



Capacity Building of Fishers **Initiative for Sustainable** **Harvest, Education and** **Research (CB-FISHER1)**

FUTURE FISHERS PROJECT SUMMARY

PROJECT INFORMATION

1) Executive Summary

Project Title: “Capacity Building of Fishers Initiative for Sustainable Harvest, Education and Research (CB-FISHER1)”

Future Fishers was formed because of the concerns of fishers about the state of the fishing sector. In particular, fishers highlighted the problems of declining fish catch and habitat destruction which has affected the growth of the sector and is a result of decades of unsustainable use of our vital and ecologically sensitive marine and coastal resources. These core problems have been made worse by the weak social and economic conditions which in turn created the right conditions for increased fishing activities and the unsustainable practices that currently exist. If these conditions are allowed to continue in this way, the impact on these rural communities and by extension the country can be significant in terms of the loss of livelihoods, destruction of the coastal and marine ecosystems, and the loss of an important source of protein.

Fishers are the critical marine and coastal resource users; their practices not only influence and shape vital ecosystems but also the fisheries that depend on these ecosystems. This is because fisher attitudes tend to reflect their personal interests and concerns largely because of a lack of unity, systems, regulations and legislation.

As we seek to address this problem, the key question before us is to understand the effects of long-term versus short-term goals and benefits as uncertainty often leads to an emphasis on short-term actions at the expense of long-term solutions which is central to the design of this project.

Goal of the overall Project

The overall long-term goal is to rebuild and sustain marine ecosystems and improve species populations at high levels of economic and biological productivity and biological diversity, so as not to jeopardise goods and services from marine ecosystems, while providing food, revenue, and recreation for the current and future generations.

The purpose of the first phase is to encourage local stakeholder participation and collaboration of sustainable use of coastal and marine resources to create livelihood opportunities and a greater level of commitment to the environment.

Objectives of Phase 1

1. To strengthen the Governance and Management of Future Fishers within year 1
2. To identify and develop for implementation Fisheries harvesting and Post-harvesting business activities by the end of the second year.
3. To increase the Ecosystem Management Awareness among primary stakeholders by the end of the project
4. To strengthen the Fisher’s participation and commitment to the responsible use of natural and physical resources by the end of the project.

The overall long-term goal to this project will focus on the ecosystem-based approach to fishery management to reduce overall fishing mortality. The goal of this project is similar; to rebuild and sustain populations at high levels of economic and biological productivity and biological diversity, so as not to jeopardise a wide range of goods and services from marine ecosystems, while providing food, revenue, and recreation.

Future Fishers believes that “fishers are an integral part of the solution for the declining fishery”. If this statement is true, then as a user of this resource, fishers need to be placed in the best possible position to positively affect marine and coastal resource. This is why the first phase of the project is designed to support Fisher's development and empowerment. The first phase of this project proposed foundational strategies to support fishers in building a level of capacity that will improve the collective thinking and actions. These actions are expected to influence fishers’ attitude to act as true custodians of the coastal and marine environment. This phase seeks to build awareness among fishers of the coastal and marine ecosystem. This will be done through a series of awareness sessions, consultation and participation in conversations called “depot talks”. All these conversations are expected to create a bigger vision for the areas and identify the new role fishers’ can play in realising such a purpose.

Concurrent with these talks will be the development of a community vision for each Fishing Association. Building the capacity of these Fishing Associations is important for sustaining the community vision and by extension, the sustainability of livelihood opportunities. The project also deals with gathering vital ecosystem information that will assist with the development of phase 2 in respect to climate change, ecosystem valuation, the economic feasibility of fishing and the development of business feasibility and opportunities in the area and the role the fishers can play in developing and sustaining these businesses. The second phase will take the focus nationally as a strategy for scaling up the activities and potential results. This will include a greater emphasis on climate-proofing actions, business development, and endangered species conservation.

Results of the First Phase

The first phase of the project will yield the following results:

1. The Governance and Management of Future Fishers have been strengthened through the use of improved policy, direction, management systems, operating guidelines.
 - a. The project will assist Future Fishers in building the following core capabilities
 - i. The ability to mobilise and lead fishers in collaboration with other stakeholders
 - ii. The ability to plan and develop projects to improve the coastal and marine ecosystem
 - iii. The ability to conduct training initiatives
2. Ecosystem and economic pathways planning have been identified for implementation. This includes climate change impact assessment, habitat identification and economic valuation of the east coast fishing industry. Approximately 20 jobs will be created.
3. Ecosystem Management Awareness among primary stakeholders (fishers) has been increased
 - a. Greater awareness among fishers in the code of conduct for fishers and the safe handling of the fishery for consumption.
4. Fisher’s participation and commitment to the responsible use of natural and physical resources have been strengthened.
 - a. Organised Fishing Associations
 - b. Stronger Leadership
 - c. Greater communication and stronger relationships

2) Project Sites

The area proposed for this project is northeast Trinidad. This area contains several fishing villages such as Matelot, Grand Riviere, Sans Souci, Toco, Cumana, Balandra and Salybia, hereafter referred to as the Matura to Matelot region. Collectively, these fishing villages house over 150 fishing pirogue (boats).

The level of physical pollution on the beaches in the area of the facilities or where the fishers currently occupy is sometimes pervasive. Broken nets, floats, oil bottles other containers are lying all around and sometimes can even be washed away by tidal movement.

Inland is major conservation area as part of the Forest and protected areas in Trinidad and Tobago. The Matura National Park is a protected tropical forest area of approximately 9000 ha. Also, part of the Nariva Swamp and Coastal Zone Pilot Protected Area within the boundaries of Sangre Grande Region.

3) Problem

The M2M region has an active coastal fishery. It contains various prime fishing areas which are home to species such as kingfish, redfish, carrite, cavalli, snapper, mojarras, and grunts among a few.

The growing awareness of the linkages between sustainable fishery development and sustainable environment in the region has been reflected by the emergence of various environmental measures such as the introduction of environmental impact assessment (EIA), development of criteria for water quality standards, fish safety standards (HACCP), and the code of conduct for responsible fishers etc., to mitigate the problems. However, lack of effective implementation, monitoring and enforcement of laws, regulations and standards remain a common problem.

The key impacts of fishing and other environmental effects in the M2M region are:

- 1. Declining Fish Stock;**
- 2. Destruction of important habitats;**
- 3. Ocean pollution;**

Several specific activities were identified as impacting the marine and coastal environment. These activities include mining, agriculture, shipping, tourism, industrial development, urban development, waste dumping, and seawall construction. These activities result in several forms of habitat degradation, including damage to coral reefs and seagrass beds through sedimentation, pollution and waste disposal, and degradation of water quality.

The main underlining causes of the above problems are as follows:

- The fisheries sector is not properly valued both in terms of the economic and the ecosystem goods and services - its actual social and economic contribution to food and nutrition security, livelihoods, the well-being of coastal communities, national GDP and ecological contribution to marine biodiversity are not known;
- Weak governance: unable to: (a) implement international best practices in fisheries management; (b) meet international (legally binding) obligations as a coastal, flag, port and market state; (c) participate fully in regional fisheries management and conservation initiatives; (d) unregulated mesh size of nets, lack of enforcement,

research, management and monitoring, and the increase in fishing activities (more vessels).

- Lack of Awareness: (Fishers) the lack of unity, organisations, commitment to participation has weakened the ability of the fishers to advocate and solve their problems. (State) The relatively low national importance assigned to the fisheries sector compared to other sectors - reflected in the resources provided for fisheries management; (Public) the lack of public understanding of the value and importance of the small-scale fisheries sector and the perceptions of its effects on the fishery.
- Limited Human and Financial Resources - Significant reduction in the HR capacity of the Fisheries Division to conduct core activities such as fisheries monitoring, control, surveillance and enforcement. Data collection to inform fisheries management decision-making and funding for infrastructure development.
- The lack of adequate infrastructure and basic needs of the site has affected fishers ability to provide services such as net mending and boat repairs hampering the economic survival of the industry. The weak facility infrastructure has clearly hindered the fishers from fulfilling the [HACCP](#) guidelines which have impacted the ability of the industry to sell food internationally.
- Cost of and availability of fishing equipment for the fishers in the M2M region.

4) Project Results for the First Phase of the project

Impact

Enhanced stakeholder participation and collaboration of sustainable use of coastal and marine resources so as to create livelihood opportunities and a greater level of commitment to the environment.

Outcomes

i) Future Fishers Institutional Growth

- The Governance and Management of Future Fishers have been strengthened through the use of improved policy, direction, management systems, operating guidelines.
- Ecosystem and economic pathways planning have been identified for implementation.
- Ecosystem Management Awareness among primary stakeholders has been increased
- Fisher's participation and commitment to the responsible use of natural and physical resources have been strengthened.

ii) Environmental Benefits:

This first phase of the project will bring forward relevant environmental information that will assist in the planning of the second phase:

- A map delineating the vulnerable and or important habitats and the heavy fishing areas.
- Determine the value of ecosystem services and the value of the industry in the target area.
- All fishing depots in the area will be cleaned of all debris, including nets, metals and plastics.
- An action plan to reduce bycatch

iii) Social/Community Benefits:

The project will make social changes in the following areas:

- The capacity for improvement in the management and implementation of project activities will be enhanced. This increased capacity will improve the opportunities for the development of new conservation projects.
- Knowledge and feasibility of potential opportunities for business development and job creations, including understanding smoke fish demand.
- There will be approximately 12 job positions created, and we expect that this will double in the second phase.
- Increased knowledge of the code of conduct for fishers and the safe handling of the fishery for consumption.

- Improved relationships among fishers
- Increased capacity of the fishers and the Fishing Association to manage their association, negotiate and collaborate on issues relevant to the industry.
- The leadership among fishers has been strengthened.
- A greater level of national awareness on the issues affecting the industry.

5) Project Sustainability

As indicated above, the problem of declining fish stock and habitat degradation has been created over decades and thus requires a long-term solution. As such, both phases of this project need to be considered in determining the sustainability of this initiative as it is designed. But for Future Fishers, sustainability is considered as a green enterprise approach to social, economic, environment with governance as a cross-cutting theme.

1. Social- The key to social sustainability lies with the empowerment of the fisher and other stakeholders
 - a. A system for effective communication and collaboration will be created in building leaders in the small-scale fishery sector and a system for collaboration.
 - b. Livelihoods created: The project is designed to enhance employment opportunities in areas of small business development in the depots managed by the fishing associations. However, as the first step in this direction, it is important to emphasise sustainable livelihoods, which basically attempts to bring the fishing community to a place where it both produces and consumes for itself without the need for external market influences. Tangible aspects of sustainable livelihoods for this project involve self-management of boats, the ice necessary for storing fish as well as onshore storage facilities. The project will also attempt to create opportunities for livelihoods in the area of data collection by the fishermen who, in the process of managing and protecting coastal resources and simultaneously collect data on coastal resources. Consequently, community stewardship of natural resources is recognised as the way of the future.¹
 - c. Training of Fishers: The project makes provisions for an emphasis in training. Developing fishing associations governance and management and reporting capabilities. Training will also be facilitated in building leadership, personal financial management.
2. Economic- The key to economic sustainability is to understand the drivers both locally, nationally and internationally.
 - a. However, the main economic thrust will be explored and implemented in phase 2 of this project. It is expected that with the fishers support we can harness the economic benefits from bycatch and discards and the downstream fish processing system as well as any other opportunities discovered in the development of a business plan in phase 1 of this project. These initiatives will be proposed, assessed, selected and chosen by the coastal fishing communities themselves. This approach has been utilised already in Trinidad and Tobago, and several cases of sustainable community-based business initiatives already exist.² Nevertheless, Future Fishers will first expose the fishermen to both traditional and non-traditional activities in the fishing industry. Traditional activities centre on fish processing, while non-traditional commercial activities encompass a wide range of activities such as fish food, fertiliser, fish

¹ See the following: National Park Service, USA: <https://www.nps.gov/orgs/1103/csp.htm>, general approach in Cuba <http://www.eumed.net/rev/delos/21/conservacion.html> and the Managers' Guide to Stewardship: https://www.coris.noaa.gov/activities/stewardship/resources/Managers_Guide_Reef_Stewardship_ebook_smallest.pdf.

² These include the San Antonio Green Market in Santa Cruz, several initiatives at the Lopinot Historical Centre, the Brasso Seco Tourism Action Committee and the State-led NAMDEVCO Farmers' Market, to name a few.

oils, and food for domestic animals, jewellery and fish skin leather.³ Non-tangible products such as culinary fish festivals may also be considered. These commercial activities will be supported by the appropriate business structures that are in harmony with community ownership and participation. Depending upon the area selected for development, it may be necessary to procure the services of technical assistance from overseas to guide with the setup.

3. Environment: The key to environmental sustainability lies with an equivalent and parallel social and economic and thrust.
 - a. Since Future Fishers is taking an ecosystem approach, in phase 1, the project will research and document vulnerable or sensitive habitat critical to the marine biodiversity and stock. In this phase, the impact of climate change and the associated environmental improvements and recommendations will also be documented. Action will then be taken in the second phase of securing sustainability in this area.

Governance and Operations: This project will improve the governance and management systems both for Future Fishers as an organisation and for collaborating with the fishing community. This system will improve our ability to work with this community in dissecting the most cost-effective changes that can be made within the time frame allocated. It will strengthen our ability to develop our capacity for improving health and safety within the project and the organisation as a whole.

³ Each of these products have stable international markets; however, new activities in the fishing industry have not been considered in Trinidad and Tobago. Fish leather is a booming industry in Peru; fish entrails are converted into fertiliser on a small scale around the world; fish jewellery is has several regional proponents, most notably, several cooperatives in Belize; the omega-3 fatty acids in fish makes fish oil a billion-dollar global industry. Tourism-based fish festivals are common in the Caribbean. In Trinidad and Tobago, there are fish festivals in Toco, Erin and most fishing communities in Tobago. However, these lack marketing strength and coordination, especially for domestic tourism.