Co-Management for FAD Fishery to Resolve User Conflict: Dominica Experience

Una Resolución de Conflictos Usuarios de FAD: Experiencia Dominicana

Co-Gestion de la Pêche par DCP pour Résoudre les Conflits entre Utilisateurs: Expérience de la Dominique

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ABSTRACT

In the past decade Fish Aggregating Device (FAD) fishing have grown from 5% in 2000 to 74% in 2010 of the total fish production on Dominica. Over time the governance of FAD fishing took on an ad hoc uncoordinated and unregulated approach which warranted immediate attention to address the growing incidence of conflict.

The growing conflicts surrounding the use of FADs lead to intervention by fishers' organizations and government to find solution to these problems. Twelve national consultations were held island wide between 2009 and 2010 to solicit feedback from fishers on the problem and to receive recommendations for possible solution. Prior to these consultations, two national workshops on “FADs; Impact, Evaluation, Solution and Policy” were conducted by the Dominica Fisheries Division in 2003 and 2007. The workshop and consultations also sort solution and general agreement which lead to a co-management strategy with the National Association of Fisher folk Cooperatives. As a result FAD management regulations were drafted by a legal consultant who attended all the national consultations held with fishers. Some of these management instruments are currently being tested under the Dominica FAD Pilot Project which is a component of a Regional Fisheries Master plan Project for CARICOM funded by JICA.

KEY WORDS: Co-Management, NAFCOOP, fish aggregating device

INTRODUCTION

Fish Aggregating Devices were first introduced to Dominica in 1987 by F.A.O Master Fisherman Richard Mounsey. At this time the Dominican fishermen did not understand the concept. In 1990, another F.A.O Expert attached to the Fisheries Division re-introduced the idea but was confronted with the same response as his predecessor which resulted in vandalism of FAD materials for other fishing purposes. Ten years later in 2000, Dominican fishermen began realizing the advantages of FAD technology due to the persistence of the Fisheries Division in an effort to increase fish landings of which 5% of total production came from FAD to 74% in 2010. Consequently, Dominican fishermen began constructing and deploying deepwater FADS for the purpose of attracting migratory pelagic species such as yellow fin tuna, Atlantic blue marlin, and dolphin fish (Figure 1). However, large numbers of FADs were being deployed privately by fishers in an uncoordinated and unregulated manner which posed a governance problem for regulators including the growing incidence of conflicts among fishers.

PURPOSE

To solve those problems and issues of fisheries resources management in Dominica, it is necessary to establish and introduce a proper management system, in which local fishers collaborate with fisheries authorities to utilize fisheries resources sustainably for their livelihoods. To conduct fisheries management activities at local level properly, fisher-folk cooperatives, or alternative Fisher-folk organizations must build the capacity to be functional or organized for fisheries resource management.

The establishment and extension of co-management systems of fisheries resources, which is currently implemented, will promote the stability of fish catch of local fishers in coastal and offshore grounds around the island of Dominica. Moreover, the achievement of this experiment is expected to maintain the revenues of local fishing operations for securing stable livelihoods of local fishers.

METHOD

Although the national fisheries resources are owned by the State and there is a government agency responsible for its protection and management, involvement of the people who use the resource daily is a key element to make proper management decision, therefore the concept of co-management; a participatory community-based management. There is an arrangement for co-management of the pelagic fishery, utilizing FADs, by the Department of Fisheries and the National Fisherman Organization (NFO) with affiliated Fisherman Cooperatives. There is a growing realization of need for a stronger community role in resource management where control is given to the community and resource users. The bottom up approach by a participatory community-based management is expected to work, instead of top down approach by administrative management.
The JICA/CRFM Dominica FAD Pilot Project provided support to the fisheries authorities (Fisheries Division) to establish the co-management model in collaboration with fisher folk organizations. The project provided support is areas such as management of FAD fishery, maintenance, and modification of FAD designs to build capacity of the National Association of Fishers Cooperatives (NAFCOOP) to function as a Resource Management Organization.

### Necessary Frameworks Which Were Developed for Effective FAD Fishery Management and Co-management

**Regulation (based on consensus of stakeholders)** — Fisheries Division and NAFCOOP conducted twelve national consultations island wide during 2009 and 2010 to solicit feedback from fishers on the problem and receive recommendation on possible solutions. Prior to these consultations, two national workshops on “FADs; Impact, Evaluation, Solution and Policy” were conducted by the Dominica Fisheries Division in 2003 and 2007 to develop FAD Fishery Management regulations and clearly recognizes NAFCOOP as a management authority instead of Government. All of the information gathered during these processes feed into the development of the FAD Fishery Management Regulation and recognizes NAFCOOP a Management authority instead of Government.

**Building the Capacity of NAFCOOP** — During the Implementation of the CRFM/JICA Dominica FAD Pilot Project emphasis was placed on building NAFCOOP’s capacity to be an effective partner in the co-management arrangement for FAD Fishery Management. Consultants together with fishers experimented on modification of existing FADs to make them more economical and cost effective thus increasing the viability of FADs placed under the new management system. During three National FAD workshops, a maintenance and monitoring plan was set up, including cost analysis for construction, deployment, and maintenance, which were calculated in order to determine a license and user fee structure to be paid by fishers.

Government of Dominica provided the initial capital for the purchase of materials for the construction of sixty FADs which was handed over to NAFCOOP. Six modified FADs were constructed and deployed to test the management framework outside of gazette regulations and was dependent upon voluntary compliance by fishers.

### DISCUSSION

October, 2011 marks one year since the first FADs were deployed to test the co-management framework between Fisheries Division and NAFCOOP. To date, eleven modified FADs have been deployed, including two which has been reported lost under the management authority of NAFCOOP. Taking into consideration that co-management of fishery resources is a relatively new approach for Dominica however some strengths and constraints were recognized in the first year.

#### Strengths

i) Significant reduction is user conflict reports, 
ii) Increase fish production, 
iii) Greater participation by fishers in monitoring & maintenance, 
iv) Lower submersion rate, and 
v) Voluntary purchase of license (slow but steady).

#### Constraints

i) Regulations not yet gazette, 
ii) Large number of fishers not yet purchase FAD license, 
iii) Reporting of catch and effort data around FADs, 
iv) Sole reliance on voluntary compliance, 
v) No user fees collected, 
vi) License fee alone not sufficient, and 
vii) Limited enforcement option.