

Centre for Resource
Management and
Environmental Studies



University of the West Indies
Barbados

Projects
Promotion Ltd.

St. Vincent and the
Grenadines

Supported
by the:



Carriacou
Environmental
Committee

Carriacou, Grenada

Caribbean
Conservation
Association



Barbados

THE SUSTAINABLE GRENADINES PROJECT

**SUSTAINABLE INTEGRATED DEVELOPMENT AND BIODIVERSITY CONSERVATION IN
THE GRENADINE ISLANDS**

Annual Workplan for 2006



Project Implementation Unit
Clifton, Union Island
St. Vincent and the Grenadines
November 2005

CONTENTS

1	Introduction	2
2	Training courses (NGO Capacity building)	2
2.1	Group Development for NGOs	2
2.2	Record keeping for NGOs	3
2.3	Conflict management for NGOs	3
2.4	Proposal Writing	3
3	Planning workshops	3
3.1	Boat building skills	4
3.2	Fisherfolk comanagement	4
3.3	Green hotels in the Grenadines	4
4	Attachments and EXCHANGES	5
4.1	MPAs attachment for community groups	5
4.2	Boat building training program	5
4.3	Fisheries management for fisherfolk	5
5	Mini-projects	6
6	Associated projects	6
6.1	Water taxi project	7
6.2	CCA people and corals in primary schools	7
6.3	MPA Management Effectiveness	7
6.4	Green schools	7
6.5	The OECS Protected Areas and Associated Livelihoods Project (OPAAL)	7
6.6	Reef Check	7
6.7	Marine space use plan for the Grenadines	7
6.8	Restoration and sustainable use of Ashton Lagoon: Participatory planning phase I	8
7	Communications and networking	8
7.1	Newsletter	8
7.2	Internet discussion group	8
7.3	Media releases	8
7.4	Website	9
7.5	Project overview booklet	9
8	Other activities	9
8.1	Conference participation	9
8.2	Steering and Executive Committee Meetings	9
9	Schedule	10
	Appendix 1: Stakeholder consultations for 2006 workplan	11
	Appendix 2. MPA management effectiveness project	15
	Appendix 3. An Integrated Spatial Information System (ISIS) for Management of Marine Space Use in the Grenadines	16

Cover photograph: The fisheries Complex in Canouan

Correct citation:

Sustainable Grenadines Project. 2005. Sustainable Integrated Development and Biodiversity Conservation in the Grenadine Islands - Annual Report for 2005. Clifton, Union Island, St. Vincent and the Grenadines. 20 p.

1 INTRODUCTION

This workplan covers the period January 1st, 2006 to December 31st, 2006. It is based on activities identified during Phase 1 of the project that were documented in the strategic plan, continuation and further development of activities carried out during the first year of Phase 2 of the project as described in the Annual Report for 2004-2005. It is also informed by stakeholder consultations throughout the Grenadines carried out by the Project Manager and Project Administrator during October and November 2005 (Appendix 1).

The workplan presents proposed activities in the categories that were provided in the project proposal and budget. These include:

- Training courses
- Planning workshops
- Attachments and exchanges
- Mini-projects
- Associated projects
- Communications and staff activities.

2 TRAINING COURSES (NGO CAPACITY BUILDING)

In the Grenadines there are numerous organizations - NGOs, CBOs and Social groups. Most of these organizations are strongly committed to making a difference with regard to sustainable development in the Grenadines but are not quite clear on what is required of them in order that their organizations can have longevity and success. It is therefore paramount that training and capacity building be offered to strengthen these organisations. Four areas of interest for strengthening were identified by the Grenadines organizations consulted during the stakeholder Mission for 2006:

- Group Development -- including Group dynamics and public relation capacity within groups,
- Record keeping,
- Conflict management for NGOs and
- Proposal writing.

The initial project proposal included short-term training courses as a major component of capacity building for NGOs. Over the first year of the project, it has become apparent that there needs to be a more flexible, adaptive approach to strengthening NGOs in the Grenadines. With a view to going beyond the initial training concept, the group development activity below has been conceived primarily as an ongoing activity in which to engage and strengthen groups. It is therefore proposed that some of the training funds be used for this purpose. The other three activities are actual training courses for which there is perceived to be a demand.

2.1 *Group Development for NGOs*

The group development activity should include organisational assessment and development of an organisational strengthening plan for each NGO. The approach that is proposed is based on methodology used by The Nature Conservancy¹. It is a rapid process that at first takes a day,

¹ TNC. 2001. Institutional self-assessment: a tool for strengthening nonprofit organizations. The Nature Conservancy, Arlington, Virginia (http://nature.org/summit/files/self_assmt_en.pdf)

and is then followed up at regular intervals (quarterly) to see what progress is being made. In the past year it was used by TNC for CEC and MEDO and provided useful insights for these organisations. It is proposed that the SG Project and TNC collaborate to carry out an organisational assessment and develop a strengthening plan for a Grenadines NGO in each month of the coming year. The PM would undertake six of these and the PA another six. It is proposed that the funds for this activity be a combination of those allocated for training courses and regional travel. The PM and TNC are presently developing a proposal for these activities and exploring other funding possibilities.

The group development activity may also be pursued by bringing resource persons from locally established groups to share various strategies of group development with the NGOs. Various group development approaches that may also be promoted include collaboration among groups with similar interests within each island and across the Grenadines. Groups may be encouraged to merge with other groups to reduce the number of struggling NGOs or to form a network whereby they are island chapters of a larger Grenadines group.

The Executive Committee also proposed that mini-projects be awarded to groups on the condition that they are willing to undergo this type of assessment and planning process. In this way the mini-project funds can have a greater impact on NGO capacity building and strengthening than has been the case to date.

2.2 Record keeping for NGOs

Organizations will be invited to send two persons preferably the Treasurer and Assistant Treasurer to the training workshop. The expected number of participants will be about 30. The main training to be provided will be on simple bookkeeping and accounting for non-profit organizations. However, there will be some attention provided on how to build institutional memory by keeping accurate records of meetings, organisational correspondence and activities.

2.3 Conflict management for NGOs

The training that will be provided in this workshop will promote the skills required for collaboration among stakeholders. It will include the causes of conflict, how to deal with anger, how to understand blocks to communication and how to mediate a dispute between two parties. Participants will be drawn from the groups' presidents or chairpersons, secretaries, committee members or other interested persons.

2.4 Proposal Writing

Most organizations in the Grenadines are involved in some form of project development where members are involved in community activities. These groups have many excellent ideas for development projects that will contribute to the enhancement of their community and the island as a whole. However, some of these projects are poorly developed as recognised from the mini-project proposals received over the last two years. Most groups lack the capacity to develop proposals to gain support from many funding agencies. However, groups have recognised the need for proper proposal writing and wish that this area be developed to enhance their ability to access funding.

3 PLANNING WORKSHOPS

Three facilitated planning workshops are proposed. They will be for one to two days each at locations to be decided on later.

3.1 Boat building skills

In the Grenadines boat building is a socio-economic activity of cultural significance which lacks proper organization. Boat building supports the livelihoods of many coastal families. However, its future is uncertain. Boats are built for many different reasons such as, fishing, sailing, water taxis and trading. This practice has proven to be the means of survival for many families in the Grenadines and with its disappearance the struggle to survive will become more difficult.

Representatives from the active boat builders and fishers will be brought together to have open discussions and to share ideas and views about the importance of and approaches to maintaining the industry. Linkages with the tourism industry, understanding the skills necessary for developing the art and setting-up a boat builders organization in the Grenadines, networking and solutions to trans-island barriers will also be discussed.

The following are the expected outputs of the workshop:

- More awareness and appreciation for boat builders, and sailors in the Grenadines
- Project development activities that will improve the capabilities of boat builders
- Harmonisation of boat builders within each island
- A network of boat builders in the Grenadines.

3.2 Fisherfolk comanagement

This planning workshop is carried over from the 2004-2005 workplan. The small size and limited resources of the Grenadine islands means that fishing is one of the most important forms of livelihood for many inhabitants of these islands. The marine and coastal resources are so crucial for sustainable livelihoods that if not properly managed and protected, there will be a gloomy future for many Grenadines people. Hence, there is the need to foster a sense of shared responsibility for management and decision-making regarding these limited resources.

Fisherfolk leaders in the Grenadines will be brought together to discuss the ways in which fisherfolk can participate in. Discussions will explore some of the areas that could be comanaged and the level of interest among fisherfolk in doing so. They will also explore what mechanisms need to be put in place in order for them to be part of the decision-making process and the level of involvement they are willing to accept. Comanagement may also relate to the participation of fisherfolk in managing the shore-based facilities that have been constructed in various Grenadine islands.

The expected outcomes are:

- Fisherfolk will have greater involvement in the management of their fishery,
- They will gain understanding and appreciation for comanagement and their role in it,
- There will be integration and communication among existing fisherfolk organizations in each island,
- Needs and plans for establishing and/or strengthening fisherfolk organisations will be identified as a basis for project development

3.3 Green hotels in the Grenadines

The purpose of this activity would be primarily to promote sustainable environmental practices in Grenadines hotels and guest houses and secondarily to engage them in the SG Project and sustainable development issues in general. There are over 50 such establishments in the Grenadines, most of which are small and right on the coast. Of 22 establishments contacted, 15 indicated that they were interested in this approach. The approach would be to gather basic information on current practices then convene a workshop to review this information and to

develop a project to address the issues that are found. Many of the improved practices are also cost-saving.

The activity will also introduce the Green Globe and other similar schemes. It will be carried out in collaboration with the Tourism Associations and Ministries of the two countries as well as with regional agencies that are involved in sustainable tourism. CERMES would contribute staff/student time to carry out and report on the survey. Sustainable Grenadines Project would contribute the usual planning meeting amount towards the workshop and staff time for coordinating the trip and planning the workshop, plus office space for the persons while in the Grenadines. The funds to carry out the survey are being sought from OAS and ACS. Several establishments have indicated their interest in participating in this initiative.

This initiative will:

- Produce a proposal for a project that will be used to seek funding
- Generate a considerable degree of awareness among hoteliers
- Identify and communicate easily implementable activities to reduce impacts and footprint.

4 ATTACHMENTS AND EXCHANGES

Attachments and exchanges provide a valuable way for organizations to gain practical experience in operational management. There are plans to develop a number of comanaged MPAs in the Grenadines for example the Tobago Cays Marine Park and the Sandy Island-Oyster Bed in Carriacou. Existing fisheries complexes are located in many of the islands. Boat building can be seen throughout the islands. There are also coastal ecosystems especially mangrove in almost every island and these have served to benefit fishermen, the coastal environment and wild life. However, its importance is not appreciated by many community persons. Therefore, attachments in these areas mention below will be provided for individuals from these organizations. Others will be determined on the basis of need as identified during the year.

4.1 MPAs attachment for community groups

Individuals from MEDO, CEC and/or other organizations with an interest in comanaging MPAs in the Grenadines will be attached to SMMA (St. Lucia), Scots head Marine Park (Dominica) or some other comanaged MPA. These persons will gain an understanding of how these parks can enhance sustainable livelihoods for community members. They will also understand how these parks are effectively comanaged.

4.2 Boat building training program

Boat builders from the various communities throughout the Grenadines will have an opportunity to gain hands-on experiences on some of the techniques used to build boats in other islands. The details of these attachments will be derived from the planning workshop above.

4.3 Fisheries management for fisherfolk

Individuals from the various fishing communities in the Grenadines will be able to visit an appropriate fishing complex in the region and SVG or Grenada to understand their operation and to gain knowledge on what can be done to enhance fisheries in their communities. The details of these attachments will be derived from the planning workshop above.

5 MINI-PROJECTS

Mini-project proposals were received from 13 NGOs. They are listed in Table 1 and details are given in the mini-projects document which is provided separately.

Table 1. List of mini-projects submitted for consideration

	Project Name	Organisation	Island
1	Bequia Harbour and Beaches Cleanup and Enhancement Project	Bequia Tourism Association	Bequia
2	La Pompe Enhancement Project	La Pompe Community Support Group	Bequia
3	Fisher folk Re-education project for Lobster Enhancement	Canouan Sailing Club	Canouan
4	Revitalization of the Sailing Tradition	Canouan Sailing Club	Canouan
5	Computer Laboratory and Resource Centre	Concern Citizens of the Northern Area of Carriacou	Carriacou
6	Big Pond Ecological Amenity Project	Bayaleau Development Committee	Carriacou
7	Paradise Beach Development & Enhancement Project	L'Esterre, South Striders Social Club	Carriacou
8	Mt. Pleasant Government School Landscaping Project	Mt. Pleasant and Grand Bay Community Development Organisation	Carriacou
9	Esplanade Development and Beautification Project	Dover Government School	Carriacou
10	Petite Martinique Island Markers	Petite Martinique Catholic Youth Group	Petite Martinique
11	Ablo Beach Enhancement	Union Island Environmental Attackers	Union Island
12	Project Hope	Young Help Strider 4H Club	Union Island
13	Mangrove Enhancement Clean-up Campaign	Christ is the Answer Youth Group	Union Island
14	Nature Watch	Union Island Scout Troop	Union Island

6 ASSOCIATED PROJECTS

One of the purposes of the Sustainable Grenadines Projects is to develop projects with local, regional and international partners that will bring further funding and opportunities to the Grenadines. This will increase the value of the project beyond the funding provided by The Lighthouse Foundation.

Below are four projects in various stages of development that are seen as being valuable for the Sustainable Grenadines Project to pursue. It is expected that others will emerge during the year, especially from the two planning workshops.

6.1 Water taxi project

This project is being implemented by CEC in collaboration with the two water taxi associations, Counterpart Caribbean, CERMES and the Sustainable Grenadines Project as described in the 2004-2005 Annual Report. In 2006, the Sustainable Grenadines Project will continue to play a supporting role in this project by providing office space, coordinating activities and contributing to the capacity building training activities planned for this project. Documentation on planned activities is available to SC members on request.

6.2 CCA people and corals in primary schools

This project funded by the US National Fish and Wildlife Foundation (NFWF) will be implemented jointly by CERMES and the SG Project during 2006. The project will: put the Caribbean Conservation Association (CCA) workbook "People and Corals" in all Grenadines primary schools; provide training for teachers in how to apply the book and monitor use of the workbook by teachers and students. Most of the funds will be used to purchase the books. The SG project will coordinate the training workshop and oversee the monitoring and evaluation.

6.3 MPA Management Effectiveness

CERMES has acquired a grant from US NOAA to examine management effectiveness in three Caribbean MPAs: Belize — Sapodilla Cays Marine Reserve; Jamaica — Negril Marine Park; St. Vincent and the Grenadines — Tobago Cays Marine Park, using the 'How is your MPA doing' manual (Appendix 2). The SG Project will collaborate with this project with regard to the TCMP aspect. Its input will be primarily in the area of stakeholder liaison.

6.4 Green schools

The Concept paper for the Green Schools Project has been submitted to Mustique Island Company for consideration. If funded, in whole or in part, implementation will begin with the first phase as described in the Annual Report appendix.

6.5 The OECS Protected Areas and Associated Livelihoods Project (OPAAL)

This project will have a subproject that focuses on the establishment of the TCMP. The SG Project participated in two planning meetings for this subproject last year and is seen as having an important role to play in promoting, and building stakeholder capacity for, participation.

6.6 Reef Check

PADI Aware has invited CERMES to apply for funds to continue Reef Check training in Canouan, Carriacou and Petite Martinique. This is mainly for actual costs. CERMES will provide manpower and it is expected that the SG Project will provide a base, as it did before.

6.7 Marine space use plan for the Grenadines

CERMES and TNC are collaborating to begin developing a marine space use plan for the Grenadines. The proposal for this activity was circulated to the first EC Meeting in 2005. Owing to the departure from CERMES of graduate student Newton Eristhee, who was going to carry out the work, this activity has been delayed. It is expected to be taken up again early in 2006. The revised proposal is provided in Appendix 3.

6.8 Restoration and sustainable use of Ashton Lagoon: Participatory planning phase I

This project is being led by the Society for the Conservation and Study of Caribbean Birds². The SG Project proposes to be a collaborator in this project. Ashton Lagoon, the largest bay in the Grenadines, had a range of important habitats (coral reefs, lagoon, mangroves, mudflats, seagrass beds and coral reefs) for commercially important fish, shellfish, and invertebrates. The lagoon and nearby offshore island (Frigate) also provided important habitats for wintering and migrating populations of seabirds, water birds, shorebirds and land birds. Despite the ecological importance of the area and the fact this it was officially designated a conservation area, the government accepted a proposal by a developer for a 300 boat marina, condominiums, and golf course in the lagoon and mangroves. An environmental assessment pointed out that the development would cut off water circulation to the bay, causing catastrophic damage to reefs, seagrasses and fisheries. Nevertheless the project proceeded, with exactly the results that were predicted. After building the causeways, the developer disappeared, leaving behind the damaged bay.

This phase of the project proposes to plan the restoration and sustainable use of the Ashton Lagoon area. The main activity is a 3-day participatory project planning workshop in which all key stakeholders (local NGOs, government, fishing community, residents, businesses, etc.) will be invited to attend and participate. Marine, wetland, and coral reef ecologists, fishermen and engineers will provide assessments and advice to help guide the restoration planning. The local community (especially the fishing community and local NGOs) has expressed a keen interest and desire to restore the lagoon and pursue sustaining development options (e.g., ecotourism, mariculture). The main outputs from the one-year planning phase will be a restoration and sustainable use plan and funding proposals to carry out the work.

7 COMMUNICATIONS AND NETWORKING

Communications with and networking among Grenadines stakeholders and the wider public in both countries will be a very important aspect of the Project. The following activities as described in the communications plan are proposed to further these aims.

7.1 Newsletter

The Project will continue to produce a quarterly newsletter. Efforts will be made to improve it and to promote its distribution. The approach of having recipients print a few copies and distribute or put them out for others will be promoted.

7.2 Internet discussion group

There will be a continued effort to link stakeholders with internet access through the SusGren discussion group established on YahooGroups. This provides an easy means of informing stakeholders about what is going on and of obtaining feedback. It offers a means of providing the Newsletter electronically to those who would prefer it that way, and thus saving on printing and distribution costs.

7.3 Media releases

The project will continue to prepare media releases on all its activities during the year and provide these to newspapers, TV and radio stations in both countries.

² Contact person - Lisa G. Sorenson, Ph.D., Dept. of Biology, 5 Cummington St., Boston University, Boston, MA 02215; (617) 353-2462 (office), (617) 353-6340 (fax), email: lsoren@bu.edu

7.4 Website

The Project will further develop the current website that exists on the UWI, Cave Hill server with a link from the CERMES home page (cavehill.uwi.edu.bb/cermes). This will be cross-linked with the CERMES web pages and with the project documents that are currently downloadable from the CERMES site.

7.5 Project overview booklet

The project overview booklet has to be finalised. It will then be copied and distributed to the stakeholders and made available for visitors to the PIU office.

8 OTHER ACTIVITIES

8.1 Conference participation

The Project Manager or Project Administrator will participate in one regional or international conference at which the work of the project will be showcased. Opportunities for this have not yet been fully explored, but may include the Global Forum on Oceans Coasts and Islands, Paris, January 2006, if additional travel funds can be sourced, the Caribbean Environmental Health Institute, Conference, or the Caribbean Conservation Association AGM.

8.2 Steering and Executive Committee Meetings

There will be one Steering Committee meeting at the end of the year to review the work of the year and consider the proposed workplan for 2007. This will probably be in December 2006. There will also be two Executive Committee meetings during the year. These will likely be in April and August 2006.

Throughout the year there will be regular communication among Executive Committee Members.

9 SCHEDULE

The Gantt chart provides below indicates the proposed timing for the primary activities of the project (dark shading). Expected timing for associated projects is also show in lighter shading

Sustainable Grenadine Project Gantt chart 2006													
Task Name	Jan	Feb	Mar	April	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	
	1	2	3	4	1	2	3	4	1	2	3	4	1
SC Meeting													
Exec Comm Meeting 1													
Progress reports													
Budget reporting													
Training/NGO Capacity													
Group Development													
Record Keeping													
Conflict Management													
Proposal Writing													
Planning Workshops													
Boat building skills													
Fisherfolk Comanagement													
Green hotels- Grenadines													
Attachments/exchanges													
MPAs - community groups													
Boat building program													
Fisheries management													
Others to be determined													
Mini-Projects													
Associated projects													
Water-taxi Project													
Reef Check													
People & corals in schools													
MPA effectiveness													
Green School													
OECS-OPAAL Livelihood													
Marine space use plan													
Restoration Ashton Lagoon													
Communications													
Project overview													
Newsletter													
Discussion groups													
Media releases													
Website													

APPENDIX 1: STAKEHOLDER CONSULTATIONS FOR 2006 WORKPLAN

Introduction

Stakeholder meetings were conducted throughout the Grenadines from September to October, 2005. The meetings were geared toward assessing the Sustainable Grenadines Project and identifying activities that stakeholders would like to see implemented for the upcoming year. Ms Alexcia Cooke, the Project Administrator shared the communication strategy of the project with the participants. Mini-project application forms were distributed to the stakeholders and participants were reminded of the objectives of the mini-projects. All participants in these meetings are listed in Table 1.

Carriacou

The stakeholder meeting for Carriacou was held on Tuesday September 20th, 2005 at the Sea Wave Conference Room. Mrs. Virginia Fleary-Noel welcomed everyone and extended special greetings to the Project Manager, Mr. Casper Smith and Project Administrator, Ms Alexcia Cooke.

PIU staff invited Mr. Wendell Rock from the Carriacou and Petite Martinique Water Taxi Association (CPMWTA) to address the meeting. He shared his experience on his attachment to the Soufriere Marine Management Area (SMMA) in St. Lucia and expressed hope that some of the positive elements of what he saw in St. Lucia could be applied to the water taxi associations in the Grenadines.

Mr. Kim Bethel from the CPMWTA was also invited to address the meeting and gave an account of how the Sustainable Grenadines Project has helped to source funding from the Global Environment Facility (GEF) for the Water Taxi Project. He outlined the various training workshops planned for operators and gave a review of the first workshop and how it helped operators to improve their service and respect the environment on which they depend.

It was noted that Carriacou has benefited from the project thus far having received funding for two mini-projects last year. Mr. Cuthbert Cyrus from the Bayaleau Development Committee spoke about the progress of his project and the problems encountered.

Stakeholders enquired about the types of projects that would be funded. They also wanted to know if projects which were funded before could apply the next year as a phase 2 of the same project.

Issues raised include:

- Training on group dynamics - roles and responsibilities within groups, good leadership and how to create good leaders.
- Developing good communication strategies among groups
- Improving public relations capacity within groups.

Mini-project forms were distributed to the groups. Stakeholders were given a deadline of October 3rd, to return the forms to the Mrs. Fleary-Noel.

The PIU staff visited Mrs. Bernadette Sylvester, Permanent Secretary in the Ministry of Carriacou and Petite Martinique Affairs. The staff also visited the two mini-project sites and the new office for the CEC.

Petite Martinique

The project visited Petite Martinique on October 4th, 2005. PIU staff was taken around the island to see some of the issues that the people thought needed attention.

Issues identified include:

- Concern over the future of boat building in P.M. - Stakeholders thought it necessary for the boat building to be taught to the young people, especially the young boys in order to sustain such a tradition.
- Lack of signs to direct visitors on the island.
- Information boards to highlight the island's rich history and the significance of the sites there.
- Garbage disposal in the culverts leading to the sea. (Figure 4). There is one particular site which needs to be cleaned up and signs erected to deter people from disposing of garbage there.

Bequia

The PIU staff visited the Bequia Anglican Primary School and the Bequia Community High School. PIU staff addressed the teachers and student on the role of the SG Project and how they can become involved.

The Stakeholder Meeting in Bequia was held on Friday October 7th, 2005 at the Bequia Community High School. The meeting commenced at 4:30 pm and participants were reminded of the objectives of the project and the various ways in which their groups may benefit from the project. The PM reflected on the benefits that Bequia has accrued and encouraged those present to ensure that their groups remain active. He noted that from Bequia two persons were sent to training in boat sailing in Trinidad and the Bequia Community High School was given a mini-project this year.

Participants were asked to identify things that they felt was needed in their island and within their groups and the following ideas were given:

- Project proposal development
- Record keeping
- Developing a constitution for groups
- Group commitment
- Developing good public relations – making people aware
- Capacity Building in first aid and CPR
- Training people to use the hand radio

Canouan

The meeting in Canouan was held on Monday October 10th, 2005 at the Canouan Government School. The PM noted that the mini-project that was scheduled for this year on the Re-education of Fisher-folk was not carried out because of the fact the government was conducting a similar project. He urged participants to think of projects that could be implemented along with other groups as a community project as well as the individual group projects. Several issues include:

- How to keep groups together and active
- Building support within groups
- Understanding structure and roles within groups
- Effective public relations tools
- Training of young people



Figure 1: Waterway to the Sea at Sanchez, Petite Martinique

- Beautification of communities (plants and signs)
- Harmonisation of any project proposed with government plans

Mayreau

PIU staff walked around the island to inform people of what is happening in this project and how they can benefit. This approach was taken given the fact that there was only one group on the island and both contact persons for the island were not present at the time scheduled for the meeting. Issues identified include:

- Training in boat building and fishing techniques
- Education on proper garbage disposal and the implications of poor practices
- Tree planting and beautification of the Saline Beach
- Education and signs about dumping conch shells on the Windward side of island.

Union Island

Union Island received one mini-project and an attachment. The mini-project 'Project Hope' was carried out by the Youth Striders 4H Club while Mr. Jeremiah Jones from the Southern Grenadines Water Taxi Association went on an attachment to the SMMA in St. Lucia. Issues identified include:

- Certification of Groups
- Computer training
- Security on the waters
- Improving communication skills
- Education on garbage disposal
- Project proposal writing
- Group development process
- Motivation for fishermen
- Empowerment of women
- Skills training for the young men e.g. in boat building

Mustique

This meeting was held on October 24th, 2005 and was attended by 7 persons (Table 1). Participants in the meeting noted that Mustique was doing a lot to protect its environment and education. A representative from Mustique Indigenous People Association (MIPA) expressed his readiness to attend the workshops organised by the project. It was stated that presently MIPA was not functional.

It was noted that Mustique is carrying out various environmental activities under the Mustique Environmental Committee.

Table 1. Attendance at Stakeholder Meetings Throughout the Grenadines, 2005

Name	Name of Organisation	Address	Contact Information
Wendell Rock	CPMWTA	Petite Martinique	414-8272
Mrs. Corine McDonald	Dover Government School	Dover, Carriacou	443-6192
Mr. Cuthbert Cyrus	Bayaleau Development Committee	Bayaleau, Carriacou	443-7790/443-8825
Mrs. Myrtle Compton	Windward Women's Group	Windward, Carriacou	443-6352
Ms. Theresa Compton	Windward Women's Group	Windward, Carriacou	443-6352
Mr. Wallace Collins	Mt. Royal Progressive Youth Group	Mt. Royal, Carriacou	443-7655/443-7678 404-6392 wvc@caribsurf.com
Mr. Ronald Gittens	Mt. Pleasant Grand Bay Development Organisation	Mt. Pleasant, Carriacou	414-2885
Ms. Marilyn Thompson	Twinklets of the North	Windward, Carriacou	443-6183/443-8786 404-9122 Fax: 443-6183
Mr. Kent Phillip	L'Esterre South Striders Social Club	L'Esterre, Carriacou	417-9089/443-7261/ 443-7389 kap500@hotmail.com
Mr. Anslem Quamina Michelle Williams	Belair Progressive Youth Group	Belair, Carriacou	443-8896 cudjoe@hotmail.com
Mr. Saul Decoteau	P.M Catholic Youth Group/Movement	Carriacou	
Ms. Vinishah Cudjoe	B.B.H. Women's Group	Belmont	443-7389
Mr. Kim Bethel	CPMWTA	Windward, Carriacou	
Mr. Jesmond Emmons	Hillsborough Pathfinder Club (SDA)	Bell Vue South	443-6712/443-7348 403-1061
Julia Simmons	SVG Red Cross	Bequia/Kingstown	456-1888 stewie167@yahoo.com
Rochelle Ollivierre	SVG Red Cross	Bequia	457-3555
Amelia James	Bequia Girl Guides	Union Estate, Bequia	
Lydia Ollivierre	Bequia Girl Guides	Friendship, Bequia	458-3411
Jucita Ollivierre	La Pompe Community Support Group	Friendship, Bequia	527-3894
Voldon Hazell	La Pompe Community Support Group	Friendship, Bequia	529-0295 valleyranks@gmail.com
Ramona Ollivierre	La Pompe Community Support Group	La Pompe, Bequia	529-0873
Hansel Henry	Club Nuevo/AYM	Canouan	455-4279
Charles Samuel	CIC/VINLEC	Canouan	482-0034
Adornus DeRoche	Club Nuevo	Canouan	458-8292/ 531-2305
Lisa Frederick	Club Nuevo	Canouan	Pukkins-9@hotmail.com
Mr. Jack	Cotton House Hotel	Mustique	
Mr. Ernst	MIC	Mustique	488-8000/ 488-8475
Mr. Belgrave	Principal – Mustique Primary	Mustique	
Mr. Quammie	MIC	Mustique	
Dianne Wilson	Environmentalist	Mustique	
Wayne Bermingham	MIC	Mustique	
Fr. Mark DeSilva	MEDO	Mustique	mayreau@caribsurf.com
Brian Richards		Mustique	

APPENDIX 2. MPA MANAGEMENT EFFECTIVENESS PROJECT



CERMES regional project on: "Enhancing management effectiveness at three marine protected areas, in St. Vincent and the Grenadines, Jamaica and Belize"



The Centre for Resource Management and Environmental Studies (CERMES) of the University of the West Indies (UWI) Cave Hill Campus is implementing a project to evaluate marine protected area (MPA) management effectiveness, and to learn lessons from this process, at three MPA sites in the Caribbean:

- Belize — Sapodilla Cayes Marine Reserve (other Belize MPAs already have similar projects planned)
- Jamaica — Negril Marine Park (currently doing a socioeconomic study which this should complement)
- St. Vincent and the Grenadines — Tobago Cays Marine Park (currently rearranging its management)

Why a project about MPA management effectiveness?



MPAs are important ecological, economic, social and cultural assets for Caribbean countries and beyond, partly due to their significance to tourism earnings in the region. Despite many projects and proposals, and good intentions, management authorities and small field staffs have struggled with very inadequate capacity to manage most MPAs in the region. This situation needs to be remedied immediately.

A recent guidebook entitled *"How is your MPA doing?"* sets out new methods for evaluating how a marine park is being managed. Bio-physical, socio-economic and governance indicators of MPA management are assessed using existing information, natural and social science surveys, and various other means of data collection.

What will actually be done from October 2005 to March 2007?

The summary specific objectives for this project funded by a NOAA Coral Reef Conservation Grant are:

1. To conduct participatory management effectiveness research and evaluations by training at least 30 people across three MPA sites.
2. To improve MPAs in the region by monitoring outcomes documented in lessons learned combined with training and communication materials for coursework, research, management and coastal policy.

The project has four main components:

1. Inception site-specific training workshops in MPA management effectiveness and evaluation
2. Participatory management effectiveness research and evaluations at the three MPA locations
3. A terminal joint workshop on lessons learned and the consequent adaptation of management
4. Production of training materials based on experiences of the process and on lessons learned

What are likely to be the main benefits from this project?

The goal is to promote and institutionalise improved and adaptive coastal management practices and policies in the Caribbean through use of applied research and interdisciplinary training. The project will contribute towards building capacity in MPA management effectiveness evaluation in the Caribbean. Project participants will assess MPA management effectiveness under three main headings:

- Bio-physical ... status of the resources, fish populations, water quality, environmental conditions, etc.
- Socio-economic ... value of the area to various users, culture, livelihoods, sources of income, etc.
- Governance ... achieving goals and objectives, capacity for management, stakeholder groups, etc.

Knowing the strengths and weaknesses of management in the past facilitates making improvements. Integration with the university's communications network, teaching and research programmes, curriculum development and other initiatives will add value to the project and its regional impact through sharing lessons learned and disseminating output products. Participatory and community-based approaches will facilitate stakeholder involvement and adaptive management to ensure that the best practices are institutionalized based upon the lessons learned and the skills acquired during the project or afterwards.

Send questions or comments to Dr. Patrick McConney at CERMES (e-mail pmccconney@caribsurf.com)

APPENDIX 3. AN INTEGRATED SPATIAL INFORMATION SYSTEM (ISIS) FOR MANAGEMENT OF MARINE SPACE USE IN THE GRENADINES

Introduction

The Grenadine Islands comprise more than 20 islands found on the Grenadine Bank in the Lesser Antilles. These islands straddle the boundary between two countries, Grenada and St. Vincent and the Grenadines. The majority of the Grenadine Bank is less than 50 m deep and supports the most extensive coral reefs and related habitats in the southeastern Caribbean. Nine islands have permanent settlements and related infrastructure; two are resort islands; while the remainder may be visited often by fishers as they exploit different resources, or by yachters seeking safe anchorage.

Inhabitants of the Grenadines are dependent on marine resources for their livelihoods. From precolonial days to the present, varying opportunities to exploit marine resources have been the main drivers for migration and settlement. This has also been the main livelihood, even as changes provide new activities such as tourism. Indeed fishing and marine-based tourism are the two major sources of employment in the Grenadines. Tourism development is occurring at a rapid pace, encouraged by the much needed foreign exchange earnings for the Grenadine economy. As a result, the sustainability of livelihoods is now under threat from unplanned land-based development and loss of regional biodiversity, through unregulated use of marine resources for recreation and fishing.

In recent times the governments of both countries have recognised the enormous potential of their Grenadine Islands for tourism and associated development. They also recognise the vulnerability of marine and terrestrial resource systems of the Grenadines to environmental degradation, and the need for resource conservation as a bridge to sustainable development. Thus, the government of Grenada, in its National Biodiversity Strategy, has committed to the provision of broad based support for conservation and sustainable use of biodiversity; protection of key ecosystems from negative human induced impacts; promotion of sustainable utilisation of marine resources that are essential to the livelihoods of local communities; building awareness on biological diversity in Grenada; and strengthening the management of key ecosystems. Likewise, although St. Vincent and the Grenadines has not yet publicly released its policy document on the National Biodiversity Strategy, their document also speaks to conservation of biodiversity, with emphasis on co-management and collaboration with Grenada for management of the marine resources of the Grenadines.

Marine reserves are increasingly being used as a conservation and fisheries management tool in the Caribbean, as well as for promoting the tourism product. Members of the fishing community often find their traditional fishing grounds to be proposed sites for marine reserves, where fishing activity is prohibited, while other marine resource users generate profit by the use of the same area packaged in the form of a tourism product. It is therefore particularly important to balance conservation with recreational and other uses, and to minimise conflict between users of marine space.

The efficient use of marine space and resource allocation for conservation and exploitation by diverse stakeholders is much needed, and will effectively minimise conflicts. The innovative use of new and existing technologies such as a Geographical Information System (GIS) can provide a platform for the development of a marine space use information system to promote better management of marine space. Such a system would allow for the input, storage, retrieval, display and analysis of spatial patterns of marine resource use by different stakeholders such as fishers (commercial/artisanal and recreational); dive and watersports operators; yachters; commercial boat traffic; water taxi operators and conservationists. A greater understanding of the mechanisms driving marine use activities will allow managers to implement policy options that may facilitate change in marine space use and build social and ecological resilience.

Proposed Project

The Grenadine Islands of Grenada and St. Vincent and the Grenadines are to be used as a site for development of an integrated spatial information system (ISIS) for marine space use management that can be fed into a framework for adaptive management. The ISIS will be used to highlight areas for special

management attention such as: critical habitats; areas of high biodiversity; representative ecosystems; areas of high aesthetic value; important fishing grounds; safe anchorages; current and potential locations of space use conflict *inter alia*. Furthermore, it will allow relevant resource use information to be variously synthesised and visually displayed, thus facilitating a participatory planning and management process. It is also anticipated that the ISIS approach will provide a model for promoting and facilitating participatory decision making and optimal marine space use in other countries across the Caribbean.

General Objectives and Key Outputs

The project seeks to fill data gaps and develop an ISIS for marine space use management in the Grenadines. While this study looks at marine space use by various users (dive shop operators, water taxi operators, yachts, and transport vessel), particular focus will be on the characterisation of size and structure of the commercial fishery; drivers to fishing effort and other marine space use activity (cultural drivers, economic drivers) attitudes and perceptions of fishers to various issues concerning fisheries resources, fisheries management as well as rank predicted spawning aggregation sites by probability of existence.

The ISIS will be developed by making best use of existing GIS data sets and other information (through collaboration with national and international institutions) and by field data collection where data are not available, and incorporating them into a single ISIS that can be manipulated to analyse and visually display (as maps) data relevant to a wide variety of marine space use management questions. The ISIS will then be used to identify areas of overlap between competing marine activities, thus revealing areas of possible conflict in marine space use that frequently plague management, especially in newly established management areas.

Key Outputs include:

- i. An Integrated Spatial Information System for marine space use management for the Grenadines made up of existing and additional geo-databases on:
 - Demographic profile of marine resource users in the Grenadines.
 - Socio-economic profile of marine resource users in the Grenadines.
 - Areas where current marine activities are taking place (fishing areas, dive sites, shipping lanes, yacht anchorages, *inter alia*) and possible areas of overlap between competing marine activities.
 - Distribution of key resources (beaches, coral reefs, sea-grasses, conch, lobster, sea turtle nesting sites etc).
 - Potential fish spawning aggregation sites,
- ii. Marine Space Use Atlas for the Grenadines.
- iii. A model for promoting and facilitating participatory decision making and optimal marine space use in other countries across the Caribbean.

This project will complement the Sustainable Grenadines Project currently being implemented by The Centre for Resource Management and Environmental Studies (CERMES) of the University of the West Indies (UWI). Phase 1 of the Sustainable project focused on stakeholder mobilisation, and participatory project development to provide a framework for sustainable marine resource use. Phase 1 (ended in 2003) has ensured the availability of a well-mobilised and sensitised group of stakeholders, who are prepared to function in a hands-on participatory way to manage their marine resources. Phase 2 of the UWI/CERMES project (started 2003) aims to strengthen civil society to play its role in the sustainable development and livelihoods in the Grenadine Islands through partnerships with Government and other stakeholders.

Partnership in development of this ISIS for marine space use management will further empower civil society to influence research and manage the marine resources on which their livelihoods depend.

The outputs of this project will facilitate conservation of biodiversity while ensuring the sustainability of livelihoods. An ISIS for marine space use management that can be utilised in a participatory framework for adaptive management will be useful to mainland Grenada and St. Vincent, as well as to their

Grenadine Islands. The ISIS will increase the information base available to the public in an easy-to-use format, and would support the broader goal of marine space use zoning, and the development of an overall marine space use plan for the Grenadines that could include a system of MPAs. The ISIS for marine space use management may also provide a more generally applicable model for optimal marine space management in other Small Island Developing States, in particular those using MPAs as a marine resource management tool as well as in the promotion of eco-tourism.

Research Methodology:

Research Design:

This study is an analysis of patterns of marine space use by various marine resource users in the Grenadine islands of St. Vincent and Grenada. It focuses on the development of an ISIS for the islands of the Grenadines. However the study will also provide answers to the following questions:

1. What are the drivers and constraints of current marine space use activities in the Grenadine Islands of St. Vincent and Grenada?
2. What policy or paradigm shifts are necessary to facilitate effective management of marine space use activities in the Grenadine Islands of St. Vincent and Grenada?

The study will be conducted between May 30th 2005 and May 30th 2006 and will be implemented in four phases. Phase 1 (May 30th 05– July 15th 05) will be research planning and design. Phase 2 (July 16th 05 - Oct. 30th 05) will be data collection using a semi-structured interview with a questionnaire. Phase 3 (Nov 1st 05 – Jan 30th 06) will be data analysis and report writing. Phase 4 (Feb 1st 06 – May 30th 06) will be development of an Integrated Spatial Information System for the Islands of the Grenadines.

Methods of data collection:

Two one day workshops will be held with relevant NGOs and Government agencies in the Grenadines (Fisheries Grenada, Fisheries SVG, Land and Surveys, Land and Surveys SVG, Water Taxi Associations, Carriacou Environmental Committee) to obtain their input to identify major categories of marine resource users that should be targeted by this study. This will also present an opportunity to solicit their input on information gaps, useful to their management objectives that could possibly be filled during the course of this study. Based on discussions with these agencies, draft questionnaires specific to each category of marine resource user will be finalised prior to the commencement of semi-structured interviews.

Secondary data consisting of recent publications concerning the fishery sector and marine space users of the Grenadines will be collected and reviewed. In addition interviews with Key informants will be conducted to obtain generalised information related to historical patterns of marine space use activities as the development of the institutional framework under which these current activities occur.

The instrument:

Field data will be collected using a series of semi-structured interviews based on questionnaires specific to each stake holder group. However all questionnaires will contain questions which will indicate societal parameters (level of education, gender roles), economic parameter (income generation, assets expenditures, and resource use patterns) as well as perceptions and attitudes to a number of management options for marine space use. The questionnaire will be kept short and closed-ended in-order to facilitate completion in 20 – 30 minutes. Notes on comments to questions will be kept on the bottom of the questionnaire by the interviewer. Persons will be asked to recall information from 2002 when answering questions.

A base map, of the Grenadines will be prepared with the assistance of Land and surveys Grenada and St. Vincent & the grenadines. This baseline map will include major islands in the Grenadines, territorial borders between Grenada and St. Vincent & the Grenadines, major fishing banks, depths and depth contours. A four km² grid will be superimposed on the map to facilitate easy identification of fishing grounds by fishers, as well as areas where specific marine use activities take place e.g. whale watching, and safe anchorage spots. Positions identified on these base maps will serve to link activities with unique geo-locations.

Interviews will be conducted at the landing/mooring sites or at the person's home. Each person will be interviewed alone so as to minimise any interference from others in answering questions. Appointments

will be made to interview individuals. However it is probable that interviewers will be forced to drive around to locate persons.

Sampling

It is felt that the number of persons in each marine resource user category will be relatively small, considering that the total population of the Grenadine Islands is approximately 14,000 An attempt will be made to interview all individuals from each category of marine resource users (Fisher's, Water taxi operators, Dive operators, Yacht charter companies). A starting list will be obtained from the fisheries registers in Grenada and St. Vincent & the Grenadines as well as persons registered with their respective organizations. These lists will be updated during the study period from information that may be obtained from interviewed persons.

The sample area will be divided into seven islands Carriacou, Bequia, Union Is. Canouan, Mustique, Petite Martinique, Mayreau, with the larger islands of Carriacou and Bequia being further subdivided based on landing/mooring sites.

Pre testing

Questionnaires will be tested on a small sub-sample of the target population before it is administered to the full sample population. Data collection methods will be identical to those planned for the full survey. This allows for the identification and mitigation of any constraints to the efficient administration and analysis of the questionnaire.

Data Entry/analysis

Completes questionnaires will be coded and entered into individual user-friendly Microsoft® (MS) Access relational databases designed and developed for each category of marine resource users. These geo-databases can be connected to the GIS using Open Database Connectivity (ODBC) functionality available in any MS® Windows platform to obtain a mapping component (fig 1). Data analysis will be done using Statistical Package for Social Sciences v. 11.0 (SPSS 11.0).

Deliverables:

The Nature Conservancy (TNC) Eastern Caribbean program in 2002 commenced a long-term conservation program in Grenada and St. Vincent & the Grenadines, 'Parks in peril' (PIP) which ends in 2007. One of the most important deliverables of the PIP Program is to propose a well designed and representative system of Marine Protected areas for each country. The Nature Conservancy signed a memorandum of understanding with CERMES/UWI on March 23rd 2005 for the development of Grenada and St. Vincent and the Grenadines protected areas gap analysis and subsequent proposal of a representative network of marine protected areas for each country. Identification of current gaps in this analysis has presented an opportunity for CERMES/UWI to provide The Nature Conservancy with the following deliverables:

1. A spatial socio-economic and demographic profile of the marine resource users of the Grenadine islands of St. Vincent and Grenada in the form of a comprehensive written report.
2. A spatial fishing profile for the Grenadine islands of St. Vincent and Grenada, providing in the form of a comprehensive report information on possible locations of spawning aggregations, actual fishing intensity and location, boat and gear specifications as well as other aspects of the demographic profile of the fishing industry.