

Conditions for Successful Fisheries Co-management in the Wider Caribbean

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ABSTRACT

This paper presents the results of research on the conditions which help to account for the success of fisheries co-management as identified from a number of different sources in the Wider Caribbean. These conditions are discussed and compared. They embrace the wide range of factors that can affect the implementation and performance of adaptive co-management and related activities ranging from the characteristics of resources and fisheries, to cultural and institutional dimensions. The paper highlights the linkages between research and improving policy for fisheries management. It concludes with a discussion of policy implications for adaptive co-management. Adaptation is critical if co-management arrangements are to remain successful amidst uncertainty and changes in fisheries or fisheries management. Institutions for learning are particularly important.

KEY WORDS: Caribbean, fisheries, adaptive co-management

Condiciones para el Éxito del Co-Manejo Adaptativo de las Pesquerías en el Caribe

Este artículo expone los resultados de una investigación sobre las condiciones que ayudan a cuantificar el éxito del co-manejo de las pesquerías que ya han sido identificadas por un gran número de diferentes fuentes de información en el Caribe. Estas condiciones son discutidas y comparadas. Las condiciones abarcan un amplio rango de factores que pueden afectar la implementación y la ejecución del co-manejo adaptativo y actividades relacionadas, desde las características de los recursos y las pesquerías, hasta dimensiones culturales e institucionales. El artículo hace énfasis en los enlaces entre el estudio y el mejoramiento de las leyes para el co-manejo adaptativo. Concluye con una discusión sobre las implicaciones de las leyes para el co-manejo adaptativo. La adaptación es una parte muy importante en los acuerdos del co-manejo, si es que se desea que estos sean exitosos entre incertidumbre y cambios en las pesquerías y el manejo de las mismas. Instituciones de aprendizajes son particularmente importantes.

PALABRAS CLAVES: Caribe, Pesquerías, co-manejo adaptativo

INTRODUCTION

Over the last two decades, research and case studies undertaken at different locations around the world has documented many cases, both successful and unsuccessful, of co-management in fisheries and other coastal resources (White *et al.* 1994, Smith and Walters 1991, Hoefnagel and Smit 1996, Jentoft and Kristoffersen 1989, Berkes, Fast and Derkes 1996, DeCosse and Jayawickrama 1998, and Normann *et al.* 1998). From the results of this research, conditions are emerging which are central to developing and sustaining successful co-management arrangements (Pinkerton 1989, Pinkerton 1993, Pinkerton 1994). The list is long and varied, and is growing. Research and practical experience is continuing to reveal more about co-management arrangements and the factors affecting their successful implementation and performance. It should be noted that these conditions are not absolute or complete. There can still be successful co-management without having met all of the conditions. However, consensus is growing that the more of these conditions that are satisfied

in a particular situation, the greater the chances for successful implementation of co-management.

The term “key conditions” is used in the sense of Ostrom (1990) as ‘an essential element or condition that helps to account for the success of these institutions in sustaining common property resources and gaining the compliance of generation after generation of appropriators to the rule of use’. Berkes *et al.* (2001) regard them as conditions that emerge as being central to the chances that co-management can be developed and sustained.

The purpose of this paper is to present results from various research and development projects in the Wider Caribbean in which conditions that help to account for the success of co-management have been identified. The conditions are reported on a regional basis not for a specific country as this is how the authors have presented their results. It is expected that specific conditions would differ by country. The conditions identified for the region will be discussed and compared. These conditions will

embrace the wide range of aspects that can affect the implementation and performance of adaptive co-management and activities from resources and fisheries, to cultural and institutional dimensions. The paper will conclude with a discussion of policy implications for adaptive co-management in the Wider Caribbean.

Conditions for Successful Co-management:

Initial Conditions

The early research work of Ostrom (1990, 1992) and Pinkerton (1989) identified emerging conditions for viable self-managed, community-based management institutions and co-management. The key conditions identified from this work include:

- i) Clearly defined boundaries.
- ii) Membership is clearly defined. Those with rights to fish in the bounded fishing area and participate in area management should be clearly defined.
- iii) Group cohesion. The group permanently resides near the area to be managed; high degree of homogeneity; willingness to engage in collective action; common understanding of the problem and of alternative solutions.
- iv) Existing organizations. Prior experience with traditional management and organizations.
- v) Benefits exceed costs. Benefits to be derived from participation will exceed cost of investment. Proportional relationship between amount of harvest allocated and rules requiring user input.
- vi) Participation by those affected. Individuals affected by the management arrangements are included in the decision-making.
- vii) Management rules enforced. Rules are simple and monitoring and enforcement are able to be effected, shared and accountable to those involved.
- viii) Legal rights to organize and make management arrangements.
- ix) Cooperation and leadership at community level. There is an incentive and willingness on the part of fishers to actively participate in management.
- x) Decentralization and delegation of authority. Government has established formal policy and laws for decentralization and delegation for management.
- xi) Coordination between government and community. There is a mechanism to coordinate local management arrangements, resolve conflict, and reinforce local rule enforcement.

This early research work serves as the foundation for the research results discussed below.

Conditions Affecting Successful Co-management: Wider Caribbean

The Caribbean Natural Resource Institute (CANARI) (1999) prepared an evaluation of Caribbean experiences in participatory planning and management of marine and coastal resources. The evaluation provides a number of lessons that can guide future efforts. These include:

- i) True participation can only be achieved when participants are provided with the information required to make decisions.
- ii) Initiatives that incorporate all relevant stakeholders from the outset are likely to be the most enduring.
- iii) Efforts and projects that appeal to the motivations (most often economic) of the stakeholders are the most likely to secure their participation.
- iv) Participation requires the support of effective local organizations.
- v) Participation requires changes in attitudes towards power and authority; powerful stakeholders will circumvent participatory processes when it serves their interests to do so.
- vi) Implementation of participatory planning decisions and management actions requires political support and adequate technical and financial resources.

McConney, Pomeroy and Mahon (2003) present guidelines to understand the conditions required for establishing and sustaining successful co-management of coastal resources in the Caribbean. These include:

- i) Resources are generally more easily co-managed that are sedentary, whose distribution corresponds with human settlements, and that fall under one jurisdiction.
- ii) When benefits to groups and individuals outweigh costs.
- iii) Boundaries and scale match ability of resource users to manage them. Boundaries allow stakeholders to know where their responsibilities lie.
- iv) Reduce the openness of access through the establishment of property rights.
- v) The inclusion of government as a partner is essential.
- vi) Trust and respect among partners are necessary to have durable partnerships.
- vii) Community organizing and the establishment of stakeholder organizations is a critical component in the process of co-management.
- viii) Authorities need to support community organizing rather than just steer it towards management roles.
- ix) When planning is not participatory, or has been separated from management, strong partnerships among co-management stakeholders are less likely.
- x) It is useful to have a trained facilitator guide the

co-management process.

- xi) It is essential to be aware of power differences and dynamics among different groups in the community. Co-management is likely to redistribute power and to be resisted by those who want to avoid losing, or sharing, power.
- xii) Building stakeholder capacity is essential.
- xiii) Leadership is a key element of capacity building.
- xiv) It is important to ensure that stakeholders can receive information, understand it, and present it, in a manner that is most suitable to them.
- xv) Weak enforcement undermines co-management by increasing the uncertainty of resource sustainability and decreasing the returns on participation.
- xvi) Co-management is most likely to succeed if the resource is one that stakeholders already have good knowledge of.

Pomeroy, McConney and Mahon (2004) present a comparative analysis of lessons learned and conditions for success from both the secondary literature on co-management in the Wider Caribbean region and from six new case studies in Barbados, Belize and Grenada. Six conditions were identified to be particularly important for the success of co-management in the Caribbean region:

- i) Membership is clearly defined as to who really has a stake in the fishery.
- ii) There is a shared recognition of a resource use problem that needs to be addressed.
- iii) Clear objectives for management can be defined based on the problems and interests.
- iv) Communication amongst the stakeholders is effective, and there is adequate networking.
- v) External agents provide support for management but do not encourage dependency.
- vi) Management rules are enforceable by resource users and the management authority.

Several conditions were also identified which are constraining the implementation of co-management in the Caribbean region:

- i) Management approaches of government for coastal resources management are not flexible and responsive to changing circumstances.
- ii) There is a lack of effective leadership among fishers to guide change.
- iii) Group cohesion among fishers is weak as fishers tend to quarrel among themselves.
- iv) There is limited trust and mutual respect between government and fishers and, in some cases, between fishers for each other.
- v) Organizational capacity of fishers is weak.
- vi) Legislation providing property rights over resources and providing authority for fishers to make decisions is absent.
- vii) In many cases, fishers expect government to do

things for them and they are reluctant to get involved in management.

Conditions Affecting Successful Co-management: Asia and the Caribbean

White, Hale, Renard and Cortesi (1994) identify lessons learned from experience with collaborative and community-based management of coral reefs in Indonesia, the Philippines, Thailand, St. Lucia, and Florida. A prologue to all the lessons is: ask the community what it thinks. Other lessons learned include:

- i) Clear, salient objectives and issues are crucial early on, because many people need to know, early on, where the program is headed.
- ii) Start simple and show results and concrete benefits early in the program.
- iii) Identify indicators of success at the beginning and collect baseline data.
- iv) Include all stakeholders in order to ensure a politically neutral process.
- v) Integrate good traditional and scientific knowledge, practices and tenure systems in the program.
- vi) Management is not possible in the absence of community organizations and models of cooperative behavior.
- vii) Core groups play an essential management role.
- viii) Careful identification of issues is the key to motivating groups.
- ix) Feedback of results is required to sustain and increase community participation.
- x) Monitoring with community participation is crucial.
- xi) Use appropriate technology for monitoring.
- xii) Monitoring information can affect local and national policies.
- xiii) Trust between community workers, outside organizations, and the target community must be established and maintained.
- xiv) Government or NGOs can provide appropriate support.
- xv) Alliances and conditions help to solve larger issues.
- xvi) Collaborative management systems need time to evolve.
- xvii) Community-based management cannot solve problems that originate outside the community.
- xviii) Communities are constrained by their own legal and institutional mandate to deal with outsiders.
- xix) Education and training alone are not sufficient to change major behavior patterns that have consequences for people's livelihoods.
- xx) Changes in behavior are bounded by community values.
- xxi) Communities that are not dependent on a finite resource will not respond quickly to community-based management.

DISCUSSION

A number of studies in the Wider Caribbean published in recent years have identified key conditions which help to account for the success and sustainability of co-management. These conditions must be viewed in the distinct political, biological, cultural, technological, social and economic context of the region and the individual countries within the region. We need to bear in mind the role these unique characteristics play in shaping the process and implementation of co-management in the region. It should be noted that these are generalized conditions for the region and that the key conditions may differ for an individual country within the region.

In the Wider Caribbean, several conditions are unique to the region. One is the need to reduce the open access nature of the resource with the establishment of property rights. A second is that there is a lack of effective leadership among fishers to guide change. A third is that group cohesion among fishers is weak as fishers tend to quarrel among themselves. A fourth is that organizational capacity is weak.

Two overriding conditions that restrict co-management are, first, the lack of government's support for co-management, and lack of legal rights to organize and make management decisions. Second, is the need to be aware of power differences and dynamics resulting from co-management and the need to ensure that any resulting social or economic disequilibria are minimized. There is the need for capacity building for both fishers and government to engage in co-management. There is also the need for individual and community empowerment in order to gain greater social awareness, to gain greater autonomy over decision-making, and in establishing a balance in community power relations.

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