

# **Coastal Conflict Resolution: A Case Study of Soufriere, Saint Lucia**

**SARAH GEORGE**  
*Department of Fisheries*  
*Saint Lucia, West Indies*

## **ABSTRACT**

For over a decade the picturesque coastal district of Soufriere has been home to increasing conflict between local fishermen and the growing tourism sector. Despite past attempts to resolve these issues and a number of Fishery Priority Areas and Marine Reserves being created in 1986, the conflicts persisted and started to escalate.

In late 1992, a joint effort by the Soufriere Development Foundation, the Department of Fisheries and the Caribbean Natural Resources Institute devised a new approach to define and resolve these conflicts. The process ensured wide-scale, multiple representation by interest groups and government agencies and also ensured that groups were able to fully identify and express their concerns and recommendations.

This approach has proved highly effective. Fishing Priority Areas and Marine Reserves have been redefined, and a "Preliminary Agreement on the Use and Management of Marine and Coastal Resources in the Soufriere Region" identifies areas for various types of fishing, scuba diving, yacht mooring, and recreation. The agreement has the overall support of interest groups and defines rules to guide the use of zones and multiple use areas. It has recently been submitted for government approval.

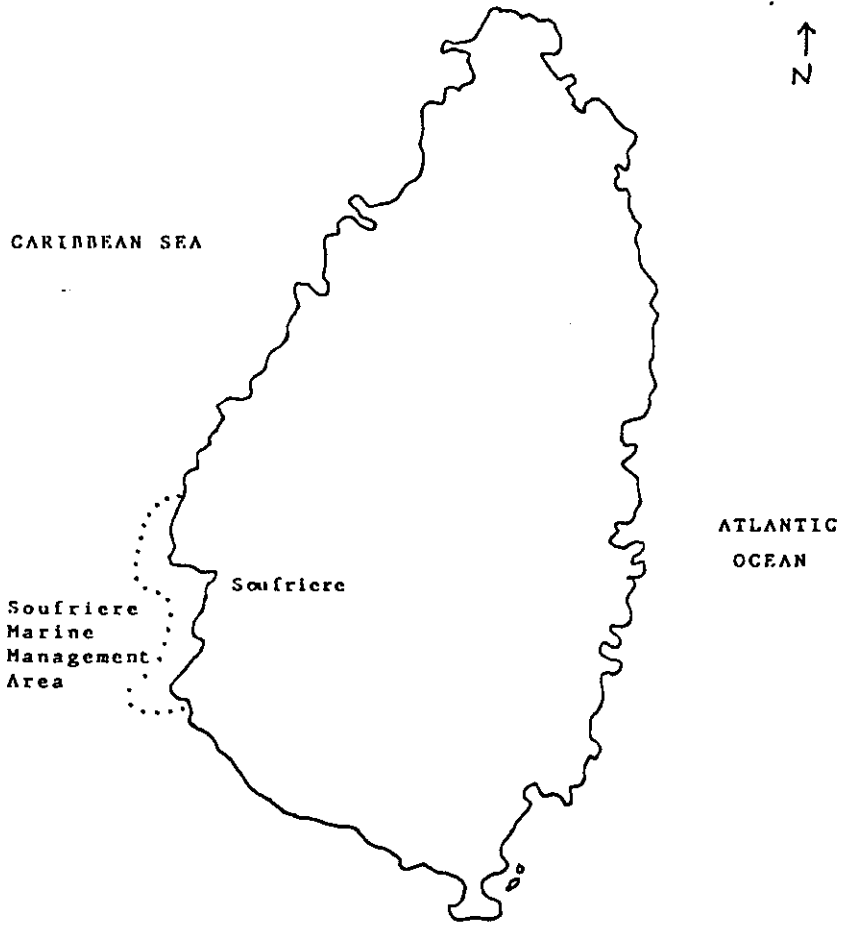
**KEY WORDS:** coastal resource conflicts, participatory planning

## **INTRODUCTION**

Development within the coastal region of Soufriere has been hampered by escalating resource use conflict within its fragile marine zone. This community, located on the central west coast of the Caribbean island of Saint Lucia (Figure 1) is bordered by a narrow submarine shelf which supports the island's most diverse and productive coral reefs. The land terrain comprises a series of steep, volcanic ridges separated by fertile valleys, fringed in the south by two spectacular volcanic plugs: the Pitons.

The area is rich in terms of its agricultural fertility, tourism potential, and coastal fishery resources. Traditionally, agriculture and fishing have provided the two main sources of employment and income. However, due to its outstanding natural and cultural heritage, there has recently been considerable development in the field of tourism.

Fish landings in Soufriere mainly comprise coastal pelagics (such as jacks, ballyhoo, and sardines) and, to a lesser extent, a variety of reef fishes. The pelagics are caught in virtually all sandy bays using beach seines for the jacks,



---

**Figure 1. Location of the Soufriere Marine Management Area.**

---

sardines and juvenile tunas and shallower gill ("fillet") nets for ballyhoo. Reef fishes are mainly exploited with fish traps (the Antillian Z trap made from hexagonal wire mesh) and, to a lesser extent, hand lines. Soufriere is one of the most important landing sites for coastal pelagics. This fishery is particularly important to Soufriere since the community is located furthest from the offshore fishing grounds where the more profitable migratory pelagics are found.

In the coastal pelagic fishery landings are occasional but can provide very large individual catches and revenue. The reef fishery provides fishermen with a constant but modest income. There are some 150 fishermen in Soufriere operating out of 78 boats. Twenty percent of these fishermen operate beach seines, thirty percent fillet nets, and twenty five percent own fish traps.

The rugged topography isolates the area and hotel development has been far slower than for the main tourism belt ten kilometers to the north. The majority of tourists visiting Soufriere arrive daily on tour boats, charter yachts, and on dive trips. The largest scuba diving facility on the island is run by one of Soufriere's major hotels. There are two other hotels (one being the controversial *Jalousie* development between the Pitons), and a few small guest houses. Yet, despite the vast number of tourists who visit Soufriere each year, only a small percentage actually stay there.

Fishermen are the traditional users of Soufriere's coastal marine zone. With the comparatively rapid influx of tourists, the traditional users now find themselves competing on a daily basis with a variety of tourism users, particularly yachters and scuba divers.

Coastal pelagic species tend to school in nearshore areas at dawn or dusk. Many of these bays are also popular protected harbours for overnight yacht anchoring. Yachters were often reluctant to move when requested to do so by fishermen in hot pursuit of migrating fish schools. This had resulted in mounting friction between the two groups. Another conflict existed between trap fishermen and divers. The former claimed that gear was often interfered with and even mutilated by scuba divers. Dive operators were indeed concerned with the impact of fish traps on the reefs, but for virtually all cases they claimed no involvement in the incidents of destruction. They suggested that private boaters and spear fishermen were the most likely culprits.

In 1986 most of the reefs off Soufriere were declared Marine Reserves (MRs) in an effort to protect areas of greatest reef diversity and productivity (Figure 2). Fishing is prohibited within MRs, thus the majority of the traditional trap fishing grounds were closed to fishermen. Three Fishing Priority Areas (FPAs) were also established for Soufriere (Figure 2). These were located in the major beach seining bays. Legislation for the FPAs required all other activities to give access to fishing; however, this still proved difficult to promote and enforce.

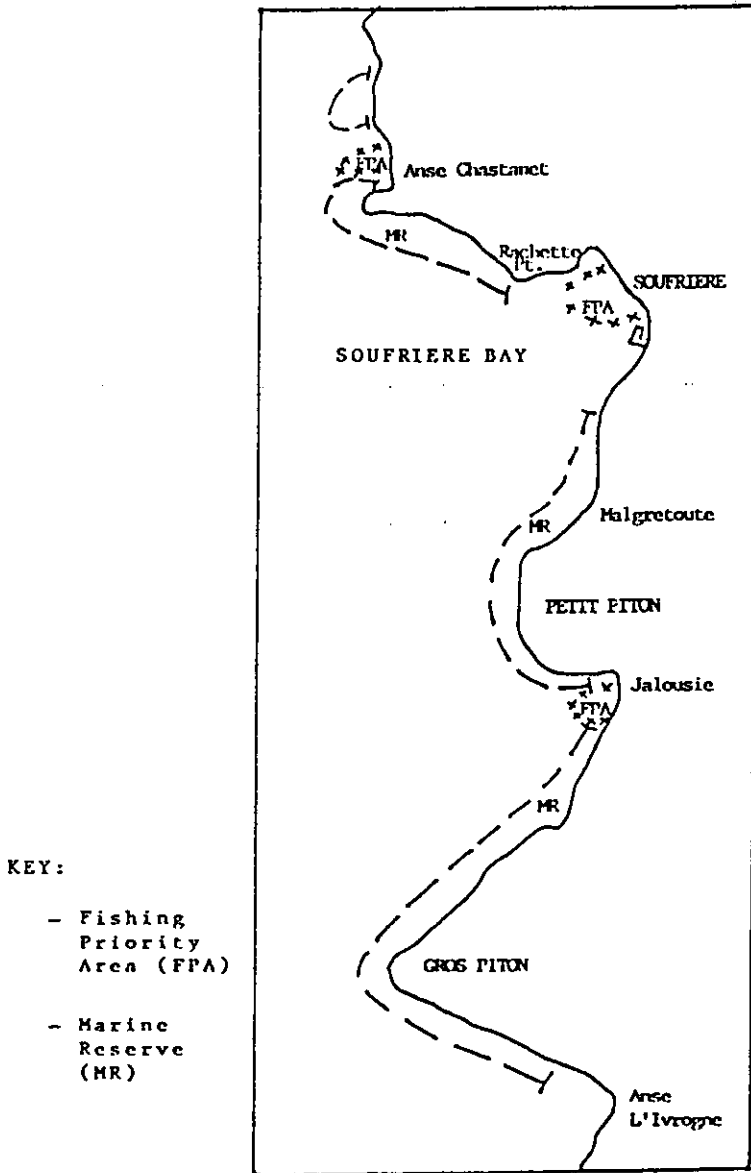


Figure 2. Marine Protected Areas as Declared in 1986

Since the FPAs catered solely to the seine fishermen, it was the trap fishermen who most felt the squeeze created by MR establishment (seines and traps are rarely owned by the same individuals). In addition, the problems that seine fishermen encountered with yachts in FPAs generated an additional lack of support for the MRs. Reserves had not been delimited, since it was felt that the FPA conflict had to be resolved first.

For more than a decade, numerous attempts were made by relevant agencies such as the Department of Fisheries, the Soufriere Development Foundation, the Soufriere Fishermen's Cooperative, local dive operators, and yacht charter companies, to resolve these conflicts. A series of meetings had been set up between concerned parties to tackle particular issues as they arose. Many heated discussions resulted in recommendations and agreed actions. However, these only brought temporary calm to the situation, and were unable to yield long term solutions to the recurrent problems.

### **The New Approach**

In late 1992, three key agencies: the Soufriere Development Foundation, the Department of Fisheries, and CANARI, met to re-examine this prolonged situation and grasp for fresh, new approaches for resolving the continuing conflicts. During the subsequent thirteen months this new initiative was able to generate a "Preliminary Agreement on the Use and Management of Marine and Coastal Resources of the Soufriere Region" (SRDF, 1993), a product of negotiation and participatory planning between all relevant interest groups and agencies. The agreement apportions the coastal zone to allow myriad of desired coastal activities to coexist in such a way as to facilitate all users, but favours none.

As demonstrated by Figure 3, an eleven kilometer stretch of coastline has been subdivided into areas for the mooring of yachts, fishing (FPAs for seining, and trap/pot fishing within multiple use zones), scuba diving (permitted within MRs), snorkeling, and recreational bathing. In addition, some preliminary provisions have been established for use of the various areas (Appendix 1).

### **The Process**

The strategy involved a series of broad-based consultations and special focus meetings held in Soufriere between October 1992 and September 1993. Key elements included a combination of strategies used to ensure that user groups were able to negotiate on equal grounds and, through a process of compromise, generate a solution which would allow for sustainable use of the area.

The consultations were designed to receive inputs from all relevant user groups, national agencies and other interested parties (Appendix 2). Recommendations and agreements, therefore, reflected the interests and

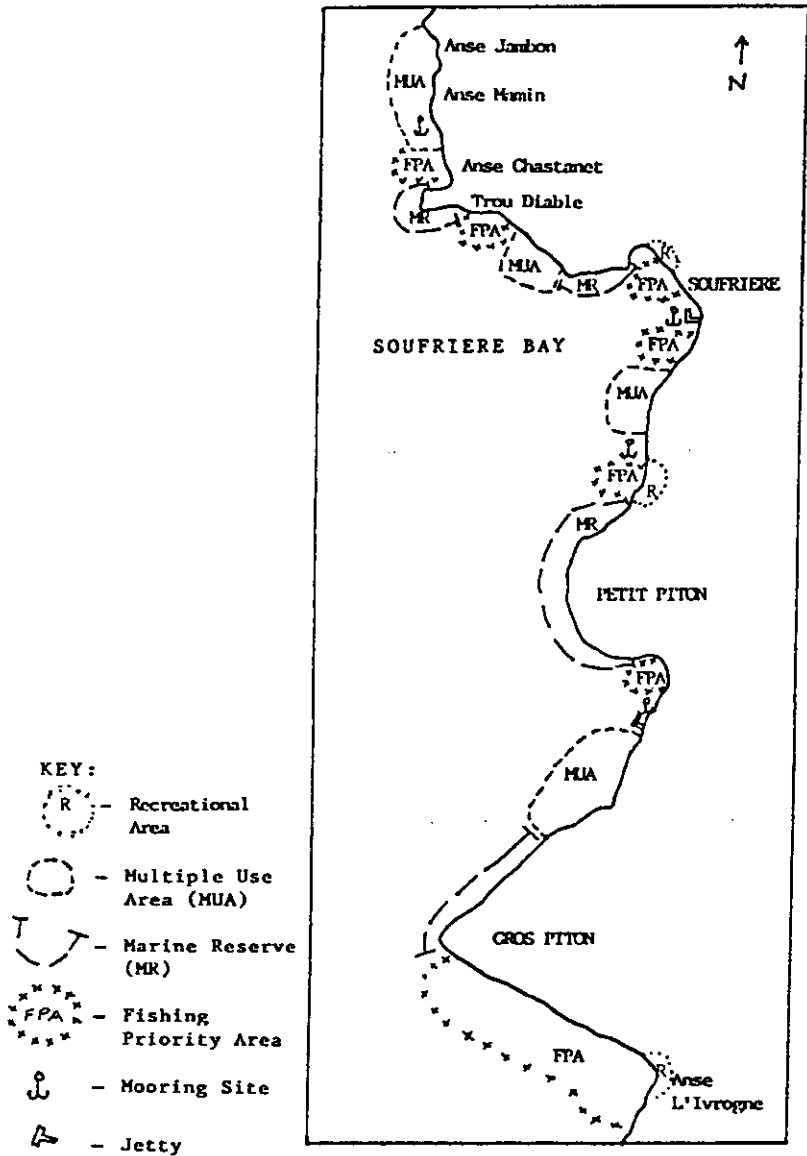


Figure 3. Zoning within Soufriere Marine Management Area

concerns of all parties and national policies for development and conservation. Given this arrangement, no one interest group was able to manipulate the process to serve its own goals exclusively.

Multiple representation was encouraged. Each interest group was invited to send a delegation of three to six participants. Thus, delegations became confident negotiating teams, with their recommendations and decisions more closely reflecting the interests of the entire group. In addition, multiple representation allowed for smaller working groups to comprise representatives from all major user groups.

Existing agreements and protected areas (MRs and FPAs) were ignored in an effort to start "with a clean slate" It was also recognized that local fishermen, although intimately familiar with the coastline, do not customarily relate to maps and hydrographic charts in contrast to yachters and divers. In order to facilitate the fishermen, the initial consultation took place from vessels, with all participants contributing towards a field exercise to identify and map the levels of conflict and areas of concern. A comprehensive and accurate graphic description of all relevant issues along the coast was constructed and provided the basis for further deliberations.

The working parties, each made up of representatives from all major user and interest groups then held focussed discussions on (a) the needs of the yachting and fishing communities, (b) the establishment of effective MRs, and (c) the issues of public access to beaches and land-based sources of pollution. Recommended actions were brought back to the larger consultation and final agreements and recommendations reflected the consensus of the entire group. A small committee produced a first draft of the Agreement which was reviewed by a third session of the consultation. The highly congested Anse Chastanet Bay and the FPA and mooring site in the northern corner of the Soufriere Bay warranted further examination, and this was achieved within special meetings.

A third draft of the Agreement resulted from the circulation of the revised document to all interest groups for their comments. This document has now been presented to the Cabinet of Ministers for their formal approval, recognizing that the support of policy makers will be instrumental to the effectiveness of the Agreement. Once approved, the task of implementation can be undertaken. This will include the provision of demarcation buoys, permanent moorings, recreational facilities, information signboards and brochures, and the employment of an Area Manager and Rangers. In addition a multi-agency Technical Committee has been recommended to oversee implementation of the Agreement.

User fees will be charged for diving within MRs and for mooring within the Soufriere area. This revenue should provide sufficient funds for covering recurrent costs. Donor agencies will be approached to cover the costs of initial

infrastructure. Thus, the effective management of the area should come at little cost to the Government of St. Lucia.

### **DISCUSSION**

Despite the relatively small coastal area governed by the Soufriere marine management agreement, the new system of access and utilization should significantly reduce the frequency and intensity of conflicts between resource users and therefore, facilitate future development. Once implemented, the effectiveness of this Agreement will require constant monitoring and possible revision. It is essential that both of these processes are carried out with the continued involvement of user groups. This would ensure their full understanding and support for further development of the marine management area.

The revived limits for the Marine Reserves will hopefully provide effective protection of the reef habitat. Although former stresses such as trap fishing will now be eliminated from these areas, the increasing levels of dive activity are of concern. Given that the majority of St. Lucia's dive sites are within the Soufriere area, there is urgent need to estimate the carrying capacity of each area and devise means to limit the direct and indirect impact of dive activity on the reefs. There is also need to estimate the degree of disturbance created by regular influxes of dive groups and its effect on factors such as fish growth and reproductive behaviour.

With the provision of additional FPAs and identification of areas for trap fishing the fishermen's support for the MRs is hopefully secured. If protected reefs areas can facilitate a gradual increase in fish biomass, improved catches may well be experienced by local trap fishermen. This would help to validate the benefits of such areas in the eyes of the fishing community.

Small islands often "lose" access to choice beach areas due to hotel development. Unfortunately, the features which attract local recreation also appeal to tourists. Even when public access is granted to such locations, waterfront structures and water sports activities often restrict use of the area by the local community. To guard against such marginalization, the management agreement seeks to reserve popular recreational areas for use by the public. Any future touristic development landward of such beaches will be required to recognize the public's right to have full access to the area. The effectiveness of these recreational zones will depend on the support of national policy makers and development authorities.

In conclusion, the achievements of the past sixteen months have brought significant hope for the future development of Soufriere. Ahead lies the task of implementing the agreement and assessing its effectiveness. Given the level of consultation and community participation which preceded this Agreement and is planned to form an integral part of the implementation stage, it is envisaged that



the coastal marine area of Soufriere will indeed be able to realise effective management.

**LITERATURE CITED**

Soufriere Regional Development Foundation. In press. *Preliminary Agreement on the Use and Management of Marine and Coastal Resources in the Soufriere Region*. Saint Lucia.

**Appendix 1**

**Provisions for Use of Soufriere Coastal Marine Area**

**Fishing:**

Fish traps will be used in such a way so as to avoid damage to reefs (including the use of floating attachment lines, legal mesh sizes, degradable panels).

No "missiles" shall be used while seining, and this activity will be confined to soft bottom areas. Only shallow fillet nets will be used over reef areas.

In areas where hotels delimit swimming areas within FPAs, a system of instant removal must be employed to insure immediate access by seine fishermen when necessary.

**Diving:**

Dive operators must assist in preventing deliberate or accidental damage to reef areas or fishing gears. Inappropriately set fish traps must be reported to the appropriate authorities, not moved.

Diver operators will record and provide statistics on dive activity within the management area. Dive operators will assist with reef monitoring.

All dives within MRs will be carried out exclusively with licensed dive operators.

**Yachting:**

Anchoring of yachts is not permitted within the Soufriere area. Yachts must use permanent moorings and jetties provided.

The existing Yacht jetty in the Soufriere bay will be upgraded to provide stern moorings, security, phone and information facilities.

The private Hummingbird Restaurant will be permitted to build a tender jetty to facilitate access to the property by yachters.

No sewage or solid waste can be disposed of within the marine management area.

**Appendix 2**

**List of Participating Interest Groups**

<b>AGENCY</b>	<b>No. PARTICIPANTS</b>
Soufriere Fishermen's Cooperative	7
Scuba diving operators	3
Soufriere restaurants and hotels	7
Yacht charter companies	2
Soufriere Water Taxi Association	2
Soufriere factories	1
Soufriere Town Council	1
Concerned citizens	2
Ministry of Planning	5
Ministry of Agriculture	3
Department of Fisheries	8
Ministry of Health	1
Ministry of Tourism	4
St. Lucia Tourist Board	4