The Centre for Resource Management and Environmental Studies (CERMES) has initiated this outreach publication, ***Policy Perspectives***, primarily in order to share some of the lessons learnt from recent projects. These interdisciplinary applied research projects emphasised learning-by-doing through the collaboration of researchers, beneficiaries and other interested parties. The information in these policy briefs may be used by policy-makers and their advisers to strengthen the linkages between research outputs and policy-making in the Caribbean. This connection is often weak in the area of natural resource management.

Coastal resource co-management in the Caribbean — Part 1

This is the first of a four-part policy brief that focuses on coastal resource co-management. Lessons are drawn from the Caribbean Coastal Co-management Guidelines Project implemented by the Caribbean Conservation Association (CCA) and CERMES' Coastal Resources Co-management Project (CORECOMP). Information related to these projects can be obtained from the CCA and CERMES web sites (www.ccanet.net and www.cavehill.uwi.edu/cermes).

Introduction

Over the last decade, the use of co-management arrangements for fisheries, coral reef marine protected areas (MPAs) and other coastal resources in the Caribbean has increased as new approaches to management have been sought. Management plans for coastal areas and fisheries now routinely mention co-management or similar terms in their texts that, ideally, reflect government policy.

There is now more documentation on the various experiences with co-management. This has increased our knowledge of conditions leading to success and failure, and the special characteristics of coastal resource co-management in the region. In this policy brief we provide an overview of key concepts and findings based on research and pilot projects.

Co-management definitions and concepts

Definitions of co-management focus on sharing management responsibility and authority between government and stakeholders. The fundamentals of what co-management should be, and are in practice, have been extensively researched. Co-management encompasses several possible arrangements that are often depicted as a scale showing the relative sharing of responsibility and authority between government and stakeholders. We have found it useful to think in terms of three types of co-management arrangements for institutional analysis in the Caribbean (see below).

Government agencies have most control	
Consultative co-management	Government interacts often, but makes all the decisions
Collaborative co-management	Government and the stakeholders work closely and share decisions
Delegated co-management	Government lets formally organized users/stakeholders make decisions
People in civil society have most control	

The most common arrangement in the region is "consultative co-management". People commonly use and understand the term consultation to mean seeking opinions and advice whether you use these as inputs into your decision-making or not. Second is genuinely joint action and decision-making in "collaborative co-management". This is where several coastal resource stakeholders in the Caribbean seem to be headed, or wish to be. The third type is "delegated co-management" that includes, but is not limited to, community-based management. The distinction is important since delegation of authority and responsibility to local area or non-governmental organisations (NGOs) is more common than to communities.

Establishing successful co-management is seldom immediate. Like most participatory processes, it takes time and careful tending. Three phases (pre-implementation, implementation, and post-implementation), that have different characteristics can be recognised. These define the paths of co-management initiatives from inception to maturity.

Pre- implementation	• Realise need for change
	• Meet and discuss change
	• Develop new management
Implementation	• Try out new management
	• Educate people in new ways
	• Adjust and decide what is best
Post- implementation	• Maintain best arrangements
	• Resolve conflicts and enforce
	• Continue evaluating, adapting

The pre-implementation phase includes problem recognition, discussion, consensus building, seeking assistance and initial strategic planning. The implementation phase has activities such as community entry, applied research, organizing and mobilisation, education, planning and plan implementation. The post-implementation phase includes evaluation, project phase-out and the adaptation of operations that have become routine. It is not uncommon for phases to last several years.

Caribbean case studies

Case studies on co-management, two each from Barbados, Belize and Grenada, were recently prepared through the Caribbean Coastal Co-management Guidelines Project implemented by the Caribbean Conservation Association. The research framework of three types and phases of co-management, introduced above, was applied with the following results in terms of classifying the case studies.

Case study location and research topic	Type of co-management	Phase of co-management
Barbados: sea egg fishery	Consultative	Pre-implementation
Barbados: Fisheries Advisory Committee (FAC)	Consultative	Implementation
Belize: Friends of Nature (FON) marine protected areas (MPAs)	Delegated	Implementation
Belize: Fisheries Advisory Board (FAB)	Consultative	Post-implementation
Grenada: Sauteurs lobster fishery	Consultative	Pre-implementation
Grenada: Gouyave seine net fishery	Consultative	Pre-implementation

As a general observation, the type of co-management that is being developed and implemented in the Caribbean region differs from that in other regions of the world, such as Asia. In Asia, where the use of co-management is more mature, delegated co-management is common. In the Caribbean, where co-management is still a relatively new concept, there is more consultative co-management in its early stages. The Caribbean situation is somewhat similar to parts of Africa, but community-based arrangements are also more common on that continent than in the English-speaking Caribbean. It is important for policy makers and advisers to be aware of these differences to avoid inappropriate comparisons.

Literature review of lessons learned, and conditions for successful co-management

A literature review of co-management in the wider Caribbean provides a number of lessons learned and suggests conditions that favour successful coastal co-management in the region.

One important finding is that government enabling policies and legislation are needed to support co-management initiatives. Literature also reveals that:

- Government officials often need to change their attitudes and behaviour in order to share power with civil society.
- Marine resource use in the region involves multiple stakeholders and multiple conflicts that need to be addressed through consultation with stakeholders.
- All primary stakeholders should be identified and included in co-management arrangements.
- There is need for forming new community organisations and/or strengthening existing organizations to engage in co-management in most places.
- Existing community organisations are administratively and financially weak, and will require capacity building in order to effectively engage in co-management.
- All types of diversity (e.g. biological, cultural, social, racial, economic, and environmental) in coastal areas need to be recognized and addressed.
- Many existing non-governmental organizations are highly dependent on government for their existence and will need to become more independent or self-reliant.
- An incentive structure (economic, social) and a clear recognition of a problem are necessary for individuals to actively engage in co-management.
- Use of property rights will be needed, although it will be difficult to restrict access to resources.
- Non-governmental organizations are useful as change agents to support co-management processes.
- Conflicts should be directly addressed and managed.

Literature on co-management is not difficult to find. There are several excellent sources on the internet with documents that can be downloaded. The web sites of CERMES, CCA and the Caribbean Natural Resources Institute (CANARI) (www.canari.org) are some with Caribbean content.

CERMES also hosts the web page for the UWI Coastal Management Research Network (COMARE Net) that provides lists and links related to coastal research projects funded by the UK Department for International Development (DFID) Natural Resource Systems Programme (NRSP). You will find a range of Caribbean projects on this web page.

There are several international web sites that can be found with search engines. Policy advisers should make themselves familiar with these web sites and the available documents.

Conditions favouring and constraining coastal resource co-management

From the case studies and literature review, six conditions were identified to be particularly important for the success of co-management in the English-speaking Caribbean:

- Membership must be clearly defined as to who really has a stake in the coastal resource (is a stakeholder).

- There must be shared recognition of a resource problem that needs to be addressed by several stakeholders.
- Clear objectives for management need to be defined based on the problems and interests of the stakeholders.
- Communication amongst the stakeholders has to be effective, with adequate networking.
- External agents may provide support for management but should not encourage dependency.
- Management rules must be enforced by the management authority and complied with by resource users.

The above are six of the 23 variables investigated as factors of success. They stand out as the ones requiring particular attention in the early phase of co-management in the region. Several other conditions were identified as the main ones that currently constrain the implementation of co-management in the Caribbean region:

- The management approaches of governments for coastal resources management are not sufficiently flexible and responsive to changing circumstances. Weak adaptation.
- There is a lack of effective leadership among fishers and other resource users to guide or manage change.
- The organizational capacity of the non-governmental stakeholders, and especially fishers, is generally low.
- Group cohesion for the collective action of resource users is weaker in management compared to exploitation.
- There is limited trust and mutual respect between officials of government and fishers and, in some cases, amongst fishers on the whole. Levels of conflict can be high.
- Legislation providing property rights over resources and giving authority for fishers to make decisions is absent.
- Fishers expect governments to assist them, but they are reluctant to get involved in management responsibilities.

Future of co-management and enabling policy in the English-speaking Caribbean

The conditions for successful coastal co-management, and the constraints, discussed above have been tentatively identified from studying a handful of Caribbean experiences. Additional cases must be researched in order to provide a better guide to policy. As co-management is still a relatively new concept in the Caribbean region, these listed conditions may change over time as more experience is gained. While the researched sample is small, the tentative conclusions drawn can assist in directing policy experiments to test them under a variety of circumstances.

Conventional, top-down, command-and-control approaches to fisheries and coastal resource management do not work well in the Caribbean region. The people whose livelihoods depend on these resources need to be involved in their management. Most governments in the region are realizing that they cannot manage the resources without input from stakeholders. This points to the need for co-management. The most appropriate type of co-management will be determined by several factors and as a result of learning.

The type of co-management that is being developed and implemented in the Caribbean region differs from that in other regions of the world, such as Asia and Africa. It reflects the political, cultural, social, economic and environmental conditions that exist in the region. Any resource governance system must be viewed in the context of the complex interactions of these conditions that have shaped past and present situations, and that have a capacity for influencing the future. Therefore, policy needs to be well grounded in the realities of the Caribbean rather than imported from abroad without adequate adaptation and testing.

The immediate focus of any coastal resource co-management initiative in the region must first be on capacity building and institutional strengthening for State management authorities, resource users and some external agents. The management authorities in the region are primarily governmental, and are not well equipped for their considerable responsibilities. It is important for them to be strengthened in order to legitimately be considered as sources of authority that can be shared with stakeholders. If they have no effective authority, then there is no reason for stakeholders to take them seriously as partners. Within public sectors in the region, resource management authorities are often weak and find themselves subordinate to economic development agencies that may have little regard for environmental management. If coastal development is to be sustainable, and since much coastal development is tourism-oriented, natural resources must be well-managed.

Resource users need to put their differences aside and begin to be empowered and organized to engage in collective action other than in times of crisis. The repeated failure of fisher organisations around the region is particularly worrisome. It is important for those involved in fisheries policy to invest in the formation and sustainability of stakeholder organisations while avoiding increasing their dependence on government. It may be more feasible for enabling interventions to be made by third parties such as non-governmental organisations.

The role of the external agent (for example: non-governmental organization, academic or research institution, religious organization) is important. It involves initiating a process of discovery and social learning, guiding problem solving, building local capacities, and advocating appropriate policies. External agents in the region need to take a more active role in the small-scale fisheries sector and in coastal co-management. Their sustainability will depend in part on developing self-financing mechanisms with skills that can be transferred to the stakeholders that they are assisting. Policy should be directed at encouraging such innovative financing.