	Role/Interests	How will they benefit from improved ecosystem stewardship by fisherfolk/fisherfolk organisations?
Government		
Fisheries Division, Ministry of Agriculture, Forestry, Fisheries and Rural Transformation, Industry and Labour ²⁰	Lead agency responsible for management of the fisheries sector	Collaborative co-management improves partnership between Fisheries Department and resource users (i.e. fisherfolk), creating a sustainable environment for resource conservation alongside development of the fisheries industry as stakeholders will share aligned goals (makes use of opportunities to transform undesirable paths i.e. unsustainable exploitation of resources). Efficient utilisation of Division resources by 'sharing the burden' of management alongside ecosystem stewards.
Cooperative Division, Ministry of National Mobilisation, Social Development, Family, Gender Affairs, Persons with Disabilities and Youth ²¹	<ul style="list-style-type: none"> • Responsible for regulation and management of cooperatives • Interest in achieving viable and sustainable cooperatives 	Fishing cooperatives that adopt and promote more sustainable fishing practices among their membership are likely to have more sustainable and viable business enterprises. A positive reputation in this regard can potentially create opportunities for these cooperatives to form new partnerships with other organisations with similar values willing to provide capacity building and other resources to support development of these cooperatives. These partnerships may reduce the financial and administrative burden of the Department of Cooperatives to provide support to such fishing cooperatives. These partnerships can also serve to strengthen the enabling environment for these cooperatives consequently supporting the Department of Cooperatives in achieving its mission of having viable and sustainable cooperatives.

¹⁹ This list is not exhaustive, but meant to give insight into the various stakeholders in stakeholder categories of government, civil society, academia and private sector that will be affected by improved ecosystems stewardship

²⁰ Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour. 2017. Fisheries – Overview of the Division. Accessed on 13th May 2020. Available at http://www.agriculture.gov.vc/agriculture/index.php?option=com_content&view=article&id=96&Itemid=88.

²¹ Ministry of National Mobilization, Social Development, Family, Gender Affairs, Persons with Disabilities and Youth. 2020. Cooperative Division – General Information. Accessed on 13th May 2020. Available at <http://mobilization.gov.vc/mobilization/index.php/cooperative-division>.

Conservation and Sustainable Development Unit Ministry of Health, Wellness and the Environment	<ul style="list-style-type: none"> Responsible for implementing multilateral environmental agreements, dealing with climate change adaptation Role in ensuring sustainability and conservation of biological resources.²² 	Greater support and understanding by fisherfolk for marine management decisions particularly for marine protected areas and zonation policies
National Parks, Rivers and Beaches Authority Ministry of Tourism, Sports and Culture	Responsible for the preservation and management of ecological, cultural and historical resources through protected area system management. ²³	Greater support and understanding by fisherfolk for marine management decisions particularly for protected areas
St. Vincent National Trust Ministry of Tourism, Sports and Culture	Responsible for preservation of culture, architectural and natural heritage in St. Vincent ²⁴	Greater support by fisherfolk for conservation-based initiatives
Maritime Administration Ministry of National Security, Air and Sea Port Development	Responsible for the management of maritime affairs	Greater support by fisherfolk for maritime management decisions
Tobago Cays Marine Park Board	Responsible for the protection, conservation and improvement of natural resources in the Tobago Cays ²⁵	<ul style="list-style-type: none"> Greater support and understanding by fisherfolk for marine environment management decisions Assistance with monitoring by fisherfolk through increased reporting of illegal activities Increased willingness by fisherfolk to contribute to management objectives
Coast Guard Service Ministry of National Security, Air and Sea Port Development	<ul style="list-style-type: none"> Role in enforcement of fisheries legislation Responsible for enforcing rules in Tobago Cays Marine Park 	<ul style="list-style-type: none"> Reduced need for monitoring and enforcement due to increased compliance of fisherfolk with regulations Assistance with monitoring through increased reporting of illegal activities

²² Ministry of Health, Wellness and the Environment. 2020. Accessed on 13th May 2020. Available at <http://health.gov.vc/health/index.php/environmental-health/conservation-sustainable-development-unit>

²³ Ministry of Tourism, Sports and Culture. 2017. National Parks, Rivers and Beaches Authority. Accessed on 13th May 2020. Available at http://www.tourism.gov.vc/tourism/index.php?option=com_content&view=article&id=97&Itemid=102

²⁴ The St Vincent and the Grenadines National Trust. 2019. Accessed on 13th May 2020. Available at <https://www.svgnt.org/>.

²⁵ Hoggarth, D. 2007. Tobago Cays Marine Park (TCMP) 2007-2009 Management Plan - Revised November 2007 Draft updated to include OPAAL Baseline Studies and related documentation. Prepared for Organisation of Eastern Caribbean States (O ECS) and Environment and Sustainable Development Unit (ESDU)

Royal St. Vincent and the Grenadines Police Force		
Tobago Cay Wardens		
Civil society		
Fisherfolk organisations e.g. <ul style="list-style-type: none"> ○ SVGNFO (Umbrella organisation for most cooperatives) ○ Barrouallie Fisheries Development Cooperative Society Ltd. ○ Calliaqua Fisherfolk Cooperative Society Ltd. ○ FAD Fishers Cooperative ○ Fish Vendors Cooperative ○ Goodwill Fishermen Cooperative Society Ltd ○ Union Island Fishing Cooperative ○ Southern Grenadines Fisherfolk Organisation (Not a member of the SVGNFO) 	<ul style="list-style-type: none"> ○ Interest in long-term sustainability of fish stocks to support livelihoods, including sustainable business enterprises ○ Represent the interests of fisherfolk 	<ul style="list-style-type: none"> ● Fishing cooperatives that adopt and promote more sustainable fishing practices among their membership are likely to have more sustainable and viable business enterprises. A positive reputation in this regard can potentially create opportunities for these cooperatives to form new partnerships with other organisations with similar values willing to provide capacity building and other resources to support development of these cooperatives. ● More sustainable fish stocks
Mayreau Explorers Cooperative	Role in improving socio-economic conditions in Mayreau through providing alternative livelihoods in vertical seamoss farming to fisherfolk, youth and women ²⁶	Increased interest / support by fisherfolk for potential alternative livelihood options provided by the Mayreau Explorers Cooperative

²⁶ Pierre, B. 2019. *Case study on the Mayreau Explorers Cooperative: Creating alternative livelihoods through vertical seamoss farming in the Tobago Cays Marine Park*. Port of Spain: CANARI.

<p>National civil society organisations with a focus on supporting marine / coastal conservation e.g.</p> <ul style="list-style-type: none"> ○ Sustainable Grenadines (SusGren) ○ St. Vincent and the Grenadines Environment Fund 	<ul style="list-style-type: none"> ○ Interest/role in conservation of coastal and marine environment and sustainable livelihoods for people in the Grenadine islands²⁷ ○ Role in supporting sustainable livelihood initiatives and promoting natural value of islands. ²⁸ 	<ul style="list-style-type: none"> ● Increased support and interest by fisherfolk to be more involved in the organisation’s work with increased participation in sustainable livelihood initiatives ● Increased partnerships with fisherfolk organisations for conservation projects
Private Sector		
Fish vendors	<ul style="list-style-type: none"> ○ Responsible for processing and marketing of fish and fish products ○ Interest in long-term supply of fish and fish products for livelihoods and revenue generation 	<ul style="list-style-type: none"> ● Increased revenues from improved long-term sustainable supply to market
Exporters e.g. Rainforest Seafoods ²⁹		
Fish processors e.g. Rainforest Seafoods ²⁹		
<p>Fish retailers e.g.</p> <ul style="list-style-type: none"> ○ Markets / Supermarkets ○ Hotels and Restaurants ○ Fish Retail Outlets 		
Regional and international organisations		
Caribbean Regional Fisheries Mechanism	Inter-governmental organisation facilitating sustainable use of fisheries resources for socio-economic benefit of the region	Increased support for policy decisions
Caribbean Network of Fisherfolk Organisations (CNFO)	Regional network of small-scale fisherfolk. Supports fishers on Grenadine Islands	Support for organisation work

²⁷ Sustainable Grenadines Inc. 2018. Information about Sustainable Grenadines. Accessed 13th May 2020. Available at <http://www.susgren.org/about>.

²⁸ St. Vincent and the Grenadines Environment Fund. 2019. About Us. Accessed 13th May 2020. Available at <https://www.svgef.org/about-us/>

²⁹ Jamaican Observer.2019. “Rainforest Seafoods invests in new facility in St. Vincent” Jamaican Observer, 19th April. Accessed 9th August 2020. Available at http://www.jamaicaobserver.com/sunday-finance/rainforest-seafoods-invests-in-new-facility-in-st-vincent_162710?profile=1056

5 Policy, legal and planning context for ecosystem stewardship

National policies, laws or plans can either encourage ecosystem stewardship by fisherfolk or undermine it.³⁰ To determine whether existing fisheries and coastal and marine related policies, laws and plans in St. Vincent and the Grenadines were supporting or constraining ecosystem stewardship, selected priority policies, laws and plans were assessed to determine whether they were adequately in line with the principles of EAF, namely whether they considered:

- human well-being: a condition in which all members of society are able to determine and meet their needs and have a large range of choices to meet their potential; and
- ecosystem well-being: a condition in which the ecosystem maintains its diversity and quality — and thus its capacity to support people and the rest of life — and its potential to adapt to change and provide a viable range of choices and opportunities for the future.
- good governance: governance arrangements that enable broad stakeholder participation are similarly expected to confer support for management and foster stewardship among fisherfolk and other resource users.³¹

EAF recognises the need to maintain the productivity of ecosystems for present and future generations, conserving critical habitats, reducing pollution and degradation, minimising waste and protecting endangered species. It also recognises that this will not be achieved without the cooperation of people, i.e. unless the ecosystem contributes to human well-being, providing sustainable goods and services and sources of livelihood.³² Consideration of the latter is likely to encourage fisherfolk and other resource users to sustainably use, protect and conserve the resources they depend on for livelihoods. A holistic governance framework which considers importance of not only the ecological well-being of fisheries resources — but equally considers socio-economic well-being of fishery resource users and collaborative management mechanisms in the approach to fishery resources management — will increase the likelihood of ecosystem stewardship from fisherfolk in the small-scale fisheries industry.

5.1 Findings for policy, legal and planning context for ecosystem stewardship in St. Vincent and the Grenadines

Table 5.1 identifies some of the national fisheries and coastal and marine related policies, laws and plans within the fisheries institution in St. Vincent and the Grenadines. Policies, plans and laws identified are either directly related to the fisheries sector, for example the Fisheries Act (1986) which promotes and manages fisheries resources in St. Vincent and the Grenadines, or indirectly related to the fisheries sector, for example the St. Vincent and the Grenadines' Policy Framework and Strategic Plan for Agricultural Development 2012-2018 which seeks to enhance efforts for sustainable use and conservation of natural resources including the fisheries sub-sector, and increase investment to ensure more productive agriculture.

³⁰ Bennett, N.J., Whitty, T.S., Finkbeiner, E., Pittman, J., Bassett, H., Gelcich, S. and Allison, E.H., 2018. Environmental stewardship: a conceptual review and analytical framework. *Environmental Management*, 61(4), pp.597-614.

³¹ Viability and Sustainability of Small-Scale Fisheries in Latin America and https://books.google.tt/books?id=WBtfDwAAQBAJ&pg=PA475&lpg=PA475&dq=good+governance+definition+McConney&source=bl&ots=KCYRgCdVBF&sig=ACfU3U2DE3Aa8CDQ47L1iAbqrSv_J2NFOw&hl=en&sa=X&ved=2ahUKewjQ96zQ0MjpAhWrmOAKHRQ9C0AQ6AEwDHoECAoQAQ#v=onepage&q=good%20governance%20definition%20McConney&f=false

³² FAO. 2002. The ecosystem approach to fisheries. <http://www.fao.org/3/a-y4773e.pdf>

Table 5.1 Policies, laws and plans related to the fisheries institution in St. Vincent and the Grenadines

Policies
<ul style="list-style-type: none"> • National Fisheries and Aquaculture Policy, 2018 • National Ocean Policy and Strategic Action Plan, 2018 (Draft)
Laws
<ul style="list-style-type: none"> • Fisheries Act (1986) • Fisheries Regulations (1987) • Fisheries (Prevention of Illegal, Unreported and Unregulated Fishing) Regulations (2017) • Maritime Areas Act (1983) Act No. 15 of 1993 • Fish Processing Regulations (2001) • High Seas Fishing Act (2001) • Beach Protection Act (1981) • Mustique Conservation Act (1989) • Tobago Cays Marine Parks Act (1999) • Marine Parks Act, 1997 (No. 9 of 1977). • Aboriginal Subsistence Whaling Regulations (1986) • Cooperative Societies Act (2012) • Town and Country Planning Act (1992) • Central Water and Sewerage Authority Act (1978) • Forestry Act (1945) • Mustique Conservation Act (1989) • National Parks Act (2002)
Plans
<ul style="list-style-type: none"> • National Plan of Action to Prevent, Deter and Eliminate IUU Fishing 2018-2022 • National Sargassum Management Plan (2018) • National Adaptation Plan (2019) • National Biodiversity Strategic Action Plan 2015 – 2020, • National Economic and Social Development Plan 2013-2025 • National Environmental Management Strategy and Action Plan 2004-2006 • National Parks and Protected Area System Plan 2010 -2014 • Policy Framework & Strategic Plan for Agricultural Development 2012-2018 • Tobago Cays Management Plan 2007-2009

Selected key national policies, laws and/or plans were prioritised for deeper analysis. Instruments were selected based on their relevance to the fisheries sector and identified through desk-study as well as through the pre-webinar survey in which respondents were asked to select the national policies, laws and/or plans that they felt were most relevant to the sustainable development of the fisheries sector in St. Vincent and the Grenadines. Participants were informed that the policies, laws and/or plans identified and selected did not have to be directly related to the fisheries sector but could be broad and cross cutting such as a national climate change policy or biodiversity management plan. Despite limitations in responses, the following instruments were identified and analysed against the principles of EAF in Table 5.2.

- Fisheries Act (1986)
- Fisheries Regulations (1987)
- National Fisheries and Aquaculture Policy (2018)
- Draft National Ocean Policy and Strategic Action Plan (2018)

It should be noted that responses from the pre-webinar survey also included the Shipping (Marine Pollution Prevention) Bill 2019 and the Fish Processing Regulations (2001). However, these were not further analysed and included in Table 5.1 as the Shipping (Marine Pollution Prevention) Bill 2019 or the “Pollution Bill”, which guides on international shipping standards as it relates to marine pollution has not yet been enacted. It was brought to the Parliament for first reading in mid-2019. It was also felt that the Fish Processing Regulations would not effectively reflect EAF principles as these regulations were specifically designed to ensure international quality requirements for fish and fish products leaving and entering the country. The regulations consider hygiene standards, control of marketing, handling, transporting and storage of fish and the operation of fish processing establishments.

Additionally, discussions at the webinar focused on desk study analysis of the National Ocean Policy – Discussion Document (2013) as access to the Draft National Ocean Policy and Strategic Action Plan, 2018 was not possible until after the webinar. The draft policy references the National Economic and Social Development Plan (2013-2025) and considers the wider policy framework but makes no provision as yet for monitoring and evaluation of the policy. The policy does include a strategic action plan with indicator goals and associated timelines.

It should also be noted that the outdated Fisheries Act and Regulations are currently being reviewed and updated under a FAO funded project with a timeline of three years, until 2022. There is also no fisheries management plan at this time, though one is mandated by law to be prepared by the Chief Fisheries Officer through consultations. Preparation of a fisheries management plan is mentioned as a goal under the National Fisheries and Aquaculture Policy.

The National Fisheries and Aquaculture Policy gives an overview of the consultative process that was used to formulate the policy and highlights consultations with fisherfolk. It also lists the legal instruments guiding the policy (inclusive of major fisheries legislation listed above) and is based on the Government’s international and regional obligations for sustainable fisheries development. The policy also considers the national overarching policies such as the Strategic Plan for Agricultural Development 2012-2018 and the National Economic and Social Development Plan 2013 – 2025. The policy states that its performance will be monitored and evaluated regularly and resources would be made available when improvements are identified. The policy will be monitored and evaluated through audit of investments, and evaluation of the impacts of new initiatives through well-defined information systems and monitoring of indicators. The policy has a twenty-year life cycle with regular monitoring and evaluations, including a midterm review, and proposes the development of three-year action plans that are also monitored and evaluated.

Table 5.2: Analysis of key fisheries-related policies, laws and plans in St. Vincent and the Grenadines against the principles of EAF

Name of Policy, Law, Plan	Description	The policy/law/plan considers the ecological well-being of fisheries resources	The policy/law/plan considers socio-economic well-being of resource users including fisherfolk	The policy/law/plan considers collaborative management and inclusion of stakeholders in decision-making
Fisheries Act (1986)	Primary fisheries legislation aimed at promoting and managing fisheries	<p>Part II of the Act speaks to Marine Reserves and Conservation Measures as it relates to the declaration of protected areas and prohibition of destructive fishing practices and gears. It notes the following:</p> <ul style="list-style-type: none"> • Minister may declare any area of fishery water a marine reserve for protecting species, and habitats – Section 22(1) • Offences and fines for activities with marine reserves without obtaining Minister’s permission e.g. fishing and construction- Section 22(2) • Offences and fines for use of explosives or noxious substances to kill / catch fish. • Offences and fines for prohibited gear <p>Minister can also make regulations to support fisheries management through licensing, marine reserves regulations, fishing priority areas, protection of species (lobster, conch, turtles) and conservation measures (relating to gear, area, species and temporal restrictions) – Section 45(1)</p>	<p>The Act considers socio-economic wellbeing of resource users, by supporting their access to fishing resources, including through the following:</p> <ul style="list-style-type: none"> • No application for a license shall be refused unless determined by a licensing programme – Section 11(4) • Minister may grant licenses to operate a fish processing establishment - 17(1) • Minister may declare any area a fishing priority area for approved unimpeded fishing – Section 20 • Foreshore and sea-bed land may be leased for aquaculture 	<p>The Act notes that the:</p> <ul style="list-style-type: none"> • Chief Fisheries Officer (CFO) shall consult with fishermen in preparation of a fisheries management plan – Section 3 • The Minister may appoint a Fisheries Advisory Committee (FAC) to advise on fisheries management and shall include the CFO and other persons deemed capable by Minister – Section 5 • Minister may designate local fisheries management area giving management authority to any local fisheries related group and CFO shall provide assistance to such group. This local authority shall make bye-laws consistent with the Act - Section 18(1), Section 19(1)
Fisheries Regulations (1987)	Secondary fisheries legislation that supports management and regulation of fisheries	<p>Part VI of the Regulations considers Fishery Conservation Measures as it briefly relates to:</p> <ul style="list-style-type: none"> • Restrictions on lobsters, conch, turtles, conch, coral including closed seasons and gear used. • Restrictions on gear – spear-gun (requires permission; prohibited in conservation areas) and nets (mesh sizes; tangled nets prohibited) 	<p>Socio-economic well-being of resource users is not specifically considered except as it relates to the non-refusal of licences for fishing and fish processing establishments</p>	<p>Section 2 of the Regulations speaks to the composition of the Fisheries Advisory Committee, noting that it shall include 3 persons chosen from professional fishermen and appointed by the Minister</p>

<p>Fisheries and Aquaculture Policy, 2018</p>	<p>Sets out measures for management, conservation and sustainable use of fisheries and aquaculture resources to ensure socio-economic benefits in collaboration with stakeholders</p> <p>The Policy identifies 7 goals and an action plan to achieve its objective.</p>	<ul style="list-style-type: none"> • Goal 2 speaks to ensuring sustainable use and protection of the natural environment by improving marine and coastal ecosystem management through monitoring and reducing pollution, developing a network of Protected Areas and developing research activities • Goal 3.1 speaks to development and implementation of a fisheries management plan – using traditional knowledge (collaborative aspect) and ecosystem-based approaches with species specific management. Also speaks to adopting conservation measures as it relates to sustainable fish stocks, along with prohibiting Illegal, Unreported and Unregulated fishing activities 	<ul style="list-style-type: none"> • Goal 1 focuses on developing climate change resilience within the sector as it relates to improving resilience of fisherfolk and coastal communities and reducing risk through implementation of fisherfolk insurance scheme to safeguard fisherfolk from socioeconomic risks • Goal 3.3 covers training of fisherfolk to increase capacity and working with fisherfolk cooperatives towards sustainable livelihoods opportunities • Goal 4.1 speaks to increasing the contribution of fisheries and aquaculture to sustainable rural livelihoods • Goal 5 speaks to the contribution of fisheries to food and nutrition security (focuses on increasing availability and per capita consumption of fish and fish products) • Goal 7.2 speaks to providing opportunities for youth in the development of the industry 	<ul style="list-style-type: none"> • Goal 3.1 speaks to adopting traditional knowledge in fisheries management plan • Goal 4.2 speaks to integrating fisheries in community development across sectors supporting co-management approach and participatory approach • Goal 7.1 speaks to increasing female participation in management through decision-making, for example
<p>National Ocean Policy and Strategic Action Plan (2018)</p>	<p>Guides the intersectoral planning and development of ocean activities in a sustainable manner for socio-economic development</p> <p>Consists of 10 policy goals and 11 strategic action plans.</p>	<p>Policy 4 speaks to conserving and managing marine coastal ecosystems to increase resilience and reduce impacts of environmental change in coastal areas through development of information management systems, marine zoning and multi-use spatial plans and establishing protected areas among others</p>	<p>Policy 7 speaks to developing the blue economy through improving productivity and sustainability of marine living resources and optimising economic opportunities from coastal and marine resources through supporting facilities for small-scale fisheries, adding value to outputs and accessing regional and international markets for small scale fisheries products.</p>	<p>Policy 3 aims to promote and increase stakeholder participation in coastal and marine management through identifying stakeholders and strengthening partnerships</p>

6 Mechanisms for fisherfolk participation in decision-making

Taking action is a fundamental part of ecosystem stewardship. Stewardship actions include the range of approaches, activities, behaviours, and technologies that are applied to protect, restore or sustainably use the environment. In the case of small-scale fisheries, stewardship actions by fisherfolk and/or their organisations are influenced by formal or informal decision-making processes about the use of fisheries resources that may or may not involve fisherfolk. Participatory decision-making, however, allows the views and knowledge of fisherfolk to be considered, including on decisions that would facilitate cooperation by fisherfolk in becoming better stewards. It gives a voice to an often-marginalised group and mitigates against the overshadowing of their opinions by more powerful or influential stakeholders. To determine the extent to which fisherfolk were being included in decision-making processes related to the management of fisheries and other coastal and marine resources the institutional analysis examined the existence, composition and functioning of current NICs.

The CLME+ SAP identified interactive governance arrangements such as NICs essential to successfully implementing and achieving ecosystem-based management and EAF. In the CLME+ region NICs can be broad or narrow based on the scope and ecosystem approach being used. Examples of NICs include: Fisheries Advisory Committees or Councils, Ocean Governance Committees, sustainable development commissions, integrated coastal management institutions and climate change bodies. NICs operate within the policy cycle and involves interactions across multiple scales, stakeholders, sectors and levels of governance (local, national, regional and international). A NIC can be considered as the operational arm of good and effective governance or policy processes.³³

Through past engagements in decision making processes, fisherfolk perceive that their feedback is not given consideration. Fisherfolk have been reluctant to attend meetings/ consultations as the perception is that there is no feedback on their ideas and they may feel left out of decision making when ideas are used without their credit. During the consultations of the National Ocean Policy, the perception from fishers was that there was no intention to receive feedback as they were engaged during later stages of policy consultation. Also, decisions are made quickly before fisherfolk are allowed an opportunity to engage in the consultative process.¹⁷

6.1 Findings for mechanisms for fisherfolk participation in decision-making in St. Vincent and the Grenadines

During the validation webinar, participants were asked to validate current NICs identified during the desk study and pre-webinar survey, as well as identify any additional current NICs related to the coastal and marine sector in St. Vincent and the Grenadines. Participants were also asked to note whether the NICs identified included fisherfolk or not, or if this information was unknown, to share where additional information could be sourced for further analysis. Table 6.1 shows the NICs that were identified during the desk study and by participants during the pre-webinar survey. Additional information on selected mechanisms from Table 6.1 as well as other mechanisms that were identified during the desk study but not noted as priority to be expanded on in Table 6.1 is provided below.

Fisheries Advisory Committee

³³ Compton, S. 2020. *Identifying suitable national intersectoral coordination mechanisms (NICs)*. Developing Organisational Capacity for Ecosystem Stewardship and Livelihoods in Caribbean Small-scale Fisheries (StewardFish) project. Project Report to FAO. 18 pp.

The analysis found that the mechanism which would allow fisherfolk a substantial voice at the national level, the Fishery Advisory Committee, has not been established. While the Fisheries Advisory Committee is not legally mandated as the Fisheries Act (1986) states that the Minister 'may' appoint a Fisheries Advisory Committee, the Fisheries Regulations (1987) state that, if established, the Fisheries Advisory Committee shall include three persons from professional fishermen appointed by the Minister. During the validation webinar, it was noted that the Fisheries Advisory Committee is still at a 'conversational' stage, suggesting that no substantial steps toward its establishment have yet been made. It was further noted that fisherfolk organisations have been feeling the impacts of the COVID-19 pandemic, along with added challenges from climate change, and are calling for a platform to support their voices in decision-making processes, as it has been noted before that fisherfolk organisations perceive that their voices are not taken seriously.³⁴

National Oceans Coordination Committee

While it does not solely address matters related to the fisheries sector, the recently established National Oceans Coordination Committee makes provisions for a representative from a fisherfolk organisation, chosen by Cabinet, to sit on the Committee. However, it was noted at the validation webinar that the fisherfolk organisation has not attended meetings despite invitations sent and is yet to name a representative to sit on Committee. There also seemed to be lack of communication among fisherfolk as other fisherfolk organisations were not aware of the Committee.

National Climate Change Committee

A National Climate Change Committee was another committee yet to be formed. It is to comprise of representatives from Permanent Secretaries in the public service, civil society, private sector and academia and is to be chaired by the Sustainable Development Unit with its purpose being to develop an annual climate change plan. This committee would be supported by a technical arm.³⁵

Task forces

There are also Cabinet appointed task forces to focus on issues related to Sargassum and Illegal, Unreported and Unregulated Fishing. Both of these task forces include the SVGNFO.

Biodiversity Committees

Respondents identified a 'Biodiversity Committee' on the pre-webinar survey. During the desk study two committees fitting this description were found – the National Biological Strategic Action Plan Steering Committee and an inter-ministerial action committee to 'oversee national transformation through sound, sustainable biodiversity practices'.

The National Biological Strategic Action Plan Steering Committee oversees the development of the National Biodiversity Strategy and Action Plan and consists of the Sustainable Development Unit, Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour, National Parks, Rivers, and Beaches Authority, Physical Planning Unit and Forestry Department. A recommended inter-ministerial action committee to 'oversee national transformation through sound, sustainable biodiversity practices' will be formed from the steering committee involved in preparation of the sixth national report to the Convention on Biological Diversity (CBD). Suggestions for the composition of this inter-ministerial committee include agencies such as the Ministries of Agriculture and Tourism, Fisheries Division, Forestry Division, National Parks, Rivers and Beaches Authority and National Trust, Ministry of Health, Wellness and the Environment, Ministry of

³⁴ CANARI (2015). Report of the National Fisherfolk Workshop, Saint Vincent and the Grenadines. Held as part of the Strengthening Caribbean Fisherfolk to Participate in Governance project. October 20-21, 2015. Saint Vincent and the Grenadines, Kingstown: Fisheries Division

³⁵ Government of St. Vincent and the Grenadines. 2019. National Adaptation Plan for St. Vincent and the Grenadines.

Education, Ministry of Housing, Energy Unit, Ministry of Transport, Works, Urban Development and Local Government (Grenadines representatives) and the Regional Integration and Diaspora Unit ³⁶

Network of Marine Protected Areas

Sustainable Grenadines Inc. (SusGren) organises annual meetings within an informal network of marine protected area (MPA) managers from the Grenadine Islands. This is a support network that is able to share resources, knowledge and experience with each other. Representatives of the MPAs sign certificates of agreement to be part of the network. SusGren also assists the various MPAs in writing proposals for small grants and facilitates training. Within the last couple years, the importance of incorporating fisherfolk into the network has been considered. SusGren is currently liaising with the SVGNFO to establish a mechanism that could incorporate fisherfolk into the network. ³⁷

National Environmental Advisory Board

The National Environmental Advisory Board is a dormant multi-disciplinary Cabinet appointed committee which has not been in operation since the early 2000s. The purpose of the Board was to coordinate multi-sectoral environmental activities and oversee implementation of the National Environmental Strategy Action Plan, though its effectiveness was questioned in implementation of its duties ^{38 39}. It was suggested at the validation webinar that, if the Board were to become active again, it would need restructuring due to changes in institutional arrangements.

Agriculture – Tourism Linkage Committee

The now dormant Agriculture – Tourism Linkage Committee was established to develop sustainable linkages between agriculture and tourism and coordinate an agro-tourism linkage programme that would diversify tourism and agriculture products and enhance rural livelihoods through initiatives such as farm tours, establishing agro-tourism action alliances and developing proposals for seafood festivals. There are plans to re-establish the Committee. The Committee will be supported by the Ministry of Tourism, Agriculture, Finance and Trade and the Inter-American Institute for Corporation on Agriculture (IICA)^{40 41}

³⁶ Government of St. Vincent and the Grenadines. 2019. Sixth National Report to the Convention on Biological Diversity

³⁷ Sustainable Grenadines. 2020. Personal Communications. June 9th.

³⁸ Government of St. Vincent and the Grenadines. 2016. Environmental Management Framework (EMF) for Regional Disaster Vulnerability Reduction Project (RDVRP) St. Vincent and the Grenadines Component.

³⁹ St. Vincent & the Grenadines Environmental Management Strategy and Action Plan 2004-2006

⁴⁰ Harvey, E. 2017. Linking Farmers & Tourists to Solve Development Challenges in SIDS. European Union. Accessed 19th June 2020. Available at <https://europa.eu/capacity4dev/article/linking-farmers-tourists-solve-development-challenges-sids>

⁴¹ King, C, Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour . 2019. St. Vincent and the Grenadines Initiatives in Agro-tourism Development: A review. Presentation given at the St. Vincent and the Grenadines Agro-tourism Policy setting Workshop, March 19 Beachcombers Hotel Conference Room.

Table 6.1 Coastal and marine related NICs in St. Vincent and the Grenadines

Name of NIC	Purpose	Composition	Are fisherfolk members of the mechanism?	Functioning (Active/Inactive)
Fisheries Advisory Committee ⁴²	To advise Minister on fisheries management as it relates to fisheries planning, amendment of legislation, coordination of policies, projects and joint ventures or proposals for access agreements within the fisheries sector (Section 5, Fisheries Regulations, 1987)	<ul style="list-style-type: none"> • Permanent Secretary of line Ministry • Chief Fisheries Officer • 3 professional fishermen • Other persons deemed suitable by the Minister 	Yes	Inactive (To be established)
Maritime Commission ^{43, 44}	To manage the Department of Maritime Administration	<ul style="list-style-type: none"> • Permanent Secretary in the Ministry of National Security who shall be the Chairperson; • Registrar of Ships who shall be the Secretary; • Director for Maritime Administration; • Registrar of Seafarers; • Commander Coast Guard; • Director General Finance and Planning or his nominee; • Commissioner of Maritime Affairs; • Harbour Master; • Port Manager; • Solicitor General or his nominee; • Comptroller of Customs and Excise Department; • Permanent Secretary Ministry of Telecommunications or his nominee; • Chief Fisheries Officer; • Chief Environmental Co-ordinator or his nominee; • Permanent Secretary Ministry of Transport, Works and Housing or his nominee 	No	Active

⁴² Fisheries Regulations, 2013

⁴³ Shipping Act, 2004

⁴⁴ Government of St. Vincent and the Grenadines, Ministry of National Security, Air & Sea Port Development. 2018. About Maritime Administration. Accessed 15th June 2020. Available at http://security.gov.vc/security/index.php?option=com_content&view=article&id=91&Itemid=129

National Environmental Days Commemoration Committee (NEDCC)	To raise awareness on global environmental days	<ul style="list-style-type: none"> • Forestry Services, • Fisheries Division, • Public Health Department, • Department of Labour, • Ministry of Tourism, Sports and Culture, • Caribbean Youth Environment Network, • Sustainable Development Unit, • National Parks, Rivers and Beaches Authority 	No	Active
National Ocean Coordination Committee ^{45,46}	<p>To implement and monitor and evaluate the National Ocean Policy Strategic Action Plan and cross-cutting policies and actions including:</p> <ul style="list-style-type: none"> • supporting marine-related sustainably activities • facilitating participation of public and private institutions, non-governmental organisations and civil society in the implementation of the National Ocean Policy Strategic Action Plan • Liaising with the OECS in the Caribbean Regional Oceanscape Project <p>The Committee was established in 2019.</p>	<ul style="list-style-type: none"> • Ministry of Finance, Economic Planning, Sustainable Development and Information Technology • Maritime Administration • Ministry of Foreign Affairs, Commerce and Trade • Attorney General's Chambers • Fisheries Division • Ministry of Health, Wellness and the Environment • Customs and Excise Division • Port Authority • Coast Guard • Physical Planning Unit • National Parks • SVG National Trust • Barrouallie Fisheries Development Cooperative Society Ltd. • SusGren • SVG Hotel & Tourism Association 	Yes	Active
National Parks Board under the National Parks, Rivers and	<ul style="list-style-type: none"> • To advise the Minister on policy relating to National Parks (including marine managed/protected areas) <p>To monitor conditions of National Parks and advise on improvement of facilities</p>	<ul style="list-style-type: none"> • Director of National Parks • Director General of Finance and Planning, or nominee • Head of Physical Planning Department • Chairman of SVG National Trust • Medical Officer of Health • Director of Forestry 	No	Active

⁴⁵ World Bank.2019. International Development Association Program Document for Proposed Credit in the Amount of US\$30million to St. Vincent and the Grenadines for the First Fiscal Reform and Resilience Development Policy Credit

⁴⁶ Compton, S. n.d. NOCC Committee.

Beaches Authority ^{47 48 49}		<ul style="list-style-type: none"> • Commissioner of Police, or nominee • Chief Executive Officer of the SVG Tourism Authority • Chamber of Industry and Commerce • Rural Community non-governmental organisation • Permanent Secretary of Ministry of Tourism, Sports and Culture, or nominee 		
National Seaweed Invasion Task Force ^{50 51}	Established by Cabinet to share information on sargassum influxes and promote best management practices	<ul style="list-style-type: none"> • Ministry of Transport and Works (Minister is the chairman), • The Building, Roads and General Services Authority (BRAGSA - Executing Agency) • Ministry of, Housing, Informal Human Settlements, Land and Surveys, and Physical Planning. • Ministry of Agriculture (including the Fisheries Division) • Ministry of Tourism, Sports and Culture (Represented by the National Parks, Rivers and Beaches Authority) • Ministry of Health, Wellness and the Environment • The SVG Tourism and Hotel Association • National Fisherfolk Organisation • National Emergency Management Organisation (NEMO) • Office of Grenadines Affairs 	Yes	Active; mainly mobilised during sargassum influxes
National Taskforce on Illegal, Unreported and Unregulated (IUU) Fishing ⁵¹ <small>Error! Bookmark not defined.</small>	To develop the National Plan for IUU and advise Government on related policy actions	<ul style="list-style-type: none"> • Fisheries Division • Caribbean Regional Fisheries Mechanism • Department of Maritime Administration • Royal SVG Coastguard • Ministry of Legal Affairs • Ministry of Economic Planning and Sustainable Development 	Yes	Active

⁴⁷ National Parks (Amendment) Act, 2010.

⁴⁸ National Parks, Rivers and Beaches Authority.2020. The National Parks Board. Accessed on 8th June 2020. Available at <http://nationalparks.gov.vc/nationalparks/index.php/about-us/the-board-and-staff>

⁴⁹ National Parks, Rivers and Beaches Authority. 2020. Personal Communication – Email. 23rd June.

⁵⁰ National Sargassum Management Plan 2018 (Draft)

⁵¹ Fisheries Division.2020. Personal Communication via email. 18th June.

		<ul style="list-style-type: none"> • Ministry of Foreign Affairs, Trade and Commerce • National Fisherfolk Organisation 		
Tobago Cays Marine Park Board ^{52, 53}	To govern management of the Tobago Cay Marine Park	<ul style="list-style-type: none"> • Director of Grenadines Affairs • Dep Director of Grenadines Affairs • Permanent Secretary Min. National Security • Attorney General • Ministry of Finance • Chief Fisheries Officer • Ministry of Tourism • Commander of Coastguard • Southern Grenadines Water Taxi Ass • Mayreau Community • Union Island Tourism Board • Water Taxi Association 	Though a fisherman sits on the Board, it is not in the capacity of representing any fisherfolk organisation or informal fishing groups but rather as a representative of the nearby Mayreau community	Active

⁵² Tobago Cays Marine Park. 2020. Personal Communication. 12th May

⁵³ Tobago Cays Marine Park. 2020. Personal Communication via email. 19th June

7 Support and resources available to fisherfolk and their organisations for ecosystem stewardship

To undertake ecosystem stewardship, would-be stewards must have the support and resources to do so. In this case “support and resources” refer to the finances, technology and equipment and education, skills and knowledge needed to effectively undertake ecosystem stewardship actions. Access to these resources may also ensure that aspects of fisherfolk’s human well-being (e.g. access to training to ensure safety at sea) are considered by support agencies and may provide motivation for stewardship actions ⁵.

To determine whether fisherfolk have adequate support and resources to undertake ecosystem stewardship actions the institutional analysis examined some projects, programmes and initiatives in St. Vincent and the Grenadines that have provided or are providing finances, technology and equipment and capacity building (e.g. education, skills and knowledge) to fisherfolk and their organisations.

7.1 Findings for support and resources for ecosystem stewardship by fisherfolk and their organisations

Through desk study, interviews and the national validation webinar, various projects, programmes and initiatives aimed at providing support and resources to fisherfolk and fisherfolk organisations, set out in Table 7.1, were identified by stakeholders. While what is listed is not meant to be comprehensive, it provides some general insight into the type of support and resources that are available to fisherfolk and their organisations in St. Vincent and the Grenadines.

The findings in Table 7.1. show that support and resources for fisherfolk in St. Vincent and the Grenadines are available from a range of sources including from government, civil society and intergovernmental organisations either through ongoing programmes, or *ad hoc* efforts in response to projects. Support and resources provided include technical support in proposal writing, training in quality assurance, loan and grant programmes, training in management as it relates to cooperatives and support in transitioning to alternative livelihoods.

In terms of government programmes, a main source of technical support is provided through the Fisheries Division and financial support through loans are available to fisherfolk organisations to upgrade gear from the Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour.

Projects implemented by civil society and international organisations are also an important source of support and resources for fisherfolk in St. Vincent and the Grenadines. For example, the Caribbean Fisheries Co-management Project (CARIFICO) project, which was implemented by the Japan International Cooperation Agency (JICA) and Caribbean Regional Fisheries Mechanism (CRFM) built capacity of FAD fishers in St. Vincent and the Grenadines by providing training in the construction and deployment of FADs leading to an increase in catches of more resilient offshore pelagic fish stock and reduction of pressure on nearshore fisheries. As a result of this project, and due to the increased interest in FAD Fishing, a FAD Fishers Cooperative was developed. The Fisheries Division is supporting the newly formed cooperative through consultations with fishers and regularly monitoring FAD components.

A fisher exchange programme under CARIFICO facilitated knowledge sharing between fishers in Union Island and Mayreau and led to the preparation of a FADs management plan for Carriacou.^{54,55} As part of JICA Country Assistance Policy, there is a programme to support fisheries and fishing community development to small scale artisanal fishermen and fishing villages, through issue-based training in the fisheries sector as well as dispatching volunteers to assist.⁵⁶

Other projects such as the ongoing FAO/GEF funded Climate Change Adaptation in the Eastern Caribbean Fisheries (CC4 Fish) project, are also making efforts to enhance the capacity and build resilience of fisheries in St. Vincent and the Grenadines to climate change. Activities under CC4Fish that sought to increase fisherfolk resilience included building capacity in business skills, and training of vendors and handlers in food safety and hygiene^{57 58}. However, it was perceived by fisherfolk that there was little on the ground experience for local beneficiaries and that project partners seemed to have gained more benefits out of the project.¹⁷

Civil society organisations like SusGren have also supported fisherfolk through training programmes in quality assurance. SusGren has also informally supported fisherfolk in the Grenadines islands. Fisherfolk in these islands are not organised as cooperatives and SusGren often leads in convening meetings for fisherfolk, and also assisting fisherfolk with developing project proposals. SusGren also provides financial support for fisherfolk from the Grenadines to attend fisheries-related meetings in mainland St. Vincent since the cost of participation for Grenadines participants is usually higher due to the need for inter-island transport and accommodation in St. Vincent depending on the length of the meeting or workshop. When possible, SusGren, through their projects, would also provide support for fishers to attend regional training meetings or programmes.

The recently formed, non-profit company, St. Vincent and the Grenadines Conservation Fund Inc. supports works as it relates to biodiversity conservation within protected areas and funds projects that are related to training on climate change adaptation, coral reef monitoring, control of invasive species, and community awareness for Protected Areas. The recent call for proposal was also opened for fisherfolk organisations to apply.⁵⁹ The National Development Foundation of St. Vincent and the Grenadines also provides loans to small and micro entrepreneurs as self-help mechanisms and loans are available to fisherfolk.⁶⁰

Additional examples of projects, programmes and initiatives that provide support and resources to fisherfolk and fisherfolk organisations in St. Vincent and the Grenadines are set out in Table 7.1.

⁵⁴ CRFM, 2017. Report of the CRFM / CARIFICO Seminar: Strengthening Fisheries Co-management in the Region. CRFM Technical & Advisory Document, No. 2017 / 4. 68p.

⁵⁵ JICA and Florida Sea Grant. 2018. Facilitating Co-managed Fisheries in the Caribbean Region: Good Practices and Guidance from the CARIFICO Experience.

⁵⁶ JICA. 2018. Rolling Plan for St. Vincent and the Grenadines, Annex of Country Assistance Policy.

⁵⁷ FAO. 2020. Climate Change Adaptation in the Eastern Caribbean Fisheries Sector. Accessed on 13th June. Available at <http://www.fao.org/in-action/climate-change-adaptation-eastern-caribbean-fisheries/en/>

⁵⁸ FAO Western Central Atlantic Fishery Commission. 2018.

Report of the GEF/FAO Climate Change Adaptation in the Eastern Caribbean Fisheries Sector Project launching workshop. Bridgetown, Barbados, 7–9 February 2017. FAO Fisheries and Aquaculture Report No. 1189. Rome, Italy

⁵⁹ The Saint Vincent and the Grenadines Conservation Fund (SVGCF). 2019. Call for Proposal – Protect and Enhance Ecosystems and Educate and Create Responsible Communities.

⁶⁰ National Development Foundation of St. Vincent & the Grenadines. n.d. *Loans* [Online]. Available at: <http://www.ndfsvg.org/loans.html> (Accessed on 24 June 2020)

Table 7.1 Programmes and initiatives providing support and resources to fisherfolk and fisherfolk organisations in St. Vincent and the Grenadines

Name of project/programme/initiative	Description of programme/initiative	Type of support /resources provided	Organisation delivering programme/initiative	Organisation type
Farmers Support Fund ^{61, 62}	<p>Concessionary loans to farmers and fishers at two percent interest.</p> <p>It is a soft loan overtime, so less is paid as compared to banks.</p> <p>Money returned is put back into the fisheries industry. Loan approval requires a fisherman identification card to prove that they are registered fishers.</p> <p>During Covid-19 pandemic, \$1million from the Fund, was used to provide pirogues and gear to fishers.</p>	<ul style="list-style-type: none"> Financial loans to fishers to upgrade gear 	Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour through grant provided by the Venezuela-based Petro Caribe initiative	Government
Regular Work Programme of the Fisheries Division ⁶¹	Technical and equipment support to fisherfolk	<ul style="list-style-type: none"> Information on fisheries e.g. as it relates to species information Support with business management Fishing gear Assistance with writing project proposals -this assistance is often provided with support from other agencies including the as National Parks and Beach Authority, Maritime Administration and Sustainable Development Unit 	Fisheries Division	Government

⁶¹ Fisheries Division.2020. Personal Communications. 8th May.

⁶² Government of Saint Vincent and the Grenadines Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour.

		<ul style="list-style-type: none"> • Technical advice on placement of FADs and data collection 		
Seamoss farming in the Tobago Cays Marine Park	Initiative aimed at supporting alternative livelihoods for fisheries by building capacity in seamoss production and value-added products	Training for fisherfolk in vertical sea moss in farming in the Tobago Cays Marine Park as an alternative livelihood.	Mayreau Explorers Cooperative supported by SusGren through GEF funding,	Civil Society (national), International Development Agency
OECS Agricultural Competitiveness Project (AGRICOM) ⁶³	Project aimed at promoting agro-market development to decrease rural poverty and the import bill, and improve rural employment <i>(Regional project with St. Vincent and the Grenadines as one of its target countries)</i>	<ul style="list-style-type: none"> • Small grant funding for the preparation of business plans, implementation of business plans and general agriculture services, project management and conducting monitoring and evaluation activities. <p><i>Business plans are required to be submitted to access grants. To be eligible, fisherfolk must participate in sub-project proposals.</i></p>	Co-funded by the World Bank and the Government of St. Vincent and the Grenadines	Government and International Development Agency
Climate -Resilient Eastern Caribbean Marine Managed Areas Network (ECMMAN) Project ^{64, 65, 66}	Project aimed at establishing a network of marine management areas which would also provide for improved livelihoods opportunities within the project countries. <i>(Regional project with St. Vincent and the Grenadines as one of its target countries)</i>	<ul style="list-style-type: none"> • Support with creating markets for the invasive Lionfish to support its eradication in the South Coast Marine Conservation Area – the Calliaqua Fishers Cooperative was involved in this component • Equipment and materials and gear such as ice packs, deep fryers and tents were also provided to as support for lionfish harvesting, processing and marketing • Financial support, through the ECMMAN Livelihoods Support Fund, for Calliaqua Fishers Cooperative to purchase ice boxes for boats for its membership to ensure freshness of fish 	The Nature Conservancy and the National Parks, Rivers and Beaches Authority	Government and Civil Society (international)

⁶³ Ministry of Agriculture. n.d. OECS Agriculture Competitiveness Project – Promoting Agri-market development.: Project Information Leaflet.

⁶⁴ The Nature Conservancy. n.d. Climate-Resilient Eastern Caribbean Marine Managed Areas Network (ECMMAN) Project – Project Accomplishments 2013-2017.

⁶⁵ CANARI (2015). Report of the National Fisherfolk Workshop, Saint Vincent and the Grenadines. Held as part of the Strengthening Caribbean Fisherfolk to Participate in Governance project. October 20-21, 2015. Saint Vincent and the Grenadines, Kingstown: Fisheries Division.

⁶⁶ National Parks, Rivers and Beaches Authority. 2020. Personal Communications. 27th May.

		<ul style="list-style-type: none"> • Support with setting up a fish fry event and tackle shop to generate income for the Calliaqua Fishers Cooperative • Diving certifications were also provided to fishers so that they can be employed in the South Coast Marine Conservation Area • Mentoring in business management 		
<p>Caribbean Marine Biodiversity Program (CMBP) <small>37Error! Bookmark not defined.,67, 68</small></p>	<p>Project aimed at achieving sustained biodiversity conservation, maintaining and restoring critical ecosystems and realising tangible improvements in human and community wellbeing.</p> <p>The project sought to provide the tools needed for effective management of the Grenadines seascape, in order to protect marine habitats, promote sustainable fisheries and support alternative tourism-based livelihoods.</p> <p><i>(Regional project with St. Vincent and the Grenadines as one of its target countries)</i></p>	<ul style="list-style-type: none"> • Training of fishers in the Grenadines islands in post-harvest handling of fish and seamoss using the Hazard Analysis and Critical Control Point (HACCP) method • Equipment – Fishers from Bequia and Carriacou were supplied with ice boxes for their boats as they utilise smaller goats which do not have storage capacity. • Training in bookkeeping for fisherfolk • Peer training to Mayreau fishers received training in assembling lobster pots from fishers in other Grenadine Islands e.g. Bequia • Training in sustainable lobster fishing • Awareness building of lobster fishing regulations <p><i>Due to fisherfolk request to have as a continuous programme, training initiatives are incorporated into projects once funding is available. Efforts are made to facilitate training at least once per year.</i></p>	<p>Sustainable Grenadines Inc. in collaboration with the Ministry of Carriacou and Petite Martinique Affairs and the Fisheries Divisions of Grenada and SVG</p> <p>The Caribbean Marine Biodiversity Program is a five-year project, funded by the U.S. Agency for International Development and implemented by The Nature Conservancy,</p>	<p>Civil Society (national and international) and Government, International Development Agency</p>

⁶⁷ Sustainable Grenadines Inc. 2018. CMBP – HACCP Trainings. Accessed on 15th June 2020. Available at <http://www.susgren.org/projects/13>

⁶⁸ Sustainable Grenadines Inc. 2018. CMBP – Lobster Pot. Accessed on 15th June 2020. Available at <http://www.susgren.org/projects/14>

COVID-19 Support 69	Initiative supporting farming and fishing communities to ensure public safety during COVID-19 pandemic	<ul style="list-style-type: none"> Personal protective equipment - local non-profit organisation in the Grenadines, Bequia Threadworks, was commissioned to make 1000 masks to distribute to fishers 	The St. Vincent and the Grenadines Environment Fund and Bequia Threadworks	Civil Society
Marine Conservation Grant 70	Initiative supporting compensation for fisherfolk	<ul style="list-style-type: none"> Grant provided to the Ministry of Agriculture to compensate former turtle fishers who decommissioned their nets in compliance with legislation banning of sea turtle hunting / fishing. 	The St. Vincent and the Grenadines Environment Fund, Ministry of Agriculture	Civil Society and Government
Loan programme from the National Development Foundation of St. Vincent and the Grenadines 71	Loan programme targeted at small and micro enterprises	<ul style="list-style-type: none"> Loans to small and micro entrepreneurs as self-help mechanisms. Loans are available to fisherfolk. 	The National Development Foundation of St. Vincent and the Grenadines	National Development Organisation
Whale and dolphin conservation 72	Initiative supporting whale and dolphin conservation in Bequia and Barrouallie transitioning fisherfolk from whaling practices	<ul style="list-style-type: none"> Grant provided to Fundacion Cethus, in partnership with the Barrouallie Heritage and Tourism Organisation, the Whale and Dolphin Conservation and the Animal Welfare Institute to facilitate training to assist humpback whalers in transitioning to sustainable community-based whale watching enterprises as well as supported sustainable livelihood alternatives for small cetacean fishers 	The St. Vincent and the Grenadines Environment Fund, Fundacion Cethus, Barrouallie Heritage and Tourism Organisation, Whale and Dolphin Conservation and	Civil Society (national and international)

⁶⁹ The St. Vincent and the Grenadines Environment Fund. 2020. The SVGEF Supports Farming and Fishing Communities in Response to COVID 19. Accessed on 17th June 2020. Available at <https://www.svgef.org/grants/the-svgef-supports-farming-and-fishing-communities-in-response-to-covid-19/>.

⁷⁰ The St. Vincent and the Grenadines Environment Fund. 2019. Former Turtle Fishers Compensated for Putting Down Nets. Accessed on 17th June 2020. <https://www.svgef.org/grants/former-turtle-fishers-compensated-for-putting-down-nets/>

⁷¹ National Development Foundation of St. Vincent & the Grenadines. n.d. *Loans* [Online]. Available at: <http://www.ndfsvg.org/loans.html> (Accessed on 24 June 2020)

⁷² The St. Vincent and the Grenadines Environment Fund. 2019. Supporting Whale and Dolphin Conservation in Bequia And Barrouallie. Accessed on 17th June 2020. <https://www.svgef.org/grants/supporting-whale-and-dolphin-conservation-in-bequia-and-barrouallie/>

			the Animal Welfare Institute	
Training programme: Promoting Good Practices in Service Delivery by Fisheries Cooperatives in St. Vincent and the Grenadines. ¹⁸	Programme to develop leadership and management capacity in fisherfolk organisations	Training on good practices in management of cooperatives including: <ul style="list-style-type: none"> ○ Understanding cooperative principles and practices ○ Management ○ Leadership ○ Working with groups ○ Customer service ○ Record keeping 	Funded by European Union, through its “Programme for strengthening Fisheries Management in African, Caribbean and Pacific Group of states (ACP Countries (ACP Fish II)” project by a consultant Dougal James	International
Strengthening Caribbean Fisherfolk to Participate in Governance project ⁷³	Project aimed at building capacity of fisherfolk organisations to be engaged in fisheries governance <i>(Regional project with St. Vincent and the Grenadines as one of its target countries)</i>	<ul style="list-style-type: none"> • Funding - the project included a small grant facility, the Fisherfolk Strengthening Fund, targeted at fisherfolk organisations to support fisherfolk organisational strengthening project. The SVGNFO applied to and were rewarded grants from this fund. • Capacity building in governance – the project included a number of capacity building workshops aimed at improving the skills and knowledge of fisherfolk leaders to better participate in governance <p>The President of the SVGNFO stated that the fisherfolk who participated in this project were now in leadership roles within their respective cooperatives^{17, 74}</p>	The Strengthening Caribbean Fisherfolk to Participate in Governance project was implemented by CANARI in partnership with UWI-CERMES, Panos Caribbean, CNFO and CRFM. The project was funded by the European Union	Civil Society (regional) Academia, Regional and International Development Agencies,

⁷³ CANARI. n.d. Strengthening Caribbean fisherfolk to participate in governance [Online]. Available at [https://canari.org/coastal-marine-governance-and-livelihoods/strengthening-caribbean-fisherfolk-to-participate-in-governance/#:~:text=The%20small%20grants%20facility%20\(now,capacity%20to%20participate%20in%20governance.](https://canari.org/coastal-marine-governance-and-livelihoods/strengthening-caribbean-fisherfolk-to-participate-in-governance/#:~:text=The%20small%20grants%20facility%20(now,capacity%20to%20participate%20in%20governance.) (Accessed 20 June 2020)

⁷⁴ CANARI (2015). Report of the National Fisherfolk Workshop, Saint Vincent and the Grenadines. Held as part of the Strengthening Caribbean Fisherfolk to Participate in Governance project. October 20-21, 2015. Saint Vincent and the Grenadines, Kingstown: Fisheries Division.

8 Partnerships and networks for ecosystem stewardship

Partnerships and networks connect institutions and organisations across levels and scales. For fisherfolk organisations seeking to engage in ecosystem stewardship, partnerships and networks are important as these arrangements help facilitate information flows, fill knowledge gaps, and strengthen expertise for ecosystem management, including stewardship.⁷⁵ This section discusses a few current or past partnerships or networks in St. Vincent and the Grenadines that included fisherfolk organisations and how these have impacted ecosystem management.

8.1 Findings for partnerships and networks for ecosystem stewardship

Fisherfolk organisations in St. Vincent and the Grenadines engage in partnerships with government, and civil society organisations for various initiatives related to ecosystem management including livelihood development.

As an umbrella organisation the SVGNFO allows a structured framework for networking and partnership amongst fisherfolk cooperatives in St. Vincent and the Grenadines. Fisherfolk organisations each choose a representative to represent their cooperative on the national fisherfolk organisation. However, despite having a strong regulatory framework, in the past some cooperatives have only focused on sales of gas, oil and tackle, and not promoted growth, profitability and attraction of new members. Past issues within cooperatives have included Board Directors without fishing experience, communication issues with Board members and fisherfolk and overall management challenges and accountability at the Board level. For example, Goodwill Fishermen Cooperative Society Limited located in Kingstown covers the majority of fisherfolk with its main function supplying gas to fishers. However, due to lack of management skills, accountability and documentation, its operations were halted in previous years¹⁸.

Although fisherfolk require capacity development to partner effectively in ecosystem stewardship initiatives, this perceived lack of capacity to engage in such partnerships did not deter the Fisheries Division and others from providing opportunities for fisherfolk to participate in various initiatives. One of which includes leasing of fisheries complexes to fishing cooperatives and through the lease agreement, it was agreed that certain fisheries related information would be shared with Fisheries Division.⁷⁶ A number of examples of partnerships between fisherfolk and other stakeholders in the following areas related to ecosystem management are highlighted in Table 8.1.

Table 8.1: Examples of partnerships between fisherfolk and other stakeholders

Area	Description of partnership
Monitoring and enforcement	Fisherfolk share information with the Fisheries Division on illegal, unregulated and unreported fishing.
Data collection	The Fisheries Division receives support from fishers as it relates to data collection of fish catch. Fishing information in terms of landings is collected by fisheries officers at different landing sites. Data is also provided by some fisherfolk cooperatives as part of the requirements

⁷⁵ Building Transformative Capacity for Ecosystem Stewardship in Social–Ecological Systems https://www.researchgate.net/publication/226922986_Building_Transformative_Capacity_for_Ecosystem_Stewardship_in_Social-Ecological_Systems

⁷⁶ Fisheries Division. 2020. Validation Webinar. 3rd June.

	of their lease agreements with the Government for the use of state-owned fisheries complexes.
Awareness building/Information sharing	<ul style="list-style-type: none"> ○ Fisherfolk share their knowledge through their involvement on Cabinet-appointed task forces dealing with sargassum and illegal, unregulated and unreported fishing. ○ The Fisheries Division also collaborates with fisherfolk organisations in the annual month long “Fisherman’s Day Celebrations” which showcases the fishing industry in Saint Vincent and the Grenadines.^{17 Error! Bookmark not defined.}
Collaborative management and management planning	<ul style="list-style-type: none"> ○ As part of previous plans to improve community involvement and the need for the board to understand local fishing community, a community representative from the Mayreau fishing village was selected to be on the Tobago Cay Marine Park (TCMP) Board due to lack of fishing cooperatives in surrounding islands. There is also some education of fishers in Union Island through the TCMP as it relates to conservation or resources.^{52 77} ○ National Parks, Rivers and Beaches Authority is currently working in collaboration with the Ministry of Agriculture, Forestry, Fisheries, Rural Transformation and Industry, and the Ministry of Tourism, Sports and Culture on designating the South Coast Marine Conservation Area as a Marine Park. Discussions are being held through public meetings with fisherfolk organisations, particularly the Calliaqua Fisherfolk Cooperative Society who operate in the area, to collaborate on zoning plans to designate proposed areas for seine fishing and bait fishing. Work is also currently being done on development a management framework plans to encourage stakeholder representation in decision making. It is hopeful that this partnership model can be transferred to another proposed marine park on the leeward coast and engage stakeholders such as the Barouille Fisheries Cooperative.^{66Error! Bookmark not defined. 78}
Sustainable livelihood development	<ul style="list-style-type: none"> ○ The Fisheries Division collaborated with FAD fishers to establish the FAD Fishers Cooperative. The Fisheries Division provides regular support to the cooperative in terms of technical guidance ○ Through engaging with SusGren on various projects, fisherfolk have been able to contribute to the lobster pot project by providing suggestions on type of materials to be used in lobster pots that would be best suited for the reefs and to attract lobsters. Fisherfolk were able to experiment with different types of trees to develop suitable lobster pots.

⁷⁷ Harvey, O. and K. Williams. 2012. Training Workshop for Enhancing the Management Effectiveness of Tobago Cays Marine Park Board. Report for MPA Governance Project. 21pp.

⁷⁸ Parks, G. 2014. South Coast Marine Park Project Saint Vincent and the Grenadines Final Report. Prepared for the Organisation of American States Department of Sustainable Development Washington, DC

9 Communication of information on sustainable practices for fisheries resources use

Communication is the means to share information on best practices, lessons learnt, available support/resources, training, networking, and opportunities for participatory decision-making that can support effective ecosystem stewardship. The institutional analysis examined the extent to which providers of fisheries information in the project country were using defined communication strategies, tools and channels to communicate with fisherfolk, as well as their capacity to use the tools and channels effectively; including the structures and systems in place for clear communication.

The Fisheries Division is one of the key providers of fisheries information including information on closed seasons and invasive species. While the Division does not have an official communication strategy, efforts are made to communicate regularly with fisherfolk, including through its extension and public education unit. The Division utilises both in-person and online communication methods.

In-person engagement for the purpose of sharing information is often done through field extension activities, meetings, consultations and events.

Much of the communication of information between the Fisheries Division and fisherfolk is carried out by extension officers who engage with fisherfolk regularly for data collection at landing sites. Through these engagements, extension officers are able to share important fisheries information with fisherfolk in layman terms and fisherfolk in turn are able to share their issues and concerns with officers who pass this information on to technical staff at the Division. It was noted that integration of fisherfolk's traditional knowledge into management strategies could be improved on.

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More formal in-person engagement is facilitated through focused meetings and consultations. The Fisheries Division holds monthly meetings with the SVGNFO to discuss any issues affecting fisherfolk. The SVGNFO communicates key discussions from these meetings back to its wider membership during regular meetings of its primary cooperatives. Additionally, consultations are held through special stakeholder meetings to gain feedback directly from fisherfolk on certain policy and management decisions being considered. These consultations make provisions for participants as they are held at a suitable time (e.g. in the evening periods when fisherfolk have completed fishing for the day) to ensure fisherfolk participation. Days are chosen when fisherfolk are more accessible and stakeholder meetings are also decentralised through various communities. For larger stakeholder meetings, the Fisheries Division covers the cost of transportation to limit personal expenses of fishers attending the meeting.

The Division's public education unit also spearheads information sharing at events such as agricultural expositions and career days⁷⁹. The Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour, also has a communication department and a television and radio programme which the Fisheries Division uses to share information on the fisheries sector. Printed media (See Figure 3) such as informative flyers are also available at Fisheries Division.

In terms of online communication, while the Division does not have a dedicated website, email and social media platforms (e.g. Instagram and Facebook) are used for sharing relevant information. WhatsApp groups also allow for ease of communication and information sharing between Fisheries

⁷⁹ St. Vincent and the Grenadines Fisheries Division (2019) 20th November. Available at <https://www.facebook.com/pg/svg.fisheries.division> (Accessed: 19th June 2020)

Division and fisherfolk. However, the Division has found that the most effective way to communicate information to fisherfolk has been through face-to-face engagement.

It was noted that communication with fisherfolk on the Grenadine islands is lacking and that it is often difficult for fisherfolk there to attend meetings on the mainland due to issues with transport. ¹⁷
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Eat Lionfish

Quick Facts About Lionfish:

Warning Venomous Spines - DO NOT TOUCH

- They reproduce quickly
- They eat important fish species
- They are capable of destroying marine ecosystems
- They have no known predators in the Atlantic Ocean
- There is no harm in eating Lionfish meat

So to BEAT them we must Eat them

Fisheries Division
Ministry of Agriculture, Forestry, Fisheries and Rural Transformation
St. Vincent and the Grenadines
Telephone: #(784) 456-2738
Fax: # (784) 457-2112

Conch Regulations

Please be reminded that it is illegal to catch, buy, sell or possess Conch from the waters of St. Vincent and the Grenadines:

- > With total meat weight less than half pound
- > With shells smaller than 7 inches in length
- > Without flared lips

Let us obey these regulations listed above so that we can enjoy eating conch and our future generations also.

Anyone found violating these regulations is liable to a fine up to

\$5000.00

Figure 3 Example of printed material shared by the public education outreach unit of the fisheries division. Credit: St. Vincent and The Grenadines Fisheries Division Facebook Page

10 Organisational assessment of the fisheries authority in St. Vincent and the Grenadines

While fisheries authorities have adopted EAF principles as an approach; evidenced by their inclusion in policies and plans (see Table 5.2), many have not yet adopted these principles within their administrative procedures and/or do not currently possess the capacities to facilitate effective collaborative management procedures.

As part of the institutional analysis, an organisational assessment of the of the state agency with direct responsibility for fisheries management was conducted in each country to identify gaps and develop recommendations to better adopt the EAF approach and subsequently support fisherfolk and their organisations in actioning ecosystem stewardship. The assessment was conducted via survey to provide a rapid assessment of the state agency's internal capacity to support ecosystem stewardship by fisherfolk and their organisations. The questions in the survey examined the following four capacity areas to explore the organisational motivation and capacity for supporting ecosystem stewardship by fisherfolk:

1. Vision, mandate and culture
2. Practices
3. Knowledge and skills
4. Resources

The assessment was conducted as an organisational self-assessment – where the selected agency, either through a small focus group (including relevant and knowledgeable staff members) or via an elected representative, completed the survey.

In the case of St. Vincent and the Grenadines, the organisational assessment focused on the Fisheries Division. The survey instrument including the responses provided can be found at Appendix 13.3.

10.1 Findings from organisational assessment of the fisheries authority in St. Vincent and the Grenadines

In Saint Vincent and the Grenadines, the main fisheries management authority is the Fisheries Division under the Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour which has the primary responsibility for managing marine resources as guided by the National Fisheries and Aquaculture Policy, 2018 and enacted through the Fisheries Act (1986) and Fisheries Regulations (1987). Ecosystem stewardship within the Division is supported through its legislation and policy guidelines, as well as through the support provided to fisherfolk organisations.

The Fisheries Division is a key stakeholder in the fisheries institution in Saint Vincent and the Grenadines and plays an important role in supporting ecosystem stewardship by fisherfolk. Improved ecosystem stewardship by fisherfolk and their organisations can benefit the Division by reducing or minimising the burden on the Division's limited financial and human resources for enforcement of fisheries regulations and contributing to the sustainable use, conservation and protection of coastal and marine resources for which the Division has management responsibility.

The Fisheries Division is guided by the vision statement in the National Fisheries and Aquaculture Policy, 2018 which is based on "A well-managed fisheries and aquaculture sector, fully integrated into the wider economic development, to secure optimum benefits from those resources for the people of SVG for present and future generations." Ecosystem stewardship is supported by the

policy’s recognition that well managed fisheries can sustainably secure benefits for all stakeholders. The core values of the Department reflect the EAF principles and importance of fisherfolk as it relates to ecosystem stewardship, participatory processes and traditional knowledge.

The mandate given by the Fisheries Act focuses on promoting the management of fisheries and for matter incidental thereto and connected therewith”. The ecosystem stewardship principles of the Act are highlighted in Table 5.2 This mandate is to be achieved through the Fisheries and Aquaculture Policy and its specific policy goals relating to social-economic enhancement and EAF principles.

Table 10.1 provides a synthesis of the organisational assessment survey findings for the Fisheries Division, St. Vincent and the Grenadines, and recommendations for addressing gaps related in the four capacity areas evaluated. Each capacity area is also given an overall ranking based on the findings using a traffic light rating system, where:

	Indicates that the agency is effectively supporting ecosystem stewardship by fisherfolk and their organisations in the capacity area, with non-critical gaps to be addressed
	Indicates that the agency is adequately supporting ecosystem stewardship by fisherfolk and their organisations in the capacity area, but there are some critical gaps to be addressed
	Indicates that the agency factor is not adequately supporting ecosystem stewardship by fisherfolk and their organisations in the capacity area and there are critical gaps to be addressed

Table 10.1 Organisational assessment of Saint Vincent and the Grenadines Fisheries Division

Capacity area	Evaluation question and explanation	Response provided by agency	Overall ranking for section based on responses	Gaps/Recommended areas for strengthening
Vision, Mandate and Culture	Division has a vision statement that is supportive of /promotes ecosystem stewardship by fisherfolk	Yes		Vision statement as guided by the National Fisheries and Aquaculture Policy can expound further on EAF principles though this is reflected in policy goals.
	Division's mandate supports ecosystem stewardship by fisherfolk	Yes		
	Explanatory notes provided by agency: <ul style="list-style-type: none"> • Division's vision is <i>"A well-managed fisheries and aquaculture sector, fully integrated into the wider economic development, to secure optimum benefits from those resources for the people of Saint Vincent and the Grenadines for present and future generations."</i> • Division's mandate is guided by its specific policy goals to ensure sustainable use and protection of the "natural environment and biodiversity utilising precautionary and ecosystem-based approaches along with species-specific management strategies and strengthening institutions and enabling environment for integrated and responsible fisheries and aquaculture development and management, pursuant to agreed international standards. This includes developing stakeholders', such as fisherfolk, capacity and skills." • Core values/beliefs that the Division identifies as its culture are: <ul style="list-style-type: none"> ○ belief that ecosystem stewardship by fisherfolk is important for sustainable use of fisheries and marine resources; ○ belief that fisherfolk can be effective ecosystem stewards ○ belief that fisherfolk should be included in decision-making on management; ○ values local and/or traditional knowledge; and ○ believes in EAF 			
Practices	Division has a clear process for including opinions of fisherfolk in decisions made about fisheries and marine resources	Yes		Information sharing can be strengthened through the development of a communication strategy
	Division regularly and systematically includes fisherfolk's input in decisions about how fisheries and marine resources are managed	Yes		
	Division regularly partners/collaborates with fisherfolk and their organisations for fisheries management initiatives	Yes		
	Division regularly facilitates collaboration/partnerships between fisherfolk and other fisheries and marine stakeholders	Yes		
	Explanatory notes provided by agency:			

	<ul style="list-style-type: none"> • Through consultations, the Fisheries Division engages with fisherfolk in the decision-making process through regular meetings with the national fisherfolk organisation, outreach by the extension unit / field workers or through special workshops • While decisions are finalised by policy makers i.e. Cabinet, the Division regularly includes the input of fisherfolk in its policy advice to policy makers • Fisheries Division is viewed as both a collaborative partner (participatory approach) and an enforcer of fisheries management guidelines / regulations (top down relationship) • Collaboration on a fisheries management initiative can be shown through the formation of the FAD Fisherfolk Cooperative. Collaboration between fisherfolk and other stakeholders is facilitated by the Fisheries Division through the 'Fisherman's Day month of celebration.' • The Division collects and uses fisherfolk traditional knowledge to inform management decisions. The Division also records and shares best practices related to sustainable use with fisherfolk. Despite not having a formal communication strategy to engage with fisherfolk, information and guidance is provided to fisherfolk as it relates to sustainable fishing practices and initiatives for stewardship activities through processes mentioned in Section 9. Out of the various communication strategies used to engage with fisherfolk, face-to-face consultations have been the most effective. 			
Knowledge and Skills	Technical staff have knowledge of EAF	Yes		Capacity of technical staff in participatory processes, such as participatory monitoring and evaluation, participatory planning, participatory management, and facilitation should be built to improve engagement with fisherfolk and their organisations
	Technical staff have specialist knowledge on ecosystems, their functions and ecosystem changes	Yes		
	Technical staff understand socio-economic context of fisheries and marine resource use by fisherfolk and other stakeholders	Yes		
	Technical staff have knowledge of aquaculture and other alternative or complementary livelihood options for which fisherfolk may be well suited	Yes		
	Technical staff have knowledge of how fisherfolk organisations function including key challenges that they may face and how they can be supported to resolve them	Yes		
	Organisation has the capacity to provide training for fisherfolk in different technical areas and organisational strengthening (these may include soft skills such as facilitation, development of training material, etc.)	Yes		

	Technical staff has the skills to assist fisherfolk with mobilising funding for ecosystem stewardship activities and initiatives	Yes		
	Technical staff have skills in participatory approaches (e.g. participatory monitoring and evaluation, participatory planning, participatory management etc.)	Somewhat		
	Technical staff have communication skills needed to effectively communicate with a range of stakeholders including fisherfolk	Yes		
	Organisation provides or accesses training and other kinds of capacity building for staff to regularly improve their technical knowledge and skills	Yes		
	<p>Explanatory notes provided by agency:</p> <ul style="list-style-type: none"> • Division's technical staff have: <ul style="list-style-type: none"> ○ the relevant knowledge of EAF; ○ knowledge on ecosystems due to trained marine biologists on staff; ○ been exposed to socioeconomic context of the Caribbean region's fishing industry and the ability to conduct socioeconomic assessments with some staff exposed to the concept of Global Socioeconomic Monitoring Initiative for Coastal Management (SocMon); ○ knowledge of aquaculture and livelihood options through institutional training or workshops; ○ knowledge of fisherfolk organisations and how they function; ○ communication skills to effectively communicate with stakeholders through its public education unit's outreach activities; ○ access to training and capacity building through workshops and seminars. • Staff skills in participatory approaches is currently basic and limited to exposure through workshops. 			
Resources	Division provides funding assistance to fisherfolk to support ecosystem stewardship activities or initiatives	Somewhat		Development of a dedicated website can complement sharing of fisheries information with fisherfolk on social media platforms. A website can facilitate online document management to make key documents including reports, policies and plans relevant to the fisheries sector easily available to fisherfolk.
	Division provides materials, equipment or technology to fisherfolk to support ecosystem stewardship activities or initiatives	Somewhat		
	Division has access to tools, methods and good practices that can be used to support fisherfolk with ecosystem stewardship activities and initiatives	Yes		
	Division provides access to or assists fisherfolk organisation with accessing networks or resources outside of itself (such as technical experts, funding, projects, etc.)	Yes		

	Division has a dedicated website which can be used to share information and resources on ecosystem stewardship practices with fisherfolk	No		
	<p>Explanatory notes provided by agency:</p> <ul style="list-style-type: none"> • Funds are provided by the Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour (the line Ministry of the Fisheries Division) for ecosystem stewardship activities and the Division assists fisherfolk in applying for said funds. • Materials, equipment or technology is provided to fisherfolk mainly through projects or bilateral assistance from donor countries/agencies. • The Division assists with networking fisherfolk organisations with national and regional projects, regional/international fisheries bodies and donor agencies outside of St. Vincent and the Grenadines. • Though the Division has access to tools, methods and good practices to support fisherfolk, there is need to strengthen this access to meet current demands during the COVID-19 pandemic. • The Division does not have a dedicated website but utilises its social medial platforms to share information with fisherfolk. 			

11 Enabling and constraining factors and recommendations for strengthening fisheries institution to support ecosystem stewardship by fisherfolk

Table 11.1 set out some of the key enabling and constraining factors based on the findings from the institutional analysis and organisational assessment, it also provides recommendations to improve strengthening of the fisheries institution in St. Vincent and the Grenadines to better support fisheries ecosystem stewardship by fisherfolk and their organisations. Enabling and constraining factors and recommendations are presented below under the categories of:

- Policy, legal and planning context for ecosystem stewardship
- Mechanisms for fisherfolk participation in decision-making
- Support and resources available to fisherfolk and their organisations for ecosystem stewardship
- Partnerships and networks for ecosystem stewardship
- Communication of information on sustainable practices for fisheries resources use

Gaps and areas for strengthening the organisational capacity of the St. Vincent and the Grenadines' Fisheries Division to support ecosystem stewardship by fisherfolk are presented in Table 10.1.

Table 11.1 Enabling and constraining factors and recommendations

Area	Enabling factors	Constraining factors	Recommendations
Policy, legal and planning context for ecosystem stewardship	<ul style="list-style-type: none"> Laws and policies related to the fisheries sector reflect EAF principles, covering ecological wellbeing, socio-economic wellbeing and collaborative management. The Fisheries Act and legislation are currently being updated and the Fisheries and Aquaculture Policy has a defined policy life cycle, with plans to develop a fisheries management plan. 	Inadequate monitoring and evaluation of fisheries and fisheries related policies and plans	Consideration should be given to improving participatory monitoring and evaluation of key fisheries and fisheries related policies
Mechanisms for fisherfolk participation in decision-making	Fisherfolk are engaged in various inter-sectoral decision-making mechanisms related to ocean governance, sargassum, and illegal, unreported and unregulated fishing	<ul style="list-style-type: none"> There is currently no decision-making mechanism directly related to the fisheries sector on which fisherfolk are represented. For example, there is no Fisheries Advisory Committee in place to support participatory decision-making with fisherfolk. The selection of members on the Fisheries Advisory Committee is also heavily dependent on the Minister and most of the decision-making power lies with Minister / Cabinet in the decision-making framework Decision making mechanisms are available for fisherfolk organisations to have representation but may not be engaging them meaningfully, as in the case of the National Ocean Coordination Committee. This, coupled with the limited capacity of 	<ul style="list-style-type: none"> Through the updating of the current fisheries legislation, amendments can be suggested to the process for selection of representatives on the Fisheries Advisory Committee to ensure that fisherfolk have a say in determining who would be their representative on the committee. This would allow the opportunity for the selection of a capable representative to be involved in decision-making who understands the views of fisherfolk. In the absence of a Fisheries Advisory Committee, a sub-committee on fisheries can be established within the National Oceans Coordination Committee to facilitate further engagement of fisherfolk. Although provisions are made for a fisherfolk representative to sit on the

		<p>fisherfolk to participate in governance, may indicate weak stakeholder engagement in decision-making</p> <ul style="list-style-type: none"> • There is inadequate inclusion of Grenadine fishers in decision-making processes, which may be due in part to the lower number of legally registered fishing organisations among the Grenadines islands • Limited application of participatory decision-making as decisions related to the fisheries sector are often made quickly without an opportunity to properly consult fisherfolk for feedback 	<p>National Oceans Coordination Committee, there is need to ensure that this representative is willing to and capable of meaningfully representing fisherfolk in this capacity. Ideally, this representative should be voted in by fisherfolk rather than chosen by Cabinet, as is the current process.</p> <ul style="list-style-type: none"> • A formalised umbrella fisherfolk organisation can be formed to represent the collective views of the Grenadines fishers so as to strengthen the participation of the Grenadines fisherfolk in decision-making. • Consultative processes need to adequately factor in time and resources for participatory engagement of stakeholders so as to allow sufficient opportunity for fisherfolk to input into decisions
<p>Support and resources available to fisherfolk and their organisations for ecosystem stewardship</p>	<p>Support and resources are available to fisherfolk from local government agencies, civil society organisations and regional projects as it relates to training, provision of equipment and financial aid</p>	<ul style="list-style-type: none"> • Despite having a strong regulatory framework, fishing cooperatives have faced management issues in the past. Currently, there is no continuous training programme available to build capacity in Cooperatives. 	<ul style="list-style-type: none"> • In order to develop fisherfolk’s capabilities to engage in ecosystem stewardship as meaningful stakeholder’s capacity should be built among fisherfolk to operate well-managed cooperatives. This can be facilitated through regular training sessions / workshops for covering topics of management, leadership and accountability and building awareness of laws, policies and plans. • Capacity for virtual communication and engagement (e.g. through the use of information and communication technology and e-learning platforms;

			the need for which was highlighted during COVID-19 pandemic ¹⁷) should also be built among fisherfolk organisations. This training would allow for better advocacy from fisherfolk organisations and greater capacity to input into decision-making processes.
Partnerships and networks for ecosystem stewardship	Efforts are made by government agencies to engage fisherfolk in partnerships particularly through projects, on coastal and marine protection and conservation initiatives.	Fishing cooperatives/organisations need to build capacity to engage in long term partnerships	<ul style="list-style-type: none"> • Additional support should be provided to develop fisherfolk capacity to engage in ecosystem stewardship partnerships through experienced-based learning on projects which would allow fisherfolk to gain a better appreciation for the benefits and skills needed to form and maintain long-term partnerships with various stakeholders.
Communication of information on sustainable practices for fisheries resources use	Regular meetings between the Fisheries Division and the umbrella fisherfolk organisation, SVGNFO, provide a clear channel for communication along with the day-to-day engagement of extension officers with fisherfolk at various landing sites.	<ul style="list-style-type: none"> • Inadequate communication channels between the Fisheries Division and fisherfolk in the Grenadine islands for sharing fisheries-related information. This has contributed to lower awareness of legislation, and fisheries related decisions among fisherfolk in the Grenadines islands. • Outcomes from consultations and workshops are not communicated back to fisherfolk. • Traditional knowledge not adequately integrated into management decisions 	<ul style="list-style-type: none"> • Develop a communication strategy for engaging and sharing information with fisherfolk from the Grenadines islands. This is especially important to ensure their meaningful participation in decision-making processes and management planning activities such as consultations. • Outputs from consultations and workshops should be communicated back to fisherfolk in time manner. • Develop an effective strategy to capture and include traditional knowledge from fisherfolk in management decisions.

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13 Appendices

13.1 Definitions of conceptual components for the institutional analysis framework

Conceptual component	Worksheet
<p>A. Policies. Laws and plans</p>	<p>This component focuses on the existing legal framework within the target country to address and guide fisheries management and planning. It involves the formal governance of a nation’s fisheries management which can either empower or constrain the ability to integrate <i>ecosystem stewardship</i>⁸⁰ practises within small-scale fisheries. The assessment of this component also involves regulations, rules and management plans that resulted from the policies and legislation identified. This can be used as an indicator of fisheries-related state agencies capacity to support fishing industry stewardship. For example, to determine whether legislation is adequate as Stewardship is an evolving concept for management of natural resources such as fisheries. Policy and legislation need to be assessed in order to identify the barriers at the institutional level that may hinder the promotion of ecosystem stewardship. This component is divided into:</p> <p>A.1 Fisheries Policy A.2 Fisheries Management Plan A.3 Fisheries Legislation</p>
<p>B. Advisory and/or decision-making mechanisms</p>	<p>Institutional arrangements - examine the institutional frameworks and mechanisms established for governing fisheries management and fostering ecosystem stewardship. This includes the establishment of multi-stakeholder committees or similar structures, which play an advisory or decision-making role in resource management. The relationship between these mechanisms and the agencies/stakeholders involved will also be analysed.</p>
<p>C. Fisheries-related Organisations</p>	<p>This conceptual component will map the fisheries-related state agencies as well as other fisheries-related organisations which play a key role in the fishery-related institutional arrangements of each country. This includes the core fisheries management organisations such as Fisheries Divisions/Departments/Authorities/Agencies and other associated departments, such as Environment, Coastal Management, Agriculture, Cooperatives, Markets and others. It will also include non-state organisations such as fisherfolk organisations, civil society organisation, private sector and academia, where relevant. Given that the level of involvement in the fisheries sector will differ within and among project countries. This section will investigate agencies roles and particularly their mandated role in fisheries management. Furthermore, an organisational capacity assessment will be carried out to examine the core fisheries state agencies’ current ability to support stewardship activity.</p> <p>Organisational Capacity Assessment:</p>

⁸⁰ *Ecosystem Stewardship* is understood as “a strategy to respond to and shape social-ecological systems under conditions of uncertainty and change to sustain the supply and opportunities for use of ecosystem services to support human well-being”.

	<p>Under this key conceptual component, core capacitiesⁱ of fisheries-related state agencies capacity to support and enable ecosystem stewardship will be assessed. The capacities to be examined are:</p> <ol style="list-style-type: none"> I. Vision, mandate, culture- this section looks at the organisation’s visions and goals, its operational culture and its internal governance mechanisms and how they promote ecosystem stewardship. It is reflected in the everyday organisational culture, how they communicate with fisherfolk and their organisations and the relationships they build. II. Knowledge and skills- this focuses on assessing the fisheries-related state agency’s capacity to provide fisherfolk and fisherfolk organisations with the relevant knowledge and skills support required for improved stewardship actions. This section assesses the capacity in technical knowledge, skills and ability related to ecosystem stewardship. III. Resources- assesses the capacity, availability, and efficient access to resources related to organisations– in particular the resource support made available to fisherfolk organisations from the state agency, as well as resources provided for execution of any ecosystem stewardship actions and practices. IV. Partnerships - is an assessment of the organisations capacity to foster partnerships and link activities, plans, projects and initiatives which involves ecosystem stewardship. It will look at their ability to build networks, and assist in building the networks of fisherfolk organisations, as resource users and ecosystem stewards.
<p>D. Processes and practices</p>	<p>For this conceptual component, the operational procedures for fisheries-related state agencies will be examined more closely. The processes and practices will be assessed in three sub-components. These are:</p> <p>C.1 Promotion of good governance- This is determined by probing the inclusivity of the decision-making process in fisheries governance. The system of institution (i.e. the decision-making process applied) determines the relative success of the structural processes to a certain degree in institutional capacity for improved fisheries management that integrates ecosystem stewardship (i.e. levels of exclusion, discrimination). This also assesses organisations internal structures and systems ability to create an environment that encourages and facilitates stewardship. It includes the channels of communication for sharing or receiving information from fisherfolk, and transparent and accountable systems. This will also assess the structures and systems in places for clear communication, involvement and integration within and among fisheries-related state agencies.</p> <p>C.2 Collaborative management- This sub-component focuses on the extent of cooperative management that exists in practice between fisheries-related state agencies and small-scale fisheries groups such as fisherfolk organisations, as well as fisherfolk</p>

	<p>individuals and the local communities. It also identifies the degree of stakeholder collaboration in management practises (government, private sector and civil society/local communities).</p> <p>C.3 Adaptive management This assesses the ability of the fisheries-related state agencies to budget, manage and implement activities, using internal structures and mechanisms which are flexible and adaptive to internal or external changes, changes in the resources, or changes in the resource users. This looks at the organisations ability to learn actively, develop practices and policies for promoting stewardship; and implement, monitor and evaluate plans, projects, programmes of work for actions or systems enabling stewardship.</p> <p>C.4 Communication This sub-component assesses the extent to which fisheries information providers in StewardFish project countries are using communication tools/channels to communicate with fisherfolk, as well as their capacity to use the tools/channels effectively. It includes the channels of communication for sharing or receiving information from fisherfolk, and transparent and accountable systems. This will also assess the structures and systems in places to for clear communication, involvement and integration within and among fisheries-related state agencies.</p>
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13.2 National validation webinar participants and other in-country key informants

13.2.1 National validation webinar June 3rd, 2020 – List of participants

Name	Organisation	Position/Title	Email Address
Kris Isaacs	Fisheries Division, Ministry Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour	Senior Fisheries Officers	kris.isaacs@yahoo.com
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Name	Organisation	Position/Title	Email Address
Yasa Belmar Jenny (Surname not recorded)	Conservation and Sustainable Development Unit – Ministry of Health, Wellness and the Environment	-	emdsvgl@gmail.com
Olivia Jackson (No first name recorded) Phillips	St. Vincent and the Grenadines National Trust	-	svgntrust@vincysurf.com svgtrust@gmail.com
Sanya Compton	Centre for Resource Management and Environmental Studies of the University of the West Indies (UWI-CERMES)	-	sanyacompton@gmail.com
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Aditi Thanoo	Caribbean Natural Resources Institute (CANARI)	Junior Consultant	aditithanoo@gmail.com
Melanie Andrews	CANARI	Technical Officer	melanie@canari.org
June Masters	Caribbean Regional Fisheries Mechanism (CRFM) Secretariat	Statistics and Information Analyst	june.masters@crfm.net
Maren Headley	CRFM Secretariat	Programme Manager	maren.headley@crfm.int
Terrence Phillips	Food and Agriculture Organisation of the United Nations (FAO)	Regional Project Coordinator – StewardFish Project	Terrence.Phillips@fao.org

13.2.2 List of key informant interviewees

Representatives from the following organisations were interviewed as part of this analysis

- Fisheries Division
- Tobago Caye Marine Park
- Sustainable Grenadines Inc.
- National Fisherfolk Organisation
- National Parks, Rivers and Beaches

13.3 Organisational Capacity Assessment Survey

Respondent information

Country:	Saint Vincent and the Grenadines
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Name of national fisheries authority:	Fisheries Division
Name of lead respondent:	Kris Isaacs
Position of lead respondent:	Senior Fisheries Officer
Email address of lead respondent:	fishdiv@gov.vc
Contact number of lead respondent:	(784) -456-2738

Name and contact information of other persons who contributed to completing this survey

Name	Position in organisation	Email address
Jennifer Cruickshank-Howard	Chief Fisheries Officer	Fishdiv@gov.vc
Kris Isaacs	Senior Fisheries Officer	Fishdiv@gov.vc
Ferique Shortte	Senior Fisheries Officer	Fishdiv@gov.vc
Jeremy Searles	Senior Fisheries Assistant	Fishdiv@gov.vc

Section 1: Vision, Mandate and Culture

This section looks at the organisation's *motivation* to support ecosystem stewardship by fisherfolk and fisherfolk organisations. It is reflected in the organisation's vision, mandate and culture.

1. Does the organisation have a vision statement that is supportive of /promotes ecosystem stewardship by fisherfolk? Briefly explain your answer.

Yes. The Vision of the organization is "A well-managed fisheries and aquaculture sector, fully integrated into the wider economic development, to secure optimum benefits from those resources for the people of SVG for present and future generations."

2. Does the organisation's mandate support ecosystem stewardship by fisherfolk? Briefly explain your answer.

Yes, one of the specific policy goals of the organization is ensuring sustainable use and protection of the natural environment and biodiversity utilizing precautionary and ecosystem-based approaches along with species-specific management strategies and strengthening institutions and enabling environment for integrated and responsible fisheries and aquaculture development and management, pursuant to agreed international standards. This includes developing stakeholders' such as fisherfolks' capacity and skills.

3. Which of the following core values/beliefs reflect the culture of the organisation?
Check/highlight all that apply.
 - **The organisation believes that ecosystem stewardship by fisherfolk is important for sustainable use of fisheries and marine resources.**
 - The organisation believes that ecosystem stewardship by fisherfolk is not important for sustainable use of fisheries and marine resources.

- **The organisation believes that fisherfolk can be effective ecosystem stewards.**
 - The organisation believes that fisherfolk are not effective ecosystem stewards.
 - **The organisation believes that fisherfolk should be included in decisions made about how fisheries and marine resources are managed.**
 - The organisation believes that fisherfolk input into decisions about how fisheries and marine resources are managed is not important.
 - **The organisation values local and/or traditional knowledge held by fisherfolk.**
 - **The organisation believes in the ecosystem approach to fisheries (EAF).**
4. Do you have any additional information to share about your organisation's vision, mandate and culture as it relates to supporting ecosystem stewardship by fisherfolk and their organisations? You can also use this section to clarify any of the responses provided for question S1.3.

Section 2: Practices

This section looks at the how the organisation's core values and beliefs are translated into actions (practices). It focuses in particular on the actions that support ecosystem stewardship by fisherfolk and fisherfolk organisations in the following areas: decision-making; collaboration and partnerships; and information collection and sharing.

Decision-making - Please provide answers to the following questions about your organisation's decision-making practices.

1. Does the organisation **have a clear process** for including the opinions of fisherfolk in decisions made about fisheries and marine resources? Briefly explain your answer.

Yes, through consultations with Fisherfolk the Fisheries Division is able to both explain certain decisions which are being considered and garner feedback on these potential decisions. These consultations are done through regular meetings with the National Fisherfolk Organization, through outreach by the extension unit or other field workers (data collectors) or by holding special workshops where discussions can be held.

2. Does the organisation regularly and systematically include fisherfolk input in decisions about how fisheries and marine resources are managed? Briefly explain your answer.

Decision making is done by the policy makers, specifically members of Cabinet. The Fisheries Division acts as policy advisors in the process. The Fisheries Division regularly includes the input of Fisherfolk in its policy advice to the policy makers on how fisheries and marine resources are managed.

Collaboration and partnerships - Please provide answers to the following questions about your organisation's collaboration and partnership practices

3. Select which of the following statements are true for the organisation. *Check/highlight all that apply.*

- **Fisherfolk generally view the organisation as a partner with whom they can collaborate on fisheries management (*participatory relationship*).**
 - **Fisherfolk generally view the organisation as an enforcer of fisheries management guidelines and regulations with whom they must comply (*top-down relationship*).**
 - **The organisation regularly highlights sustainable use practices undertaken by fisherfolk.**
 - **The organisation regularly highlights unsustainable use practices undertaken by fisherfolk.**
4. Does the organisation regularly partner/collaborate with fisherfolk and their organisations for fisheries management initiatives? If yes, please provide a recent of example.

Yes. The formation of the Fish Aggregating Device (FAD) Fisherfolk cooperative is a recent example of Fisherfolk and the Fisheries Division collaborating in a fisheries management initiative. This example being specific to the management of FADs within the waters of SVG. Input from both sides are taken into account when decisions are to be made.

5. Does the organisation regularly facilitate collaboration/partnerships between fisherfolk and other fisheries and marine stakeholders? If, yes please provide a recent example.

Yes. Every year as part of “Fisherman’s Day month of celebrations” the Fisheries Division, Fisherfolk and other marine stakeholders collaborate to showcase the fishing industry in Saint Vincent and the Grenadines through a month a activities related to the fishing industry.

Information collection and sharing – Please provide answers to the following question about your organisation’s information collection and sharing practices.

6. Select which of the following statements are true for the organisation. *Check/highlight all that apply.*
- **The organisation collects local/traditional knowledge held by fisherfolk about fisheries and marine resources.**
 - The organisation does not collect local/traditional knowledge held by fisherfolk about fisheries and marine resources.
 - **The organisation uses local/traditional knowledge held by fisherfolk to inform management decisions about fisheries and marine resources.**
 - The organisation does not use local/traditional knowledge held by fisherfolk to inform management decisions about fisheries and marine resources.
 - **The organisation records best practices related to sustainable use and management of marine resources and shares this information regularly.**
 - **The organisation provides information on sustainable fishing practices to fisherfolk in a manner that they can understand.**
 - The organisation does not provide information on sustainable fishing practices in a manner they can understand to fisherfolk.
 - **The organisation has a communication strategy to share the information with different stakeholders including fisherfolk.**
 - The organisation does not have a communication strategy to share the information with different stakeholders including fisherfolk.
 - **The organisation provides advice/guidance to fisherfolk for stewardship activities and initiatives.**

- The organisation does not provide advice/guidance to fisherfolk for stewardship activities and initiatives.
7. How does the organisation share information with fisherfolk about sustainable use practices for fisheries and marine resources?

Through face to face consultations, printed material and electronic media.

8. What has the organisation found to be the most effective way to share information with fisherfolk?

Face to face consultations.

9. Do you have any additional information to share about your organisation's decision-making; collaboration and partnerships; and information collection and sharing practices as it relates to supporting ecosystem stewardship by fisherfolk and their organisations? You can also use this section to clarify any of the responses provided for questions S2.3 and S2.6.

Section 3: Knowledge and Skills

This section looks at the organisation's capacity to support ecosystem stewardship by fisherfolk and fisherfolk organisations. It focuses in particular on the knowledge and skills held by technical staff (e.g. managers, researchers, policy development officers, field officers etc.).

1. Do technical staff have knowledge of the Ecosystem Approach to Fisheries (EAF)? Briefly explain your answer.

Yes the technical staff have knowledge of the Ecosystem Approach to Fisheries, as many of the staff have been exposed to the concept through institutional education or through workshops.

2. Do technical staff have specialist knowledge on ecosystems, their functions and ecosystem changes? Briefly explain your answer.

Yes, there are technical staff who are marine biologists and who would have completed studies on ecosystems, their functions and ecosystem changes.

3. Do technical staff understand the socio-economic context of fisheries and marine resource use by fisherfolk and other stakeholders? Briefly explain your answer.

Yes, there are technical staff who would have been exposed to concepts of socio-economic contexts of the fishing industry within the Caribbean region.

4. Do technical staff have the skills to conduct socio-economic assessments? Briefly explain your answer.

Yes, there are technical staff who have the skills to conduct socio-economic assessments. Some staff have been exposed to the concept of Global Socioeconomic Monitoring Initiative for Coastal Management (*SocMon*)

5. Do technical staff have knowledge of aquaculture and other alternative or complementary livelihood options for which fisherfolk may be well suited? Briefly explain your answer.

Yes, there are technical staff who have knowledge of aquaculture or alternative/complementary livelihood options through institutional training or exposed to the concepts in workshops.

6. Do technical staff have knowledge of how fisherfolk organisations function including key challenges that they may face and how they can be supported to resolve them? Briefly explain your answer. Briefly explain your answer.

Yes, there are technical staff have knowledge of how fisherfolk organisations function including key challenges that they may face and how they can be supported to resolve them. The Fisheries Division meets with the National Fisherfolk Organization twice a month to discuss functions and issues which affect Fisherfolk in the industry.

7. Does the organisation have the capacity to provide training for fisherfolk in different technical areas and organisational strengthening (these may include soft skills such as facilitation, development of training material, etc.)? Briefly explain your answer.

Yes, the organization has the capacity to provide training for Fisherfolk in a number of areas and has in the past held workshops on various topics including conservation and resource management, quality control and gear and fishing methods (just to name a few).

8. Do technical staff have the skills to assist fisherfolk with mobilising funding for ecosystem stewardship activities and initiatives? Briefly explain your answer.

Funds for ecosystem stewardship activities are provided through the Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour (the parent Ministry of the Fisheries Division) or through projects. The Technical staff of the Fisheries Division has the skills to assist the Fisherfolk in applying to the institution or taking part in projects.

9. Do technical staff have skills in participatory approaches (e.g. participatory monitoring and evaluation, participatory planning, participatory management etc.)? Briefly explain your answer.

The technical staff has skills in participatory approaches but these would be basic and limited to exposure through workshops.

10. Do technical staff have communication skills needed to effectively communicate with a range of stakeholders including fisherfolk? Briefly explain your answer.

Yes technical staff has communication skills needed to effectively communicate with a range of stakeholders. The Fisheries Division has public education unit which is charged with outreach activities.

11. Does the organisation provide or access training and other kinds of capacity building for staff to regularly improve their technical knowledge and skills? Briefly explain your answer.

Yes, the organization provides access to training and capacity building for staff through workshops, seminars, courses whether nationally, regionally or internationally.

12. Do you have any additional information to share about the knowledge and skills of your organisation's technical staff as it relates to supporting ecosystem stewardship by fisherfolk and their organisations?

Section 4: Resources

This section looks at the organisation's capacity to support ecosystem stewardship by fisherfolk and fisherfolk organisations. It focuses in particular on the finance, equipment, materials, tools and methods that the organisation has access to for supporting fisherfolk with ecosystem stewardship activities and initiatives.

1. Does the organisation provide funding assistance to fisherfolk to support ecosystem stewardship activities or initiatives? Briefly explain your answer.

Funds for ecosystem stewardship activities are provided through the Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour (the parent Ministry of the Fisheries Division) or through projects. The Technical staff of the Fisheries Division has the skills to assist the Fisherfolk in applying to the institution or taking part in projects.

2. Does the organisation provide materials, equipment or technology to fisherfolk to support ecosystem stewardship activities or initiatives? Briefly explain your answer.

Yes the organization provides materials, equipment or technology to fisherfolk to support ecosystem stewardship activities but this is mainly done through projects or bilateral assistance from donor countries/agencies.

3. Does the organisation have access to tools, methods and good practices that can be used to support fisherfolk with ecosystem stewardship activities and initiatives? Briefly explain your answer.

Yes, the organization does have access to tools, methods and good practices which can be used to support Fisherfolk but with the changes that have come globally through the pandemic of Covid-19, there is need for strengthening and refreshing of these tools, methods and good practices to meet the current demands in a time of pandemic.

4. Does the organisation provide access to or assist fisherfolk organisation with accessing networks or resources outside of itself (such as technical experts, funding, projects, etc.)? Briefly explain your answer.

Yes, the organization provides assistance in accessing projects, regional/international fisheries bodies and donor agencies outside of St. Vincent and the Grenadines.

5. Does the organisation have a dedicated website which can be used to share information and resources on ecosystem stewardship practices with fisherfolk? Briefly explain your answer.

No the Organization does not have a dedicated website, but it utilizes social media (Facebook and Instagram) to share information.

6. Do you have any additional information to share about your organisation's resources as it relates to supporting ecosystem stewardship by fisherfolk and their organisations?
