

SOUFRIERE MARINE MANAGEMENT ASSOCIATION

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**CONFLICT RESOLUTION AND PARTICIPATORY PLANNING:
THE CASE OF THE SOUFRIERE MARINE MANAGEMENT AREA**

Soufriere is a picturesque rural town, located on the southwest coast of the island of St. Lucia. Because of its mountainous topography and relative isolation, the Soufriere region has not been part of the main transformations which have affected the rural economy of St. Lucia over the past few decades. Its agriculture is characterized by mixed crops produced on small to medium size estates and it supports a traditional artisanal fishing community.

In the recent past, Soufriere witnessed radical changes provoked by the growth of tourism in the coastal zone, and in the late 1980s and early 1990s, the multiplicity of uses and growing demand for scarce and fragile resources generated critical impacts and conflicts.

Over the years, management authorities have been aware of these issues and initiated a number of programs and measures aimed at addressing them; however, due to insufficient financial and human resources to effectively implement recommendations, conflicts continued to increase.

In 1992, the Soufriere Regional Development Foundation (a community based non governmental organization involved in facilitating development activities in Soufriere), initiated a planning process aimed at devising a plan to effectively address all concerns. It was agreed that the process should be fully independent and participatory.

The experimental nature of the exercise and its potential usefulness to other parts of the country and the Caribbean region was also recognized. Ultimately, all efforts from this new approach resulted in a system that contained details of a proposed Zoning Agreement (which included marine reserves, fishing priority areas, multiple use areas, recreational areas, and yacht mooring sites), legal provisions needed to manage individual activities such as fishing, diving, yachting, marine transportation, demarcation requirements, materials for user information, and training needs.

The zoned area was called the Soufriere Marine Management Area (SMMA) and was managed by the Soufriere Foundation with technical support from the Department of Fisheries, under the guidance of a Technical Advisory Committee (TAC) comprising key management authorities and user groups. The Soufriere Foundation was selected to serve as secretary to the TAC and the Department of Fisheries as the Chair. In 1995 the SMMA was formally established.

In 1997-8, the SMMA went through a period of relative instability, as some provisions of the original agreement were being questioned, and as conflicting needs and demands were being expressed by the parties involved. An institutional review resulted in the formation of a not-for-profit organization, the Soufriere Marine Management

Association' overseen by a board of directors consisting of the main stakeholders, and a broad-based advisory body which provides a forum for all stakeholders to express their needs, views and concerns.

1) BACKGROUND

Soufriere is a picturesque rural town, located on the southwest coast of the island of St. Lucia (see figure 1). This area is remarkable for the richness and diversity of its landscapes and natural resources, including mountains, rainforest, rivers, active volcanism and coral reefs. The area of coastline hereinafter described extends over 12 kilometers and presents a succession of beaches and cliffs, with the Soufriere Bay at the center. The town of Soufriere lies within that bay.

Because of its topography and relative isolation, the Soufriere region has not been part of the main transformations which have affected the rural economy of St. Lucia over the past few decades. Its agriculture is characterized by mixed crops produced on small to medium size estates and it supports a traditional artisanal fishing community. However, in the more recent past, Soufriere has witnessed radical changes provoked by the growth of tourism within the coastal zone.

Over the past two decades, tourism has grown significantly, with two large resorts, four smaller hotels, and a number of guesthouses and restaurants, many of them focusing on the diving and the yachting sectors.

Maritime transportation remains important and an increasing number of day charter boats and water taxis bring large numbers of visitors from the northwest (tourism belt of the island) to Soufriere.

In the late 1980s and early 1990s, the multiplicity of uses and growing demand for scarce and fragile resources generated critical impacts and conflicts. The main environmental problems prior to the establishment of the SMMA can be summarized as follows:

- Degradation of coastal water quality, with direct implications for human health and for the protection of the reef ecosystem;
- Depletion of near-shore fisheries resources;
- Loss of the economic, scientific and recreational potential of coral reefs, particularly in the context of diving tourism;
- Degradation of landscapes and general environment quality, notably on or near beaches; and
- Pollution generated by solid waste disposal in ravines or directly in the sea.

Problems of resource management in turn manifested themselves in growing conflicts among users of the resource, particularly the following:

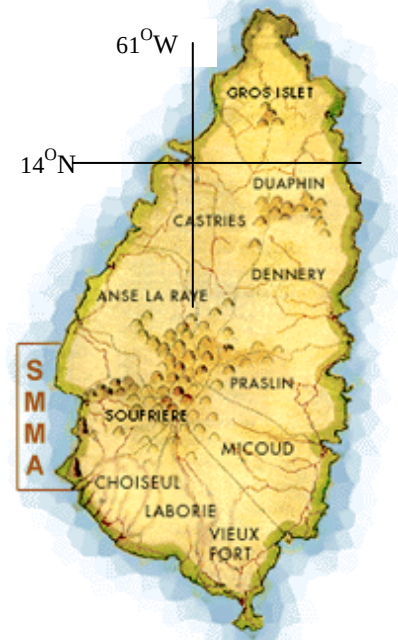


Figure 1 – Location of SMMA

- Conflicts between commercial dive operators and fishermen over the use of, and the perception of impact on the coral reefs;
- Conflicts between yachtsmen and fishermen because of anchoring in fishing areas;
- Conflicts between the local community and hoteliers over the access to beaches;
- Conflicts between fishermen and authorities at both the local and national levels over the location of a jetty in a fishing priority area;
- Conflicts between fishermen and hoteliers over the use of the beaches for commercial fishing or recreational, tourism oriented activities.

Over the past decade, relevant institutions, notably the Department of Fisheries, Ministry of Agriculture, Forestry and Fisheries, have been aware of these issues, and have initiated a number of programs and measures aimed at addressing them. These efforts included the legal establishment of Marine Reserves and Fishing Priority Areas, the provisions of support to the local Fishermen's Cooperative, the delivery of training and extension services, and enforcement of national regulations following the adoption of the new Fisheries Act in 1984. However, due to the lack of funds for demarcation of declared areas, proper enforcement of rules, and the fact that delimitation of reserves was based on resource distribution with too little consideration for the socio-economic consequences for the fishers, conflicts continued to increase.

2) THE CREATION OF THE SOUFRIERE MARINE MANAGEMENT AREA (SMMA)

a) The process

It is against this background that a conflict resolution process was initiated in July 1992, to attempt to effectively address the many issues affecting users of marine and coastal resources in Soufriere.

The decision of engaging in such a process was taken at a meeting convened by the St. Lucia National Trust as part of its national consultation on the formulation of a plan for a System of Protected Areas for St. Lucia. The participants recommended that a process of consultation be started in Soufriere. The need for consultation was reinforced by the USAID funded ENCORE Project which, in considering a proposal for demarcation of the existing Marine Reserves and Fishing Priority Areas submitted by the Department of Fisheries, recognized that delimitation could not effectively be undertaken in the present climate of conflict and resource degradation.

Thus, in late 1992, the Soufriere Regional Development Foundation (SRDF) (a community based non-governmental organization involved in facilitating development activities in Soufriere), having identified all involved parties, initiated a planning process aimed at resolving major marine resource use conflicts and arriving at a consensus on use location and priorities.

It was agreed that the process should be fully independent and participatory. The experimental nature of the exercise and its potential usefulness to other parts of the country and the Caribbean region was also recognized.

In response, a series of consultations/meetings/research activities were conducted and these resulted in an agreement which contained details for a proposed zoning arrangement comprising marine reserves, fishing priority areas, multiple use areas, recreational areas, and yacht mooring sites (see Appendix); in addition to legal provisions needed to manage individual activities such as fishing, diving, yachting, marine transportation, demarcation requirements, materials for user information, and training needs.

The proposed zoned area was called the Soufriere Marine Management Area (SMMA) and was to be managed by the SRDF with technical support from the Department of Fisheries, under the guidance of a Technical Advisory Committee (TAC) comprising key management authorities and user groups. The SRDF was selected to serve as secretary to the TAC and the Department of Fisheries as the Chair.

In November and December 1993, the agreement was presented to the Ministers of Agriculture and Tourism, as well as the District Representative for the Soufriere area. In consultation with all parties, it was agreed that the Minister of Tourism would submit the agreement to the Cabinet of Ministers for endorsement. This was done in February 1994 and shortly after, the SMMA was formally sanctioned by the Cabinet of Ministers.

On the basis of Cabinet's decision, the SRDF and the Department of Fisheries took the lead in ensuring the implementation of the agreement, with work focusing on three main directions:

- establishing appropriate institutional arrangements, centered around the creation and operation of the Technical Advisory Committee (TAC);
- preparation of a management plan;
- searching for financial and technical support, notably through the French Mission for Technical Cooperation and the ENCORE Project of the Ministry of Planning of the Government of St. Lucia.

b) The outcome

The TAC recognized that detailed operational mechanisms for the Agreement were now required to ensure effective implementation and operation of the SMMA. As such, the TAC created a Technical Working group (TWG) comprising an SMMA Manager (the first person hired under the SMMA initiative), the Department of Fisheries, the Caribbean Natural Resources Institute (CANARI), with other technical experts co-opted as necessary, to formulate a management plan for the area (including budgetary matters).

The TWG organized a 3-day workshop to generate the management plan for the SMMA. The TAC members, along with other local experts and a small number of regional experts

actively involved in marine park management, participated in the event. Funding agencies already involved in supporting the SMMA were also present.

The management plan produced defined the institutional arrangements and responsibilities, revenue sources (including specific fees to be charged for various categories of users, systems of fee payment and collection), job responsibilities and skills required for four rangers and the SMMA manager, specifics of infrastructure needed (demarcation and mooring buoys, demarcation signs), systems for monitoring the resource base and levels of resource use, surveillance, maintenance, and public awareness needs.

With funding assistance from the USAID ENCORE Project for demarcation of all marine reserves within the SMMA; the French Government through the French Mission for Co-operation for moorings, a patrol boat and communications equipment for the SMMA office, and salaries for the manager and wardens for an initial three month period; and the Caribbean Conservation Association, through a regional marine park development programme, contributing to marine resource monitoring and public awareness literature, the SMMA was ready for official launching in June of 1995. The event took place in Soufriere and highlighted the objectives and operations within the SMMA.

c) Financial arrangements

Funds from external sources were sought to cover initial operating costs, however, one of the stipulations given by the Government was that the SMMA become self-financed in the near future. Thus, a user fee system was developed and implemented.

After about three years of operation the SMMA became self-sufficient in terms of finances for day-to-day operations. In 2001, user fees (snorkel, dive and mooring fees) accounted for approximately 98% of the revenue generated by the SMMA and other sources (provision of resources to researchers, mooring/buoy installation projects, donations, souvenir sales and grants) accounted for about 2%.

d) Resource status

Apart from regular monitoring activities which include measuring sedimentation rates, water clarity, water Salinity; recording fish landings; and participation in the international ReefCheck Programme, two major studies were carried out: 1) a cooperate research venture under the direction of Dr. Bruce Hatcher from CFRAMP (CARICOM Fisheries Resource Assessment and Management Programme)/Dalhousie University, Nova Scotia, Canada, Dr. Wayne Hunte, McGill University, Canada and Dr. Hazel Oxenford, University of the West Indies, Barbados carried out a study entitled 'Soufriere Experiment in Reef Fisheries Sustainability' (SERFS), and 2) Reef fish stock assessments were carried out by a scientific team led by Dr. Callum Roberts from the University of York, England. Both studies investigated the role of marine reserves in reef fishery sustainability.

Fish stock assessments

As part of the SERFS the team of Hatcher, Hunte and Oxenford undertook experiments to test the mechanisms by which marine reserves export post settlement (adult) fishes to adjacent non-reserve areas (Hatcher et al 1995). Mean dispersal distance was found to be only to be only 50 meters (Coreless et al 1996). These results showed that there was negligible export of potential fish biomass from reserve areas at the time. What remained to be seen was how mean displacement (movement) would change as density within the SMMA increase.

Dr. Roberts monitored fish stocks annually from 1994 to 2000 in reserves and fishing areas. After the third annual census of the status of coral reefs within the SMMA, overall findings showed increases in stocks of commercially important species across the board, with especially strong increases in marine reserves, suggesting that management efforts were beginning to pay off (Roberts et al, 1997). Further, catch per trip and catch per pot for catches outside of marine reserves increased significantly from 1995/6 to 2000/1 (Gel et al, 2001).

Reef Health

Land-based sources of pollution, especially as it relates to sedimentation, pose a continued threat to the reef systems within the SMMA. In late 1996, an unnamed storm caused severe sedimentation in the nearshore, causing some damage to reef areas within the SMMA. In 1994, Tropical Storm Debbie caused extensive damage to reef systems, and the additional flooding of the town of Soufriere caused major concerns for the Soufriere population. In an attempt to prevent future flooding, the river as straightened and retaining walls constructed along both sides. Unfortunately, such shortsighted planning has contributed to the sediment problems since the natural river bends, which allowed settlement of sediment, were removed. More recently, Hurricane Lenny (1999) contributed to the loss of over fifty percent of live coral cover on one reef in the SMMA.

To address land-based sources of pollution the Government of St Lucia has initiated a number of relevant programs. One such initiative is the establishment of coastal zone management policies and guidelines (including establishment of appropriate institutional arrangements) to facilitate an integrated and coordinated approach to coastal zone management. Among other, other relevant initiatives include the drafting of new legislation to address solid and liquid waste issues; enactment of a new physical planning act that provides a legal basis for environmental impact assessments; and adopting an integrated development planning approach that would facilitate public participation in the planning process.

4) RESULTS AND LESSONS LEARNED

a) Conflict management

Key to the SMMA's success in managing conflicts on an on-going basis is the very close contact which exists among user groups, and between them and SMMA management. The SMMA plays the role of a facilitating link between the user groups, and not an enforcement agency.

For of a variety of reasons, it at times became necessary for the SMMA to assist one group in formalizing or vocalizing its concerns, but it is essential for the SMMA to remain and be perceived as being fair.

The SMMA has shown that two essential conditions for conflict management are:

- Direct participation of resource users: community institutions do not always provide adequate representation and because stakes/interests often vary from individual to individual direct participation of users has been vital to the process.
- Direct communication among stakeholder groups, for example, by allowing fishers to directly address conflicting interests with others, such as divers or yachts people: this seeks to empower these parties and enhance their ability to resolve conflicts with others, in addition to strengthening their ability to actively participate in the management process.

b) Communication and public sensitization

Although considerable progress has been made (e.g. balancing between enforcement of rules and regulations and public relations, establishment of a newsletter, internet web-site, etc.), effective communication among stakeholders, community groups and other involved parties remains critical. Therefore, it is essential that there are ongoing education and sensitization efforts, targeting the various user groups.

c) Involvement/support of self-regulating user groups/institutions

Support needs to be given to strengthen local, self-regulating institutions namely the Fishermen's Cooperative, St. Lucia's dive association - Anbaglo, and the Water Taxi Association. The latter being particularly dependent on better recognition by government authorities. Notably, the role of true representation of the sectors of each group cannot always be fulfilled.

d) Institutional arrangements

Over the first four years of operation the SMMA proved to work as long as the principles of participatory planning were followed. Political circumstances threatening the survival of the institution could be dealt with because of the strong commitment among the various stakeholders. However, since the existence of the SMMA was originally

established by a series of Cabinet Conclusions and not by legislation, the institution was very vulnerable to outside interference.

In 1997 and early 1998, the SMMA went through a period of relative instability, as some provisions of the original agreement were being questioned, and as conflicting needs and demands were being expressed by the parties involved.

To a large extent, these problems confirmed that the institutional arrangements, which were originally put in place, were not fully adequate and that there was need for a systematic review, in order to identify options and solutions.

A formal review concluded that the following issues contributed to the problems the SMMA was facing:

- Neither the original “Agreement” nor the management plan prepared in 1994 indicated the purpose and goals of the SMMA, and it appeared that there had never been any clear consensus on the matter. This lack of a common understanding and vision likely substantially contributed to the disagreements and misunderstandings that occurred among the different stakeholders in the first four year of operation.
- The Fisheries Act and Cabinet Conclusions did not provide an adequate legislative basis for management and regulation.
- The Agreement was meant to address conflicts through the zoning of uses; however, the Agreement was not a formal contract, and therefore, was not binding upon the parties involved. Furthermore, the lack of a formal process to allow for review and revisions of the Agreement invited ad hoc proposals and adjustments and because of the deficiencies in the policy framework, the stakeholder groups increasingly turned to the political directorate for assistance in resolving conflicts.
- The Management Plan of the SMMA, although approved in principle by Cabinet in November 1995, was never regularly used as a management tool, and not all members of the TAC were fully familiar with its contents.
- The TAC evolved over time into a body that was too large to function effectively in the role it was originally given. It also proved to be an ineffective forum to allow equitable stakeholder representation, as was indicated by the many negotiations that had taken place among various parties outside of it.
- Internal changes of the SRDF upset the balance between government and the community in the management of the SMMA, and it became clear that there was some uncertainty about roles of both the Department of Fisheries and the SRDF.
- The SMMA affected a number of user groups, both negatively and positively, to varying degrees, but there was no process to weigh and balance these against environmental impacts in order to make creative and effective management decisions.

5) NEW INSTITUTIONAL ARRANGEMENTS

a) Guidelines for institutional arrangements

After the review process, stakeholders developed a consensus on how the SMMA should be structured and how it should operate. In this regard, several guidelines for the new institutional arrangements were surmised:

- It should be guided by a clear mission that includes management of the marine and coastal resources of Soufriere for sustainable use, equitable distribution of benefits, participation of stakeholders, and ongoing management of conflicts.
- Its legal base should be clear and strong, and should cover all its management functions.
- Its management structure should be transparent and politically, institutionally, and financially autonomous.
- Management objectives and programmes should be oriented towards development and promotion.
- Government agencies should retain their statutory authority and responsibilities when operating within or providing support to the SMMA.
- There should be active collaboration with relevant institutions and provisions for ongoing stakeholder consultation in decision making.
- Day to day management and enforcement should be locally based.

b) Mission statement

The SMMA adopted a new mission statement:

The mission of the Soufriere Marine Management Area is to contribute to national and local development, particularly in the fisheries and tourism sectors through management of the Soufriere coastal zone based on the principles of sustainable use, cooperation among resource users, institutional collaboration, active and enlightened participation, and equitable sharing of benefits and responsibilities among stakeholders.

c) Legal basis and present institutional arrangements

As a result of this review, new arrangements were put in place, with the following features:

- the Soufriere Marine Management Area remains the portion of coast between Anse l'Ivrogne in the south and Anse Jambon in the north, from the shore to a depth of seventy-five meters;
- zoning and regulations were maintained;

- this area was established as a Local Fisheries Management Area under the provisions of the Fisheries Act;
- the management of the area is governed by a new agreement, which was negotiated among the members of the TAC, and which defines the vision, mission, objectives, regulations, zoning, programmes and institutional arrangements of the SMMA;
- the TAC and TWG were made obsolete;
- the coordination of management is now the responsibility of a new organisation, called the Soufriere Marine Management Association which was established as a not-for-profit company under the Companies Act.

The Association comprises all the agencies that have a demonstrated management function in the Area as the Board of Directors:

- Five community and non-governmental organisations (the St. Lucia Dive Association, the St. Lucia Hotel and Tourism Association, the Soufriere Fishermen's Cooperative, the Soufriere Regional Development Foundation and the Soufriere Water Taxi Association);
- Five government agencies (the Ministries of Planning, Fisheries and Tourism, the National Conservation Authority, and the St. Lucia Air and Sea Ports Authority);
- The member of Parliament representing the Soufriere constituency
- One person with proven knowledge and experience in the field of development and management, appointed by the Cabinet of Ministers upon the recommendation of the Minister of agriculture, Forestry and Fisheries for renewable periods of two years, to serve as President.
- The Association was made a Local Fisheries Management Authority for the SMMA under the provisions of the Fisheries Act.
- A Stakeholder Committee serves as a broad-based advisory body that provides a forum for all stakeholders to express their needs, views and concerns. Matters/issues arising out of Stakeholder Committee meetings are brought to the Board of Directors for address.

6. OUTSANDING MATTERS

a) Enforcement

Unclear and inefficient structures for the enforcement of regulations within the SMMA are an important concern to users of the Area and institutions involved in management. There is general agreement that local response to incidents must be improved. The problem stems from the current manpower and equipment constraints of the Marine Police and the local Soufriere Police Department. There is still a lack of consensus over the role that the SMMA rangers can and should play in enforcement: one view is that

their role should largely be preventive, while others see the need for the rangers to have greater enforcement authority, including the powers of arrest. Despite this, the rangers have been trained and some certified as special constables.

Avenues will be pursued to discuss among the major parties involved (Attorney General's Chambers, Marine Police Unit, Soufriere Police Department, SMMA, Water Taxi Association, Department of Fisheries) to determine a structure for law enforcement that addresses the current problems, specifies respective roles and authorities, and identifies additional resources that may be required.

b) Communications Plan

A September 1995 assessment of communication within the SMMA and a July 1996 survey of perceptions of the SMMA revealed that poor information flows contribute to a lack of compliance with the Area's regulations and to mistrust of authorities and their motives by members of the wider Soufriere and St. Lucia communities.

The following six issues were identified as the main communication problems facing the SMMA:

- Insufficient understanding of the SMMA and its purpose and goals by members of the various user groups, law enforcement agencies and officers, and the general public.
- Insufficient understanding of the need for and significance of boundaries within the SMMA, by commercial and recreational users, including: fishermen, especially pot and subsistence fishermen.
- Poor information flows between the management of the SMMA and the surrounding communities, including the town of Soufriere, partly because representatives of the various sectors on the defunct Technical Advisory Committee (TAC) did not function effectively.
- Lack of understanding by the Soufriere community and the general public in St. Lucia of the ecological and economic benefits of coastal/marine resources.
- Insufficient flow of research data and scientific information to the Soufriere community, the schools, the management of the SMMA and the general public in St. Lucia.
- Soufriere, and St. Lucia as a whole, are receiving bad publicity internationally, notably in the yachting sector, because of harassment of tourists and crime.

A communication plan was developed for the SMMA to address specific communication deficiencies that were identified during the 1995 and 1996. The plan recommends strategies and actions to address identified problems; however, despite a number of public awareness and communication activities taking place over the years, financial constraints have prevented the full implementation of this plan.

7) CHALLENGES AND POTENTIAL CONFLICTS

Currently, although the SMMA is recognized by most, the level of recognition by planning authorities is still not yet enough to ensure that proposed developments for the area are supportive of the system and not a threat. Over the years, a number of development plans have been proposed for the Soufriere waterfront and bay to enhance the area for benefit by the tourism industry. Some of these developments have never been realized, but of those that were, the impacts that were created presented the SMMA with some serious challenges. More recently, a large hotel has been proposed for the Malgretoute area and a marina, catering to the yachting sector, is planned for the Soufriere Bay.

Notably, the SMMA continues to evolve to meet new challenges, but it is yet to be seen how the system weathers the impacts of these newly proposed and future developments for the Soufriere waterfront and bay, and the continued threat from land-based sources of pollution.

8) DOCUMENTATION USED IN THE COMPILATION OF THIS PAPER:

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APPENDIX

