

A Regional Approach to Facilitate Co-management of FAD Fisheries in the Caribbean

Un Enfoque Regional para Facilitar el Co-Manejo de Recursos Pesqueros con Dispositivos de Agregación de Peces en el Caribe

Une Approche Régionale pour Faciliter la Co-Gestion des Pêcheries sous FAD dans les Caraïbes

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EXTENDED ABSTRACT

Introduction

In the Caribbean, active government management of fisheries is relatively recent and generally based on the premise of strong government control of rules and procedures, with limited awareness of the current or potential role of fishers in management. At the same time, the capacity of Caribbean governments to make and enforce rules that effectively improve fisheries management is often weak.

Fisheries co-management, in principle, has the potential to improve governance outcomes by strengthening the consideration given to fishers' knowledge and their capacity for individual and collective action in the management system.

Various co-management initiatives have been pursued in the Caribbean since the 1990's (Brown and Pomeroy 1999). Based on these experiences, three key constraints to facilitating co-managed fisheries have been identified: Flexibility, trust and capacity (Pomeroy et al. 2004):

- i) Lack of government flexibility and awareness of the potential role of fishers in decision-making and sustaining fishery resources.
- ii) Lack of trust between government and fishers and among fishers themselves for operationalizing shared-decision-making and adhering to established rules and norms.
- iii) Lack of institutional capacity, motivation and leadership for effective long-term commitment toward and ability to support co-management processes.

A meeting of local and regional partners, convened at the initiation of a recent project called Caribbean Fisheries Co-management (CARIFICO), supported by the Japan International Cooperation Agency (JICA) and the Caribbean Regional Fisheries Mechanism (CRFM), identified four broad opportunities to facilitate co-managed fisheries: Participation, cooperation, education and technology (JICA 2012).

- i) Increase the capabilities and role of fishers to participate meaningfully and effectively in the governance of fishery resources.
- ii) Build collaboration, social cohesion and trust among fishers and government stakeholders.
- iii) Strengthen the capability of governments and fishers to implement and lead sustained co-management processes.
- iv) Introduce fish aggregating device (FAD) technologies to improve the profitability and predictability of fishing and the livelihoods of fishers.

Recognizing these constraints and opportunities, this paper summarizes key strategies and guidance learned from the CARIFICO project, which took a flexible and holistic approach in adapting a set of mutually reinforcing activities to local circumstances to facilitate fisheries co-management at national, sub-regional and regional levels (Tamura et al. 2018).

Carifico Project

The CARIFICO project represented a five-year development program, piloted on six eastern Caribbean countries (Saint Kitts and Nevis, Antigua and Barbuda, Dominica, Saint Lucia, Saint Vincent and the Grenadines, and Grenada) during 2013-2018, to motivate shared-governance in the fisheries sector. The program built on decades of fisheries infrastructure development programs sponsored by JICA in the eastern Caribbean region, including the construction and maintenance of landing sites, fisheries complexes and fish processing centers.

Though CARIFICO focused on local (national) implementation of co-managed FAD fisheries, mechanisms were included in planning, implementation and evaluative components to build synergies and identify good practices for co-management more broadly at sub-regional and regional scales (Figure 1)

CARIFICO's spatially tiered implementation process was guided by a framework consisting of planning, implementation and evaluative components, yielding a set of good practices oriented to three geographic scales—National, sub-regional and regional:

- i) National: Adapt a set of mutually reinforcing activities to local circumstances and needs.
- ii) Sub-Regional: Transfer knowledge gained among participating countries through trainings and fisher exchanges.
- iii) Regional: Share best management practices and lessons learned through seminars, publications and scientific symposia.

National Scale — Eight mutually reinforcing activities were selected to facilitate the CARIFICO project: Consulting with fishers, establishing fisher organizations, conducting trainings, codifying user rules, assessing catch/effort data, establishing financial mechanisms to support co-management programs, marketing catch, and maintaining FAD programs. The activities were designed to develop and expand FAD fisheries while facilitating the adoption of co-management practices. Many of the activities implemented through CARIFICO relate to factors previously identified as constraining co-management (Pomeroy et al. 2001; Pomeroy et al. 2004, Evans et al. 2011).

Two actions were implemented to evaluate the success of CARIFICO activities in facilitating co-managed FAD fisheries: A socio-economic analysis measured improvements to five fisher livelihood assets (natural, physical, social, human and financial) by comparing fisher perceptions of those assets prior to and during implementation of the project (Montes et al. 2017). In addition, a regional workshop was convened to evaluate four aspects of project activity implementation (stakeholder roles, stakeholder responsibilities, challenges and perceived progress).

Sub-Regional Scale — Three types of interventions, including meetings, workshops and trainings, helped transfer knowledge gained through implementation of locally oriented activities among government and fisher stakeholders in the six countries participating in the CARIFICO project. Meetings provided venues for stimulating broader stakeholder input in the co-management process. They also offered opportunities for sharing experiences and information regarding the implementation of the eight CARIFICO activities. Workshops were convened to develop skills (engine repair, seamanship, icebox construction) and content for technical manuals (FAD fishery model logbook for evaluating catch and effort, FAD construction protocols) and FAD fishing guidance documents for broader regional distribution. Last, trainings helped extend peer-to-peer learning and knowledge sharing that built technical capacity for seamanship, equipment maintenance and the transfer FAD fishing skills.

Regional Scale — Three activities supported the dissemination of knowledge learned at local and sub-regional scales more broadly throughout the region: Seminars, publications, and scientific symposia. Seminars provided venues for evaluating performance in implementing CARIFICO activities, and for formalizing FAD best management practices drawing on input from fishers, local government and regional fisheries management authorities. These venues also offered opportunities to circulate publications, which documented key aspects of FAD use and management more broadly. Last, support for fisher and government stakeholder participation at regional scientific symposia fostered the sharing and vetting of implementation tactics, outcomes and guidance with scientific and fisheries management communities.

Guidance

Based on the CARIFICO experience, six factors should be considered when introducing co-management as a fisheries resource management option: Partnerships, comprehensiveness, flexibility, scale of implementation, local investment, and a realistic project time-frame.

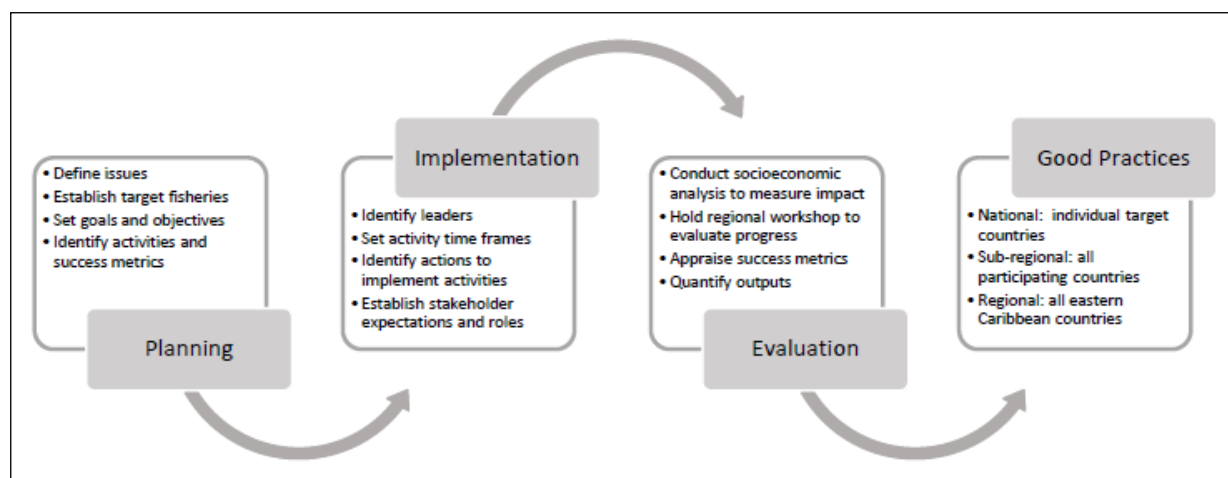


Figure 1. CARIFICO Project Framework

- i) Co-management strategies were planned, implemented and evaluated in partnership with local and regional stakeholders. This maximized the potential that efforts are relevant to local circumstances and consistent with regional fisheries management goals.
- ii) Emphasis on a set of comprehensive and mutually reinforcing activities and associated metrics allowed progress toward achieving objectives to be monitored and evaluated. In addition, the co-management plan provided capacity development for both government and fisher stakeholders.
- iii) Implementation of activities to facilitate co-management were flexibly adapted to local circumstances in a manner that valued local knowledge and the provision of peer-to-peer learning opportunities.
- iv) Mechanisms developed to facilitate partnerships and knowledge sharing among government and fisher stakeholders helped co-management initiatives to be more broadly disseminated, accepted and impactful at sub-regional and regional scales.
- v) Direct investment in local fisheries divisions (funding, expert assistance, in-house technical support) facilitated the governments' role in implementing activities intended to promote and sustain fisheries co-management arrangements.
- vi) Setting realistic longer-term commitments (capacity support and funding) and time-frames for design, implementation and evaluative stages helps to ensure that outcomes and benefits can be effectively measured and that co-management processes evolve to a point where they can be self-sustaining.

KEYWORDS: Co-Management, Fish Aggregation Device, governance

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