CANARI Policy Brief

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Marine Protected Areas and Sustainable Coastal Livelihoods

Poverty in the midst of plenty: who is benefiting from coastal conservation?

With the surge in Caribbean tourism, why do so many coastal communities remain poor? One reason is that development strategies that reserve valuable coastal resources for high-yield uses such as tourism and high-income housing perversely often narrow the options for poor coastal people. And measures aimed at making coastal areas more attractive to potential investors and visitors can often restrict or eliminate activities such as fishing, on which coastal people have traditionally relied.

Marine protected areas (MPAs) are one management tool that can either help or hurt local livelihoods, depending on how they are developed, designed, and implemented. But realistic assessments of the impacts of MPAs on local households have not been part of official planning processes, and planners are often surprised when fishers resist the establishment or expansion of MPAs because they fear, often with justification, that access to their fisheries will be restricted or cut off completely. The establishment of MPAs thus often results in conflicts between fishers and state agencies. It can also create or increase tensions between the fisheries and tourism sectors, since the objectives and programmes of MPAs often are skewed in favour of tourism at the expense of other sectors.

The challenges of dealing with such conflicts have made MPA managers increasingly sensitive to local needs. Fishers, often left out when MPAs were first planned, have become important management partners because of their large stake in MPA measures that affect fisheries. Many Caribbean MPAs have made a positive difference for fishers, but they cannot address all the threats that fishers face, especially those that come from the transformations of coastal areas. These new uses threaten the sustainability of coastal resources, making MPA managers and fishers natural allies.

This policy briefing paper was produced by the Caribbean Natural Resources Institute (CANARI). It is based on the report on the seminar "Finding Common Ground: a Seminar for MPA Managers and Fishing Communities", which was held in Negril, Jamaica in June 2004. The seminar and this policy brief are components of the project "Institutional Arrangements for Coastal Management in the Caribbean", which is being implemented by CANARI, the Caribbean Conservation Association, and MRAG Ltd., with support from the United Kingdom Department for International Development's Natural Resource Systems Programme. Other collaborators and financial contributors to the seminar included the Negril Coral Reef Preservation Society, the University of Puerto Rico Sea Grant College Program, and The Ocean Conservancy. The views and opinions expressed here are however those of CANARI alone.

A management partnership in Negril, Jamaica

Until its transformation into a major tourism resort, the economy of Negril, Jamaica revolved largely around fishing. While some residents have now found opportunities in tourism, many still rely on fishing for much or all of their income. The Negril Marine Park has worked hard to protect and enhance local livelihoods. The NGO that manages the Park relies on the help of community partners, including the fishing and tourism sectors. Representatives of both sectors are on the NGO's Board and so have regular input into management.

Many Negril fishers have supported the Park and become involved in management measures such as protected nursery areas. These committed stakeholders have also been successful in getting other fishers to use good management practices, but they cannot deal with issues that involve other types of users (for example tourist boats that anchor in nursery areas) or "outside" fishers who do not respect local rules. For these matters fishers need help from government enforcement agencies, but they do not feel that these agencies take their problems seriously.

Coastal development has had serious impacts on the Park's natural resources, but planning decisions are generally based on narrow economic analyses and rarely take the existence of the Park or the needs of local fishers into account. For example, a hotel developer was permitted to dredge through a sea grass bed within a protected nursery area. The Park has no recourse when planning decisions are taken at the political level. Over the years tourism expansion has squeezed fishers out of traditional landing beaches and forced them to move to less suitable areas. Although beaches are supposed to be public, allocation of their use is based on the property rights of adjacent landowners, not the traditional rights of local users. These are some of the challenges that the Park and the fishers are facing together.

Developing effective MPA management partnerships

Negotiating partnerships

Partnerships involving local stakeholders should be based on a negotiation of the roles, responsibilities, rights, and types and levels of compensation (returns) of each party. Without such agreements, stakeholders such as fishers may play critical management roles but without a recognised standing or right to be part of decisions that affect them.

Creating a forum

MPAs can provide a forum for fishers, especially those who lack formal associations, to bring their problems and needs to the attention of decision-makers and of other stakeholders with whom they may be in conflict.

Group organisation

Local fishers do not need to be formally organised to be management partners, but do need to have generally accepted representatives, as well as mechanisms for cooperating and sharing information among themselves. Some fishers will inevitably not be part of these groups but still have a right and must be given an opportunity to be involved in planning and management processes.

Reconciling fishing and tourism interests in an equitable way

Caribbean governments almost universally see tourism as the mainstay of their economies, while the fisheries sector is increasingly seen as a burden. This tourism-driven development path naturally leads to conflict between the sectors.

Fisheries-tourism conflicts

The major areas of conflict between fishers and tourism interests in coastal areas are the same throughout the region and include:

- *beach access:* the uses of the two sectors are generally seen as incompatible, and the tourism sector often finds ways to move fishers from beaches used for boat landing or seine fishing;
- *trap fishing:* recreational divers dislike seeing trapped fish and many are concerned that traps contribute to fish stock declines by catching underage fish; fishers complain that divers cut lines or damage traps to release fish;
- *zoning:* both sectors fight for MPA zoning that supports their use and constrains that of the other sector, and both often feel that the other sector is getting the better deal;
- *decreases in fish stocks*: fishers believe that pollution and sedimentation from tourism construction, beach resorts, and other tourism facilities are responsible for fish stock declines, while tourism interests are more likely to attribute declines to over-fishing.

Although these conflicts are persistent, they can be successfully resolved. In Barbados, the tourism and fisheries sectors and the government have agreed on a legal fish trap mesh size adequate to protect young stocks. Since some dive tourists were damaging traps nonetheless, the national fisheries association got support from the tourism sector and government for a visitor information programme on how the mesh size law protects young fish.

Guidelines for sustaining fishery-based livelihoods

1. **Fishers should not be forced from the sea because of bad management or management that favours other sectors.**
   Over-fishing is one of many human actions that contribute to declines in fish stocks along Caribbean coasts, and it should not be the only one that is controlled.
   Many management measures can and should be taken before productive fishing areas are completely closed: these include protection of nursery areas, time closures, modifications in fishing gear (e.g., larger trap mesh), restrictions or bans on fishing specific overfished species, habitat rehabilitation, and control of shore-based impacts. MPA entry and use fees can be one source of funding for such measures. Fishers in an area usually have a good idea of the problems and their solutions, and should be involved in all discussions and decisions on management options.

2. **When changes in livelihood strategies are required, they should draw on and respect people's interests and capacities.** When stakeholders and management agencies together decide that fishing in an area must be closed or restricted, the ways to replace fishers' lost income should be considered in the following order of priority:
   a. Help fishers move to another fishing ground, catch and market different species, or fish more efficiently by using better equipment and technology.
   b. Help fishers to get additional work that uses the same skills, for example operating a boat or scuba diving, or assisting in fisheries research.
   c. Support development of complementary activities that can bring in supplemental income, for example aquaculture or sea moss cultivation or income generating cultural exchange programmes targeted at tourists. Help is usually especially needed in marketing.
   d. Retrain young fishers or those making only a marginal income in other skills or professions.
   e. "Buy out" elderly fishers by negotiating a fair price for the value of their business. In countries where many fishers avoid paying into national pension schemes, this settlement can be paid out over time, like an annuity.

3. **Fishers should never be offered pre-determined alternatives**, but should be helped to identify and pursue the options that make most sense to them.

4. **Fishers should not be encouraged to take alternatives that close off options or give them no chance of getting ahead.** For example, fishers who cannot read should not be encouraged to take jobs in tourism, where they could be stuck in low-level positions because advancement requires them to read.

5. **Fishers have more options when social support systems are effective.** For example, access to good early education provides the later opportunity for retraining in interesting and well-paying careers.

6. **Skilled and experienced fishers can be extremely valuable management partners and knowledgeable teachers and leaders of other fishers, and should be not be encouraged to move out of fishing.** If they can no longer make a living fishing, they will find alternatives without being forced to.

7. **Programmes to help fishers improve their livelihoods when faced with restrictions and closures should distinguish between full-time and part-time fishers and give priority to full-time fishers.** These programmes should also help households and the larger community rather than simply the fisher, since other members of the fishers' families and communities may also be involved in the fishing industry (preparing and marketing fish, for example).

Assessing the full value of fisheries to national development

Economic assessments of proposed coastal developments tend to focus largely on direct revenue and cost projections of the new development, with little attention to its indirect impacts on existing sectors and activities, as these are assumed to contribute minimally to national income. More balanced analyses, which take into account social and economic costs and benefits over the long-term, would be needed to show the true contribution of fishery-based livelihoods to national accounts and so provide evidence for their support. Such analyses would need to take into account:

X the value of natural resources that are protected or destroyed by various alternatives;

X a comparison of management costs as well as projected income of different alternatives;

X the direct and indirect economic contributions of small-scale fishing (these data are often difficult to

Guidelines for managing coastal areas for equitable and sustainable development

1. **MPAs can be useful management tools in specific areas and situations, but effective coastal management requires other tools as well.** MPAs need the active and continuous participation of government even when management has been delegated to an NGO. Government has an obligation to support and enforce its conservation laws: this is not and should not be the main job of protected area managers.
2. **Laws need to be enforced equitably**. Privileged groups must not be immune from agreements and regulations aimed at protecting natural resources that other stakeholders depend on.
3. **Efforts by stakeholders to manage natural resources should be recognised, encouraged and supported** by government agencies, MPAs, funding agencies, and local organisations as long as they do not create conflicts with the rights and uses of others.
4. **Privatisation of traditionally used common spaces can create a host of social and economic problems for coastal communities**. When development decisions do not take traditional rights of access and use into account, local people's livelihoods can be jeopardised.
5. **Collaboration with local stakeholders will often require overcoming long-standing, and often justified, suspicion and mistrust.** MPAs cannot expect immediate local cooperation. Many stakeholder groups feel little compulsion or obligation to work with governments or their perceived agents.

Caribbean Natural Resources Institute

The Caribbean Natural Resources Institute (CANARI) is an independent, regional, technical assistance organisation with more than 20 years of experience on issues of conservation, the environment, and sustainable development in the islands of the Caribbean.

CANARI's mission is to create avenues for the equitable participation and effective collaboration of Caribbean communities and institutions in managing the use of natural resources critical to development.

The Institute has specific interest and extensive experience in the identification and promotion of participatory approaches to natural resource management.

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