

Regulated Recreational Fishing as an Alternative Livelihood in the Seaflower MPA

La Pesca Recreativa Regulada una Alternativa de Vida en el AMP Seaflower

Pêche Récréative Réglementée comme un Moyen de Subsistance Alternatif dans les ZPM Seaflower

MARTHA PRADA*¹, ERICK CASTRO², and CARLOS BALLESTEROS²

¹*Blue Dream Ltd., CORALINA, Avenida 20 de Julio 5-92, San Andres Island, Colombia. *pradamc@gmail.com.*

²*CORALINA, Km 26 via San Luis, San Andres Island, Colombia.*

ABSTRACT

The establishment of MPAs has proved to be a successful strategy in implementing conservation and sustainable use policies. However, identifying economically viable and culturally acceptable alternative livelihoods for affected users is a challenge. In the case of the Seaflower MPA, CORALINA explored several options to be offered to artisanal fishermen in compensation for their support to the implementation of no-take zones and other fisheries management restrictions. One of the most promising activities is the development of recreational fishing, a new practice in the San Andres archipelago. Because the archipelago is comprised by small islands, and have an economy based on the tourism industry, the recreational fishing offers both keep fishers at sea while engage them with tourists. Considering that recreational fishers requires special abilities and techniques, the need for specialized training is the first step towards proper development of the activity. The training needs to address topics such as fishing gear, de-hooking, barotrauma, safety, and how to deal with tourists, all new for topics for traditional anglers. Therefore, CORALINA and Blue Dream Ltd supported by UNEP-CEP-SPAW-RAC conducted in 2014 a theoretical and practical training covering these issues, with great success. The implementation of this alternative focused an enthusiastic subset of fishers, selected by them, whose will receive further training and will operate a new and equipped boat for which CORALINA secured additional funds from the national government. MPA users perceive the development of the regulated recreational fishery as an interesting alternative to open opportunities to work collaboratively at local, national, and international levels.

KEY WORDS: Recreational fishing, alternative livelihood, MPA management

BACKGROUND

With the establishment of the multiple-use Seaflower MPA back in 2005 in the San Andres Archipelago, southwestern Caribbean, around 30% of their productive oceanic waters were set up for conservation purposes. Within the No-entry and No-take zones extractive activities, such as commercial fishing is currently illegal, affecting fishermen income, in particular the artisanal ones. Artisanal fishing in this archipelago is conducted mostly by *raizales*, a minority group that has constitutional recognition and special legal framework.

The conservation actions are needed because the majority of the reef fish stocks are currently decimated, particularly those closer to the homeports, where fishing associated costs are less compared to the more productive and remote reef atolls. Remote atolls require larger boats and investments, difficult for artisanal fishers.

CORALINA, as the management authority in the Seaflower MPA, is continuously searching for alternative livelihoods for those displaced MPA users in order to keep their family income, while at the same time allowing for the conservation actions. To achieve this goal, CORALINA has been working in collaboration with national, international, public, and private stakeholders, and indeed, it has been able to secure funds to develop several productive pilot projects.

An example is the development of the GEF-Full size project entitled *Protection of Biodiversity in the Southwestern Caribbean Sea* (2012-2014), integrated with four components:

- i) Regulations,
- ii) Financial sustainability,
- iii) Alternative livelihoods, and
- iv) Monitoring and research.

Unfortunately, the third component was later excluded from this project, and CORALINA was then forced to find financial support from other sources. As a consequence, and working in partnership with the local government, the project entitled *Strengthen Seaflower MPA* (2013-2015) was approved from the Colombian Oil Revenue Fund.

Awarded with one million USD, CORALINA is currently working in the implementation of nine productive pilot projects, promoting social well and economic development in the Colombia insular Caribbean. One of them, and perhaps one of the most promising, is dedicated to the recreational fishing.

Catch and Release is a new activity in the islands, and its development requires special training to improve skills, and learn more about safety at sea and services to potential customers. The capacity building around the development of a regulated of the recreational fishing business is considered of great potential because it redirects fishing away from reefs, takes advantage of the great experiences of the local fishermen, keeps fishers at sea, and expands their participation in the most important aspect of the islands economy, the tourism industry.

Capacity building was enhanced also with the implementation of the small grant program provided by UNEP-CEP, CAR-SPAW-RAC, and Blue Dream Ltd entitled *Strengthen Capacity Building of Artisanal Fishermen by Exploring Environmentally Friendly Alternative Livelihoods in Seaflower MPA, Colombia*.

The implementation of this pilot project on recreational fishing activities are aimed to:

- i) Promote the establishment of a regulated business in recreational fishing,
- ii) Select a small group of fishers to work on recreational fishing in agreement with fishers associations,
- iii) Training the group in several aspects on sustainable recreational fishing, in two islands,
- iv) Purchase two charter boats with some fishing gears for recreational fishing, and
- v) Integration of fishermen into the tourism industry.

This paper presents results and recommendations from the various activities conducted by CORALINA and its partners about the process of making the regulated recreational fishing a well-established and sound business for MPA users, particularly on its first steps on capacity building.

METHODS

To strength the capacity building in the process of developing the regulated recreational fishing business, CORALINA has been to conduct the following activities:

- i) Between March 19 - 25, 2014, four fishermen, two from San Andres and two from Providence and Santa Catalina, accompanied the marine biologist and fishing captain Rodrigo Lopez to a practical training in Panama.
- ii) Between April 21 - 25, 2014, 20 fishermen were trained in basic concepts of the recreational fishing activity, catch and release issues, and tools and skills needed to improve fish survival. In addition, various aspects regarding the establishment of a successful chartering business. Training was provided by Dr. Edward Chesney, from Louisiana Universities Marine Consortium.
- iii) Administrative process to the purchase of two charter boats, one for each island, finally awarded in August, 2014.
- iv) Promotion of the recreational fishing in an international forum on sustainable tourism.

- v) Search for criteria needed to regulate the implementation of the recreational fishing operations.

RESULTS

With the visit to Panama, local fishers were able to participate in a learning experience on the business of recreational fisheries, at different levels of its development and in different oceans, especially on the Pacific side (Figure 1). The exchange of experiences allowed for developing new contacts and friends, showing the local fishers the complexity in this activity. Fishers also learn about various services and products clients receive, and types of equipment and accessories needed for a sport fishing business and explored future business opportunities.

Training conducted in San Andres and Providence Islands analyzed local challenges and potential benefits of the recreational fishing operations (Figure 2). In San Andres Island, the 14 participants were internally selected by the second level fishermen association ASOPACFA and thus have representation from six of the eight local fishers associations. On Providence Island, only four fishermen participated. Detailed achievements of this project can be found in the project terminal report (Blue Dream et al. 2014).

The theoretical and practical training covered the following topics:

- i) Reef and pelagic species,
- ii) Typical live baits,
- iii) Responsible catch and release fishing techniques with offshore reef and pelagic species,
- iv) General recommendations of recreational fishing,
- v) Hook size and types,
- vi) Hook removal tools, proper de-hooking devices,
- vii) Net fishing, barotrauma, alternatives to venting, fish-deep release,
- viii) Tackle selection,
- ix) Braided fishing line, reels,
- x) Components of a charter business, and
- xi) Charter and safety.

From this activity, it was clear that sport and recreational fishing is a new activity in the islands, and people are not prepared to develop this business without further training. Dr. Chesney provided advice to CORALINA technical recommendations about the charter boats and fishing gears.



Figure 1. Photographs showing activities conducted during the experiences exchange in Panama.

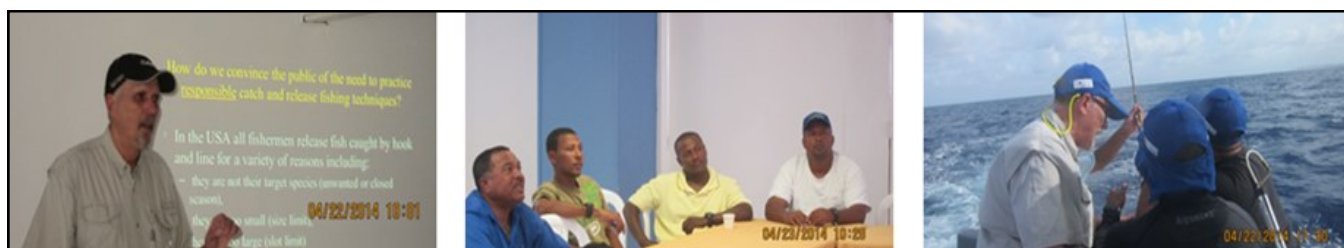


Figure 2. Photographs during the training in San Andres Islands under the coordination of Dr. Edward Chesney.

Complementarily, CORALINA signed the contract 101/2014 with the purpose to purchase two charter boats, which are delivered in December 2014 Figure 3. Currently, the project team is developing the legal agreement that will allow deliver these boats to the artisanal fishermen. This agreement respond to a long negotiation between the legal government departments and the artisanal anglers.

The inclusion of the recreational fishing in the tourism activities were explored during the development of the I Forum on Sustainable Tourism in Small Islands, an international activity conducted last October/2014 as part of the alternative livelihood project under CORALINA coordination, this time working in association with the Ministry of Tourism, Industry and Commerce.

DISCUSSION

The successful development of the regulated recreational fishing business is beginning to be considered a viable option for anglers in the islands, however, there is a long way to go before it is established and generates relevant income for MPA users.

There is need to work with artisanal fishers in strategies oriented to improve their organization and establish good enterprises. They need to reduce internal conflicts, and develop better skills that would make them good captain charters.

Local fishers encounter difficulties because the local market does not have available the special gear and accessories needed to meet these business demands. Considering the prevalent exposed oceanographic condi-

tions around the islands, attention to safety also can be concern.

The lack of specific regulations to recreational fishers is a topic CORALINA and its resource management partners will need to develop. First activities on this subject are planning in collaboration with the Billfish Foundation, and currently we are planning to develop a Memorandum of Understanding.

ACKNOWLEDGMENTS

Funding for this work was possible thanks to the support of UNEP-CEP, CAR-SPAW –RAC through the small grant program project *Strengthen Capacity Building of Artisanal Fishermen by Exploring Environmentally Friendly Alternative Livelihoods in Seaflower MPA, Colombia*.

Additional funding was received from the Sistema general de Regalias through the implementation of the project entitled *Fortalecimiento del AMP Seaflower, Archipiélago de San Andres, Providencia y Santa Catalina*.

Support was also received from the project GEFSEC PROJECT ID: 3532, entitled *Protecting Biodiversity in the Southwestern Caribbean Sea*.

We like to express our sincere acknowledgment to Rodrigo Lopez, Edward Chesney, and the group of artisanal fishers that participated in the project.

REFERENCE

Blue Dream Ltd, CORALINA, UNEP-CEP, and CAR SPAW-RAC. [2014]. *Strengthen Capacity Building of Artisanal Fishermen by Exploring Environmentally Friendly Alternative Livelihoods in Seaflower MPA, Colombia*. Terminal report. [Unpublished document]. San Andres Island, Colombia. 19 pp.



Figure 3. Photographs of the type of boat purchased by CORALINA to promote the recreational fishing in the islands. The Panamanian captain during the participation in international tourism forum, and the selected group of fishers after a practical lesson.