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**Caribbean.**

**Experiment 2: Testing the Uptake of Co-management Tools and**  
**Messages in Training Natural Resource Users and Managers**

**GRENADA CASE STUDY:**  
**THE LOBSTER FISHERY AT SAUTEURS**  
**SUMMARY OF LESSON LEARNT**

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## About this document

This summary of lessons learnt was developed from the Grenada case study: the lobster fishery at Sauteurs, Caribbean Conservation Association as an output of Experiment 2: *Testing co-management tools and messages for Training Natural Resource Users and Managers*, which forms part of the DFID funded research project “**Pro-poor Policies and Institutional Arrangements for Coastal Management in the Caribbean**”. The goal of the project was to ensure that integrated coastal management Research in the Caribbean is promoted and benefits those who depend on the resources of coastal areas, especially where there is poverty. The purpose was to test the uptake of products of a previous DFID funded project R8134: Caribbean Coastal co-management guidelines, focussing on establishing and sustaining successful co-management of coastal resources in the Caribbean. This summary of lessons learnt is aimed at the users and managers of coastal resources in the Caribbean and will be most useful for teaching students with an undergraduate degree, or training others with some prior experience in coastal resource management.

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## Executive summary

This case is situated in the northern rural town of Sauteurs set in the agricultural parish of St. Patrick's in Grenada. It was selected as an example of an attempt to co-manage a valuable inshore fishery with fairly well defined resource and community boundaries, but at a location remote from the fisheries authority. The fisheries regulations of Grenada prohibit the use of nets for harvesting lobsters, and the use of trammel nets for any species. Prior to these regulations the fishermen of Sauteurs on the mainland, and Isle de Ronde offshore, used trammel nets for harvesting lobster. As the regulations were introduced the fishermen received reprieves from government to allow them time to switch to alternative gear on their own. However, trammel nets remained the primary gear for lobster harvest, with no evidence of alternatives being introduced by the fishers themselves.

In 2001, the government of Grenada decided to no longer tolerate illegal fishing with trammel nets, but wanted a collaborative phase-out to include the Fisheries Division introducing

alternative and acceptable fishing gear. A co-management pilot project was initiated for this purpose. Although the co-management pilot project was reasonably well designed, its implementation period was unrealistically short for the objectives that were set. In particular, there was not enough time allowed for the acquisition of test fishing gear and the collaborative activities of gear trials that should have assisted in strengthening the relationships between the fishers and fisheries authority, perhaps whether they were successful or not. Joint activity may also have reduced the tensions between the parties that were evident at the start due to a history of mistrust and poor communication.

Because of the several problems experienced in implementing the project the government was forced to take a decision on whether to allow the illegal activities to continue or to announce its enforcement of regulations that had been defied for some time. Although the fishers had enough time over the years to devise their own solutions to the prohibition of their preferred fishing gear, they took no action. They considered government's inability to provide them with alternatives in a short space of time to be a breach of the co-management agreement. In many ways their objections were mainly to test the political and managerial strength of decision-makers. They accepted, and have apparently respected, the firm decision to enforce the net ban.

However, as a result of these, generally negative, interactions there seems to be little overall progress in the implementation of co-management for the lobster fishery based at Sauteurs in Grenada. Conditions for co-management seem not to be very favourable, but because of limited capacity amongst all stakeholders they need to cooperate to some extent because none can do well on their own. This scenario is fairly typical of Caribbean small-scale fisheries. The lessons on conditions for success have more to do with what to avoid, especially poor communication, and to beware the absence of a good social and cultural fit.

## **Lessons learnt**

In this document we present the conclusions or lessons learnt for co-management based on the Grenada case study: the lobster fishery at Sauteurs. The lessons learnt are presented under headings which represent the key characteristics of successful co-management institutional arrangements. Emphasis is therefore placed on understanding the conditions and factors for successful co-management as perceived by the stakeholders at the case study research sites, but also supported by empirical evidence from initiatives at more advanced phases of development in other regions of the world. Effort was also directed towards promoting the uptake of concepts and practices that may lead to co-management success.

### **Type of co-management**

The research framework summarises the main types of co-management as consultative, collaborative and delegated. This experiment in co-managing the lobster fishery at Sauteurs was a governmental approach to problem solving, the problem being the refusal of fishers at this one location to stop using illegal fishing gear. Government regarded co-management as an instrument for obtaining compliance and conducting business more efficiently and sensitively than by command and control measures. Delegated co-management was not feasible or contemplated since the local fishing cooperative is very weak and struggling to rebuild. The project plan anticipated collaborative co-management, but for logistic and other reasons the result was a very limited form of consultative co-management fairly typical of the approach to fisheries management in Grenada. Although this is institutionally weak, both the fisheries authority and fishers appear to be comfortable with this fairly loose arrangement.

### **Phase of co-management**

This case illustrates the very first stages of pre-implementation in which the co-management arrangements, the stakeholders, and their patterns of interaction are flexible and uncertain. It is unlikely that this case will advance beyond this phase in the near future, and it is possible that it will return to a more unmanaged, or a command and control, state unless there is more interest in establishing co-management.

### **Boundaries**

One boundary of Grenada's marine jurisdiction lies just north of the study site, and some lobster divers venture across into the waters of St. Vincent and the Grenadines. This does not apply to Sauteurs trammel net fishers. The boundaries of the lobster stock fished in the waters of Grenada are poorly known, but Cochrane and Chakalall (2000) place the country within the area of the loosely defined southern stock that includes all of the Lesser Antilles down to mainland South America. The lobster fishing grounds are well known and coincide roughly with the island shelf. Technology also served as a boundary. Before use of the trammel net, Sauteurs fishers who could not dive were excluded from making the lobster fishery their mainstay. As new gear is introduced there is the potential for technology to again become a significant boundary. The boundaries are adequate for establishing co-management.

### **Membership and stakeholders**

Who the lobster fishers are is fairly well defined, but there are no formal or informal barriers to fishery entry or exit. Stakeholders in this case include the Fisheries Division, St. Patrick's Fishermen's Cooperative and the individual fishers. The Cooperatives Division and SPOD are interested parties, although they have never articulated a specific interest in the lobster fishery itself. Their interest comes from roles in promoting collective action and community empowerment respectively. Although the enforcement agencies are potential stakeholders in this case of illegal fishing gear, their involvement is activated mainly through the Fisheries Division rather than through their own volition. Should the major luxury tourism projects materialise at Levera, the stakeholders may expand to include actors in this likely market for the catch. Any additional stakeholders entering this institutional arena are likely to be secondary to the fishers and fisheries authority.

### **Resource use problem**

There are different views on the nature and seriousness of the resource use problem. The Fisheries Division considers the use of destructive gear to be a serious problem especially in the destruction of habitat and from a long-term perspective. The fishers consider it less serious because they claim that the average size and abundance of lobsters have not declined since using the nets. Several agree that the damage to habitat is unfortunate, but consider this less important than their immediate need to earn their livelihoods from the fishery in the simplest manner possible. The resource use problem must be acknowledged more widely and openly by the fishers for genuine attempts at problem solving to be undertaken collaboratively.

### **Management objectives**

There is a recent draft management plan, but only the author, a former Chief Fisheries Officer, is particularly familiar with its contents or is able to champion its approval by the policy-makers. The management objectives that currently apply to the lobster fishery are not very clear. The management objectives need to become both clear and shared for stakeholders to determine the most appropriate approach to management.

## **Scale of management**

Regional or sub-regional management of Caribbean spiny lobster fisheries is required given the long planktonic phase of the animals and wide dispersal of young. The choice of implementing co-management specifically at the small scale of Sauteurs alone was related to the type of fishing gear and not the catch. The scale selected was appropriate to the problem being addressed, but not the overall management of the fishery. Any attempt to establish co-management of the fishery nationally will necessitate a larger scale of management. A more fundamental issue is whether fishers will share the perspective that the fishery can be managed at any scale. Fishers appear to be sceptical about the feasibility of management in general.

## **Management adaptation**

The fisheries authority demonstrated willingness to adapt management measures by agreeing to use the research provisions in the fisheries regulations to test the single panel nets in order to get firsthand data on their performance. This decision was overturned later by the ministry's management committee, which decided that the letter of the law that banned nets was inviolate. Both levels of decision-making must therefore be taken into account, and the flexibility to adapt may be reduced as the level in the policy structure increases. Regarding the fisheries regulations, as a result of interventions by the Fisheries Division there have been amendments since their original passage. This suggests a willingness to make regulatory changes, but for co-management to be efficient more responsive mechanisms for management adaptation will be required. The current case illustrated this need.

## **Cooperation**

The Fisheries Division assessed cooperation as satisfactory based on the willingness of fisherfolk to participate in the events it organised. However fishers at Sauteurs were clearly less than satisfied with the performance of the Fisheries Division in responding to their need for alternative gear and training in its use. The demands of the fishers were seen as unnecessary given the experience of several with various types of fishing that had been done prior to the introduction of the nets. The Fisheries Division was sensitive that being overly cooperative could have negative impacts on the fishers' self-reliance and problem solving such as by fostering dependency. There was universal agreement that more cooperation was needed between the Fisheries Division and Cooperatives Division, but no mechanism for this was available. Given the recent increased interest in promoting fishing cooperatives, and the apparent demand from fishers for this type of organisation, this deficiency could become a major obstacle.

## **Leadership**

At a workshop on leadership that included fishing industry and fisheries authority participants, Sauteurs fishers involved with the revival of St. Patrick's Fishermen's Cooperative noted that the cooperative had been through several leadership crises. Various agencies that attempted to assist the cooperative over several years had little impact on improving leadership. The leader of the cooperative was also the leader of the lobster fishers during the case study. In his absence an older and experienced fisher substituted (e.g. signing the co-management pilot project agreement). Another experienced fisher was a co-leader in organising the Fisherman's Birthday celebrations. Fishers have led delegations to meet the minister. There seems to be no lack of leaders in terms of fishers respected by others, but their abilities to mobilise and organise the fishers into a vibrant body are inadequate. It is an area in which strengthening is required.

### **Collective action**

The fishing cooperative is the most relevant expression of formal collective action in this case, but its history is not one of success. However, there have been significant instances of informal collective action. For example, in the mid-90s the fishers were invited by the Chief Fisheries Officer to advise on the most appropriate penalty for a fisher who was guilty of fishing out of season with a trammel net. They collectively provided their advice on an appropriate fine. In the last two years, the delegations that visited the minister to discuss the suspension of enforcing the net ban regulations also illustrate that the fishers are capable of focused collective action if motivated. The challenge would be to sustain collective action in the co-management context.

### **Conflict management**

Little conflict was reported within the trammel net lobster fishery. In a workshop on conflict management and negotiation that included fishing industry and fisheries authority it was clear that no formal conflict management mechanisms existed. Within the community of Sauteurs there were no systems for informal management of conflict if the disputing parties cannot solve problems themselves. In the leadership workshop the participants revealed that persistent, but low-level, grievances were barriers to forming a cohesive body. Throughout the project activities the fishers demonstrated an underlying current of conflict with, and distrust of, the fisheries authority. This was particularly clear in several workshops, but especially when the decision to uphold the fisheries regulations was announced. Fisheries officers are sometimes called upon by fishers and vendors to mediate in disputes but are untrained and unprepared for such tasks. There was much concern about the neutrality of persons asked to assist in managing conflicts since it was felt that within this small community of fisherfolk any such person was likely to have, or to develop, an interest in the outcome that could be unfair to the other party or parties. It was also said that fisheries officers were interested in short term ends to conflicts that could result in underlying causes being missed. As a consequence, conflicts resurface or remain unresolved. If co-management is to succeed, more attention must be paid to conflict management.

### **Effective communication**

The Grenada fisheries authority has invested heavily in both formal and informal communication that has proven effective. The system of extension officers allocated to particular parishes has resulted in close relationships between particular officers and the fishers in these locations. The fishers appreciate this relationship and communicate with officers regularly. However, several fishers pointed out that this informal camaraderie is insufficient in that it does not facilitate formal inclusion of their issues and answers into the fisheries decision-making system. They want to have more formal meetings, and especially to receive feedback from the Fisheries Division on matters raised previously. Communication between the Fisheries and Cooperative Divisions is negligible and needs to be improved if cooperatives are to have management roles.

### **Coordination**

Arising from communication, there is reasonable coordination at the technical level between NGOs, government and the fishing industry. Post-hurricane recovery, regular workshops and other events are examples. However there is less coordination between the technical and policy levels of government on fisheries matters. The fisheries authority's uncertainty about policy decisions and support is likely to retard its advance towards co-management since the latter is much more characterised by policy and politics than conventional management.

## **Trust and respect**

The only area in which trust and respect was said to be in short supply was among fishers themselves, as demonstrated by conflict and disunity that appear to hinder development and collective action. The dynamics of leadership in the fishing cooperative is an example. It is not likely, however, that levels of trust and respect are so low in the fishing industry as to seriously constrain the success of fisheries co-management.

## **Organisational capacity**

Capacity building is an important element in co-management. Where the poor have access to resources that create new and more relevant capabilities among them, they are usually better equipped to extricate themselves from poverty and sustain livelihoods. Such capacity building may include, but is not limited to, training and upgrading of skills, and empowerment. NGOs were very actively involved in trying to create capacity in fishing organisations up to a few years ago. These efforts have now subsided and organisational capacity is still very limited. Several key organisations have failed. The Fisheries Division is limited in its capacity. The two main NGOs that have assisted fishing groups claim limited capacity constrains their operations. Means of strengthening the organisational capacities of all stakeholders must be devised.

## **Financial resources**

Since expenditure on fisheries management is one of the matters that concerns policy-makers it will be important to ensure that operational decisions are not thwarted by lack of coordination at the policy level, such as appeared to have happened with the delay in using government funds to acquire the lobster pots. The Fisheries Division does not have significant financial resources to support co-management. External assistance in mounting demonstration projects may be needed to facilitate government providing a larger allocation to fishing.

## **External agents**

Grenada has received external funding for physical infrastructure that improves the working conditions and livelihoods of fisherfolk. These improvements are likely to continue. Previously, NGOs received external funds that were passed on to fishing industry initiatives. None of the external interventions has encouraged dependency, and further assistance specifically for co-management would be beneficial.

## **Net benefits**

Benefits from the Sauteurs project were less than planned in terms of demonstrating co-management. The project continues as a regular government initiative and any success in reducing or mitigating habitat destruction is likely to be valuable but not easily measurable. Trammel net lobster fishers have abandoned their illegal gear and do not have an approved alternative. Some claim that the government is trying to minimise costs in providing alternative gear, and shifting the burden of innovation onto them. The absence of clear benefits to the fishers is likely to be a serious constraint on them adopting new fishing gear or co-management.

## **Representation in decision-making**

The fisheries authority has not established a system in which fishers are locally or nationally formally represented in a decision-making forum. Fisheries officers have good relationships with fishers and will seek their advice in formal or informal consultation, but this stops short of decision-making. The fishers, largely through the efforts of the cooperative leader and a vocal few, have been fairly successful at representing themselves before the Minister responsible for fisheries. In doing so they have tended to bypass the fisheries authority in order to have policy

directives that are favourable to them imposed on the authority by the Minister. The several unsuccessful attempts to establish a Fisheries Advisory Committee demonstrate fundamental difficulties in forming and maintaining a representative decision-making body. This needs to be addressed for co-management to be successful and, given the prevalence of parish level bodies, perhaps success could first be achieved at this smaller scale of administration.

### **Enforcement**

The continued illegal use of trammel nets for lobster harvest, to the point of obtaining policy sanction for their activities, reveals the power that the fishers have in controlling the level of enforcement when they refuse to comply with fisheries regulations. Although Sauteurs is a fairly remote location, the capacity to enforce is less of an issue. Like elsewhere in the Caribbean the fisheries regulations are complied with mainly voluntarily, and enforced only infrequently. In the case of using a co-management approach to change fishing methods it is vital that there be the provision to strictly enforce the points of agreement and law as a basis for trust and compliance.

### **Property rights**

The lobster fishery is open access. There are no reported established property rights associated with preferred lobster fishing grounds, but fishers are known to have their favourite locations. In Grenadines areas where lobster fishing (diving or net) and recreational diving coincide there is voluntary separation of activities in order to avoid congestion and conflict. Stealing from nets or lobster holding areas was not raised as a major concern. In the beach seine fishery there is a well-developed customary system of rights by fishing location. Therefore the concept of territorial rights is not new to the fishing industry. It may be beneficial to use the opportunity of introducing new gear to examine the feasibility of rights regimes.

### **Sharing decision-making**

There is legal provision for a Fisheries Advisory Committee, but several attempts to form and maintain one have not been successful. There is no other process or institution except the meetings of the various cooperatives and associations. At Sauteurs the cooperative has not yet revived to the point of taking on fisheries management decisions, although its leader sees that the potential exists. The pilot project included the setting up of a multi-stakeholder working group to guide and oversee operations. Members were readily selected for this group but it did not function. This may be partly due to the logistic problems experienced in executing project fieldwork, but there also appeared to be the belief shared by fishers and fisheries authority that such a structure was unnecessary. The Fisheries Division and fishers accept top-down management with consultation as the norm. Both resist more collaborative decision-making.

### **Decentralisation and delegation**

In the fisheries arena there is no evidence that decentralisation and delegation of power to the fisheries authority or fishing industry is likely to occur. The Fisheries Division is closely wed to the administration of the ministry in decision-making. The long list of consultations conducted by the Fisheries Division with the industry do not exhibit any move towards delegation and there are no structures set up to receive the consequent responsibilities. Given that an area like Sauteurs is fairly remote from the centre, some level of decentralisation should facilitate the success of co-management if the necessary structures were put into place.

### **Social and cultural fit**

Grenada has experienced more political changes than several neighbouring countries, including a socialist phase. This period and colonialism were characterised by the governments taking

charge, although the formation of grassroots organisations was a feature of the socialist era. The expectation remains that government has the bulk of responsibility to make decisions and look after the welfare of the people. Co-management beyond consultation is not a good fit at present in the fishing industry, but there is scope for much improvement in consultative co-management that would not be inconsistent with the socio-cultural environment.

### **Priority action**

The priority action in this case is to establish better communication between the fisheries authority and the fishers. Much of this may be accomplished by undertaking joint activities. First among these should be the gear trials and training, including the analysis and interpretation of data collected. The revival of the cooperative should result in more sustained collective action and the building of capacity necessary for the fishers to have a role in resource management. In order for them to proceed, awareness of the benefits of responsible fishing must be increased and the draft fisheries management plan completed with clear responsibilities for all stakeholders.

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