R8317

Institutional Arrangements for Coastal Management in the Caribbean

R8317 FTR Annex E:

Final Report of Experiment 3: Testing the uptake and effectiveness of methods and tools for integrated and equitable coastal resource management

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October 2005

Citation

McConney, P. and K. Parsram. 2005. Final Report of Experiment 2: Testing co-management tools and messages for training natural resource users and managers. Report of the Regional Project on Institutional Arrangements for Coastal Management in the Caribbean (R8317). CCA, Barbados. 32pp.

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This publication is an output from a project funded by the UK Department for International Development (DFID) for the benefit of developing countries. The views expressed are not necessarily those of DFID.

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Introduction

Background

The Caribbean Natural Resources Institute (CANARI), Caribbean Conservation Association (CCA) and the Marine Resources Assessment Group Ltd. of the UK (MRAG) implemented a research project entitled *"Pro-poor policies and institutional arrangements for Coastal Management in the Caribbean"*. Other partners included the University of the West Indies' Centre for Resource Management and Environment Studies (CERMES) and the University of Puerto Rico's SeaGrant College Program. This project (R8317) was funded by the UK Department for International Development (DFID) as part of the Land-Water Interface (LWI) component of its Natural Resources Systems Programme (NRSP). The project was implemented from September 2003 to September 2005.

At the inception workshop that was held in San Juan, Puerto Rico in November 2003, it was agreed that the overall purpose of the project should be reworded as: "to change policies and practice in order to effectively implement integrated and equitable natural resource management in the coastal zone". The primary focus of the project has thus been on the identification, testing and dissemination of the strategies and pathways that can best ensure that the lessons, methods and tools gained from Suite 1¹ NRSP-funded projects are communicated effectively. All project activities were designed as contributions towards the production of a comprehensive Communication Strategy that will provide a framework for the on-going dissemination and promotion of integrated and equitable approaches to coastal resource management and development in the Caribbean region.

The design of the project was therefore centred on four experiments, namely:

- i. An experiment to test uptake of policy messages at the national level.
- ii. An experiment to test uptake or effectiveness of a tool or set of tools for use in training.
- iii. An experiment to test the uptake and effectiveness of methods and tools for integrated and equitable coastal resource management.
- iv. An experiment to test uptake of a research agenda.

CANARI took responsibility for the design and conduct of the third experiment, and this report provides a summary of the activities carried out and results obtained.

Rationale and overview

The experiment targeted one representative group of coastal area managers: managers of marine protected areas (MPAs) throughout the Caribbean and their partners, including organisations and programmes providing technical support to MPA management. This group was selected as the target because:

¹ The Suite 1 projects are: Institutional and technical options for improving coastal livelihoods (CANARI, reference: R7559); Institutional arrangements for Caribbean Marine Protected Areas and opportunities for pro-poor management (MRAG, reference: R7976); and Requirements for developing successful co-management (CCA, reference: R8134).

- MPAs play a significant role in coastal resource management, but most MPAs are not integrated into broader social and economic development strategies and thus have a less than optimal impact on local livelihoods and community development;
- Caribbean MPA managers have expressed a need for tools and approaches for increasing the contribution of MPAs to larger coastal management and local development strategies and requirements;
- many of the results and products of recent research, particularly that carried out through the NRSP suite of projects, are particularly relevant to this need.

The experiment had four components. The first component, initiated at the overall project inception workshop in November 2003 and subsequently developed further, was a characterisation of the main target audiences, the most relevant messages for each of these audiences, and the potential pathways for delivering those messages.

The second component was an assessment of the selected target audiences' knowledge, attitudes, and practices related to integrated and equitable coastal resource management and their skills and training needs. This component included a focus group session as well as e-mail surveys with a representative sampling of the main target audiences. Reports on these activities are included in Appendix I.

The third component was the development and implementation of a communication plan (Appendix II), which consisted of a set of activities to develop and test products and uptake pathways derived from the results of the inception workshop and surveys.

The final component was the evaluation of these products (listed in Appendix III) and pathways both in terms of their effectiveness in conveying the intended messages and tools and in influencing the attitudes, behaviours and practices of their intended audiences. The results of the evaluation activities are included in Appendix IV.

Methods

1. Needs assessment

Definition of key messages

The first activity of the experiment, a seminar held in Negril, Jamaica in June 2004, had several purposes. First, by bringing together a representative sample of the experiment's target audiences, including MPA managers, resource users and co-management partners, community representatives, and technical advisors, it aimed to confirm and validate the key messages, developed at the overall project inception workshop, regarding the linkages between marine protected area management and sustainable coastal livelihoods. The seminar discussions resulted in the following set of key messages, which became the basis for the later development of products:

Messages about livelihoods:

- 1. The people of the Caribbean region, especially the poor and other disadvantaged groups, should be allowed to and are capable of effectively engaging in partnerships with government to sustain livelihoods that are dependent upon coastal resources.
- 2. People who work by the sea often cling tenaciously to their main lifestyle as an expression of their culture and personality. When livelihoods dependent on coastal resources become unsustainable, they prefer to modify their current practices (for example by shifting to a currently underexploited fishery) or to adapt their skills to complementary activities (such as diving or boat captaining) than to change to an alternative profession.
- 3. MPA managers must be sensitive to livelihood situations, especially where any group is poor or has limited options that result in destructive strategies of resource use as a matter of short-term survival. Presenting conservation initiatives and management measures that do not take into account the livelihoods of stakeholders is almost certain to alienate the affected groups.
- 4. Those most capable of successfully moving out of unsustainable fisheries, because of skills, experience, and initiative, are the ones who are the most effective leaders and management partners and should therefore be supported in their efforts to remain in fishing by adopting new approaches and when needed complementary livelihoods.

Messages about management:

- 1. Community-based groups of fishers are interested in and capable of implementing and monitoring management measures aimed at improving their local stocks. Because of propinquity and vested interest, they can be more effective managers of fish reserves and fishery management zones than MPA management agencies. They do however require support and assistance in enforcement.
- 2. Fishing communities do not need to be formally organized to be effective co-managers of MPAs, but do need a demonstrable level of cohesiveness for efficient communication with co-management partners and to provide them with sufficient "standing" to be accepted as managers.
- 3. Co-management is more successful when it becomes part of the fabric of society and way of doing things in the lives of ordinary people. Giving communities responsibility for

protecting nearby resources upon which they depend is one way of encouraging greater civil society participation in natural resource governance.

Identification of information needs and pathway preferences

Secondly, the seminar participants served as a focus group to help understand the information needs of these target audiences and the ways that they prefer to receive that information. The focus group session was semi-structured, guided by a survey instrument. The information from the session is reproduced in Appendix IA.

Identification of skills needs and training pathway preferences

Following the seminar, two e-mail surveys were conducted to gather information on the skills needs of MPA managers and on the most effective approaches to meeting those needs through training activities. The skills survey was sent to six MPA management professionals who had attended the inception workshop. Only one survey form was returned; it is reproduced in Appendix IB. The training survey was sent to seven persons in the region with substantial experience in the training of MPA management personnel. Five forms were returned; the results are summarized in Appendix IC.

2. Communication plan

The project communication plan (Appendix II) drew on the results of these assessments, as well as desk studies and discussions and consultations with potential partners and others involved in marine protected area management, to identify a set of activities that met the following characteristics:

- would be based on the key messages and tools that had been identified;
- would use pathways that appeared to have the best chance of acceptance and effectiveness;
- could be implemented and evaluated within the timeframe and resources of the project.

Of the five activities identified in the plan, one was eventually discarded as unfeasible, while a new activity, the preparation and dissemination of a policy brief, was added.

3. Activities

a. Seminar for MPA managers and fishing communities.

The inception workshop also served as the first activity of the experiment. The seminar, entitled *Finding Common Ground: A Seminar for Marine Protected Area Managers and Fishing Communities*, brought together a group of people involved either in MPA management or in the fishery sector² in and around MPAs from several countries of the region, particularly Jamaica, Puerto Rico and Cuba. People were encouraged to speak in their own language, with translation provided by the co-facilitator from the University of Puerto Rico. There was a field trip through the Negril Marine Park by boat that included a lunch stop at a fishing village and meeting with a group of fishermen there. The aim of the seminar was to test the messages identified for

² Participants included 5 MPA managers or scientists, 6 fishers, 1 fisheries officer, 2 representatives of community organizations with MPA management responsibilities, and 4 representatives of regional or international organisations involved in coastal management.

development in the experiment on a representative sample of the target audience, and determine how effective a seminar format with a very mixed group of participants was for promoting the uptake of messages on MPAs and sustainable coastal livelihoods. Short-term follow-up included distribution to participants of a report on the seminar, in English and in Spanish. Approximately one year after the seminar, a representative sample of participants was interviewed by telephone on their perceptions of the seminar and its impact on their attitudes and practices. The report of the seminar is on file with CANARI.

b. Policy brief

The main messages of the experiment, as refined through the inception workshop, were developed into a four page summary and published under the CANARI Policy Brief series³. The aims of the activity were to assess the effectiveness of the policy brief format in conveying messages to key target audiences and to determine to what extent such materials were used as communication tools between MPA management stakeholders (for example, from MPA managers to senior technocrats or policy makers). The brief was disseminated in three ways. First, the availability of copies was advertised through the listserve of the region's main MPA management network, CaMPAM (Coastal and Marine Protected Area Managers network, managed by the Caribbean Environment Programme). Next, it was posted as a pdf download on CANARI's webpage, with its availability again announced through the CaMPAM network, as well as that of the Gulf and Caribbean Fisheries Association. Thirdly, packages of 20 copies each were distributed to a sampling of organizations involved in MPA management in the region⁴. Requests for and downloads of the document were tracked and recorded; and a follow-up e-mail survey of all those receiving packages of the brief was conducted five months after dissemination.

c. Webpage

At the inception workshop, some participants, particularly those involved in MPA research and management planning, complained about the inaccessibility of materials from the region on the social aspects of MPAs and recommended the creation of a website dedicated to that purpose. The usefulness of such a website was tested through the creation of a page on the CANARI website entitled *MPAs and Coastal Communities* (www.canari.org/mpa.htm). The page includes pdf downloads of most of the documents developed under the NRSP suite of projects, as well as other papers and reports relevant to the region. The aims of this activity were to test the Internet as a channel for information on MPAs and coastal livelihoods and determine for which audiences this channel was most effective. The availability of the webpage was not formally announced, but was referred to in discussions and correspondence with members of the intended target audiences. Visits and downloads were tracked by CANARI over a three month period from the day the webpage was launched. In addition, members of key target audiences were randomly queried about their knowledge and use of the site. After three months, the website was announced through the CaMPAM listserve.

³ Marine Protected Areas and Sustainable Coastal Livelihoods. CANARI Policy Brief No. 5, January 2005.

⁴ Packages sent to MPA management agencies in Antigua, Belize, Jamaica and St. Lucia; three regional programmes involved in support to MPA management; and one international coastal management organization with programmes in the Caribbean.

d. Training workshop

While there are many training opportunities for MPA managers in the region, these have to date given little attention to methods and approaches for optimizing the livelihood benefits from MPAs, particularly for the poor and other marginal residents of coastal communities. Using the results of some of the NRSP research as well as from the experiment inception seminar, a training module on MPAs and Sustainable Coastal Livelihoods was developed and tested during a one-day workshop in Negril, Jamaica in April 2005. The aim of the activity was to test the uptake of tools and approaches communicated through a workshop format. Although the main intended audience for the module was MPA management staff, workshop participants also included a number of local and national management partners. A report on the workshop is on file with CANARI. Uptake was evaluated through semi-structured interviews with a sample of participants five months after the workshop.

e. Case study

The needs assessment identified case studies as a particularly effective means of conveying messages in ways that allow target audiences to make links with their own contexts and issues, but existing case studies on MPAs and coastal livelihoods are written for a professional or academic audience and so do not reach many key stakeholders. One project activity drew on existing material on the Negril Marine Park and coastal livelihoods as well as original research to develop a case study in a format that would be accessible to a wide range of audiences. The aim of the activity was to understand how case studies can most effectively convey key messages about MPAs and livelihoods to a range of audiences. The case study was developed to be presented through a workshop or meeting format, and included:

- large posters, drawing largely on interviews with local stakeholders and supported by handouts, to tell the story of the Negril Marine Park;
- a field trip including discussions with stakeholders to involve the audience in management activities and decisions;
- structured panel discussions to engage the audience in debates on issues;
- a PowerPoint presentation of the case study's main lessons.

Because of cost and time constraints, it was not possible to produce and present all components. However, two posters, handouts, and the PowerPoint presentation were developed and presented during a regional seminar on sustainable coastal livelihoods, which was held in St. Lucia in July 2005. While it was not possible to fully evaluate this activity, reactions on the quality of the materials and their usefulness in conveying messages and concepts were collected through informal discussions at the seminar, and more formally through an e-mail survey of all seminar participants two months after the seminar.

4. Results and lessons learned

The results of the project and specific lessons coming out of the different activities are summarized in Table 1. More general lessons include the following:

Lessons about products and pathways

- 1. The target audience for the messages and tools tested in this project speak a wide range of languages and idioms. Materials prepared in technical English can only reach a small proportion of that audience.
- 2. Because the target audience is highly diverse, there is a need for a diversity of products and pathways to reach them. Strategies that are effective for reaching some segments of the audience may completely miss others. Similar messages therefore need to be conveyed in a variety of ways and through a range of channels. The differing viewpoints and frames of reference of audiences also need to be taken into account.
- 3. Generally, products should not be limited to tangible materials: guided discussions, semiformal presentations and field trips can be more effective in communicating many concepts because they allow people to draw on their own context and experience and provide space for interactive discussion.
- 4. Products cannot simply be offered; they need to be disseminated in strategic ways and with appropriate follow-up. This implies partnerships with those agencies and organizations with greatest access to the main target audiences for the products.
- 5. There is an apparently large international audience for material on MPAs and coastal livelihoods, and Internet-based pathways may serve this audience better than it does its intended target audience in the region. Rates of response to products disseminated through the Internet need to be examined with care to assure that they actually indicate effective dissemination to target audiences.
- 6. Onward dissemination of products depends to a large degree on strategic partnerships. For example, collaboration with UNEP's Caribbean Environment Programme facilitated dissemination of the policy brief and information on the webpage. UNEP has also indicated interest in funding Spanish translations of the webpage and some of the documents available through it, and in incorporating the training module and using the Negril case study posters in its MPA Training of Trainers course.

Lessons about uptake

- 1. Uptake of tools and approaches appears highest when stakeholders can immediately apply them. This suggests that strategies to disseminate tools and approaches include their application to real issues that the target audience is dealing with.
- 2. Reinforcement of messages helps assure uptake. Strategies should therefore make provision for follow-up following a communication activity.
- 3. Uptake is facilitated by discussion that challenges stakeholders' preconceived ideas, and bringing diverse groups of stakeholders together contributes to this process. People tend to remember and be influenced by the outcomes of difficult debates and arguments.

Product	Dissemination pathways	Monitoring and evaluation methods	Results	Lessons/observations
Presentations and guided discussions on MPAs and fishing communities	Seminar for MPA managers, scientists, and representatives of fishing communities, Negril, June 2004 (group also served as focus group for experiment needs assessment)	Follow-up semi- structured interviews with 5 participants and written survey from 1 (6 out of 17 participants, or a 35% sample) one year after seminar	 See Appendix IV-A. Main messages and tools effectively communicated, with evidence of uptake (sharing of messages with colleagues, use of tools): importance of coastal resources for development value and opportunities for management partnerships potential social and economic benefits from protected areas tools for participatory planning, integrated protected area planning and management, and optimizing social and economic benefits from protected area 	Follow-up interviews long after an activity yield valuable insights into uptake, but questions need to take account of limited recall on specifics. Value of bringing people together across national, cultural and language barriers in order to learn from one another. Few opportunities for this in day-to-day life. Site visits that provide opportunities for direct engagement with resource users on their own grounds are valuable for allowing managers to hear resource users' problems and concerns and try to work towards solutions.
CANARI Policy Brief No. 5: Marine Protected Areas and Sustainable Coastal Livelihoods	Announcement of availability of hard copies to persons involved in MPA management in the Caribbean, sent via CaMPAM listserve, 1 June 2005	Tracking of responses	See Appendix IV-B. 14 requests, 6 from persons directly involved in Caribbean MPA management; 8 from US-based organizations	Despite the widespread use of Internet dissemination of documents, there still appears to be some demand for printed materials. The CaMPAM list serve is an effective means of sharing information and products on MPA- related issues.

Table 1: Evaluation and Results

Product	Dissemination pathways	Monitoring and evaluation methods	Results	Lessons/observations
	Distribution of sets of 20 copies to a selection of Caribbean MPA management agencies	Follow-up email survey requesting feedback on how copies were distributed or used	No responses to e- mail survey and project timeframe did not allow for telephone follow-up.	Lack of response to survey may indicate that selective distribution by mail is not an effective uptake pathway. On the other hand, the lack of response may simply indicate that email follow-up surveys are not a highly effective means of assessing uptake. Additional research would be required to untangle these preliminary conclusions.
	Announcement of availability of downloads on CANARI website, sent via CaMPAM and GCFI listserves, 15 June 2005	Tracking of website hits	303 downloads by 15 September 2005	Websites and Internet searches are apparently widely used to locate and download policy- brief type products; however, it is not possible to conclude from the large number of downloads that the product is reaching its intended audiences.
		Internet search for references to document	Information on document and how to access it passed on through at least one listserve, two websites and one electronic newsletter	

Product	Dissemination pathways	Monitoring and evaluation methods	Results	Lessons/observations
CANARI webpage on MPAs and Coastal Communities: A Resource Site for Caribbean Coastal Managers	Mainly search engines: Availability of site not widely or systematically publicized for 3 months after it was mounted on 15 June 2005	Tracing of website hits and document downloads Feedback form included on webpage Random queries of representatives of main target audiences	See Appendix IV-C. Webpage had 550 hits by 15 September (before it was widely announced). Feedback form received 75 hits, but no forms were returned to CANARI. Information on webpage passed on through one electronic newsletter. Random queries of target audiences indicated few knew about or had visited the webpage.	Feedback forms on websites are not an effective way to monitor response. Need more research on how target groups in the region access information on the Internet; although the site has been heavily visited, there is little evidence of use by its intended audience.
Training module on MPAs and Sustainable Coastal Livelihoods	One day workshop to sampling of MPA management stakeholders, Negril, April 2005	Semi-structured interviews with 4 participants and written survey from 1 participant (5 out of 17 participants, or a 30% sample) 5 months after workshop	 See Appendix IV-D Tools effectively communicated, with evidence of uptake by managers: participatory planning livelihoods approaches integrated protected area planning and management optimizing social and economic benefits from protected areas Less evidence of uptake of messages or tools by management partners. 	Discussion format excellent at involving and getting participation of diverse group of stakeholders. Value of centering discussions around locations, problems and contexts that people know (and share). One day may be too short to communicate complex concepts and bring out full range of participant experience.

Product	Dissemination pathways	Monitoring and evaluation methods	Results	Lessons/observations
Case study on Negril Marine Park and Sustainable Coastal Livelihoods	Portions of case study (2 of 6 posters, 4 handouts, PowerPoint) presented at Soufriere seminar on coastal livelihoods, July 2005	Discussions with sample of participants at seminar Follow-up email survey 2 months after seminar	See Appendix IV-E.	Well-designed visual displays may make case studies more accessible to audiences by bringing the issues to life in ways that written case studies cannot. "Humanizing" case studies with oral histories, photographs and press releases leads people to understand management issues in different and more personal ways. Unlike video case studies, this approach also allows people to absorb the information at their own pace. Multiple media (in this case posters, hand-outs, and PowerPoint) can serve to highlight issues in different ways and reinforcing main lessons.

Conclusions and recommendations

While dissemination can be a reasonably short-term activity, the changes in practices, attitudes, behaviours and policies that indicate uptake of messages and tools often take many months or years to occur. Because of the short project time frame and limited resources available, the testing of some products and pathways was thus incomplete. More work is for example needed on characterizing the users of Internet-based products and assessing uptake, especially of tools and approaches, over the medium to long term.

The lessons it has been possible to draw from the experiment are also necessarily preliminary and incomplete. Nonetheless, the experiment has certainly helped to expand the range of products available on MPAs and sustainable coastal livelihoods in the region, as well as the potential audience for the results of research on these issues. It also appears that most of the products tested can be effective in engaging their audiences and increasing their understanding of and sensitivity to the issues; there was also evidence of the use of tools and approaches.

It is important to emphasize the important role played by implementation partners, particularly the Negril Coral Reef Preservation Society, which co-hosted several project activities, as well as the University of Puerto Rico's SeaGrant College Program, CaMPAM, and the University of the West Indies' Centre for Resource Management and Environmental Studies. Without these partnerships it would have been virtually impossible to reach samples of some key target audiences. Any follow-up activities or further use of the products developed must take this need for strategic partnerships into account.

The main recommendations for follow-up that have come out of the experiment include these:

- 1. Complete and make available the Negril case study, particularly to audiences in Jamaica, but also at regional and international activities.
- 2. Translate the policy brief into Spanish and create a Spanish portal for the webpage.
- 3. Incorporate the training module into UNEP's MPA Training of Trainers course.
- 4. Seek other outlets for the training module and case study that are targeted at nonprofessional and mixed groups of MPA management stakeholders.

UNEP's Caribbean Environment Programme has indicated interest in collaborating with CANARI on some of these activities, particularly the Spanish translations and the incorporation of the training module into its Training of Trainers course.

Appendix I

A - Results of Focus Group Needs Assessment

Negril, Jamaica, 25 June 2004

Questions about level of knowledge

1a. For resource managers: How is your agency/organisation involved in coastal management?

Respondents included:

- MPA managers from Cuba, Jamaica, and Puerto Rico (3)
- a fisheries manager from Jamaica
- researchers involved in MPA management in Jamaica and Puerto Rico (2)
- technical persons working with environmental programmes of NGOs, universities and international organisations (4).

1b. For resource users: What activities do you/your group/organisation/company carry out in the coastal zone?

Respondents (6) included fishers from Montego Bay and Negril, Jamaica and from Cuba.

2. What does integrated coastal zone management mean?

Not specifically addressed, but general consensus seemed to be that ICZM meant approaches aimed at protecting coastal ecosystems and sustaining living natural resources through management measures that constrained destructive or overintensive human use, and that MPAs were one component of that approach (on the protection end of the management continuum). It appeared that all participants had a reasonably good understanding of the concept.

3. Why is integrated coastal zone management important to local and national development?

Not addressed directly, but numerous references to the threats posed to the economic sectors of fishing and tourism from poor coastal management, and especially from weak governmental responsibility, capability, or willingness to manage. All participants agreed that these sectors depend on healthy coastal resources.

4. How can coastal management contribute to poverty reduction and improved livelihoods for local people?

Most Jamaican participants felt that coastal management should give more importance to fisheries, that decisions are driven too much by the tourism sector and this hurts local people. In other countries poverty wasn't a major issue so less attention to livelihood perspectives.

5. Are there any policies, programmes, or activities in your country/area that are making this link?

Participants did not offer much here.

6. What agencies, organisations, and stakeholder groups are involved in coastal management in your country/area?

The ones mentioned most often (so considered most important?) were:

- environmental regulatory agencies (e.g. DRNA in PR, NEPA in Jamaica)
- fisheries departments and ministries
- MPA management bodies
- fishers and persons involved in fishing sector
- tourism interests (big hotels, smaller operators)
- stakeholder associations (fishing coops, hotel associations, etc.): these do not exist in Cuba; fishing cooperatives were not perceived by participants as key players in most countries

7. What mechanisms do they use to work and communicate with one another?

Many examples given of poor communication among stakeholders, especially between national govt agencies and local stakeholders and between fishers and tourism interests.

Negril participants all said that NEPT and NCRPS act as forums for communication (wide representation of stakeholders on their Boards); also that the Marine Park provides a forum because the staff talks regularly to most stakeholders.

Cuban participants said that mechanisms for communication are built into management structures (easier because most stakeholders are represented by a government agency).

8. What information that you now lack would help you in carrying out your work in coastal zone management?

Need for good information on the economics of fishing, in order to build the case for govt support to the fisheries sector and management measures (fishers often reluctant to provide information for personal and cultural reasons)

Need for information on economic value of coastal resources for the same purpose.

Need for MPA managers to have communication and rural sociology skills and perspectives

Questions about attitudes

1. What should coastal management aim to achieve?

Did not discuss coastal management generally, but did discuss MPAs. Consensus that MPAs should aim to:

- a. protect important (and threatened?) natural systems and species through management measures (e.g., zoning, artificial reefs), regulation, enforcement, and education
- b. mediate conflicts among users that affect those systems and species
- c. provide a forum for stakeholders to come together (including government agencies)

It was stated several times by different people that a major purpose of MPAs is to restore fish stocks or improve fishing in surrounding waters.

2. Do you think the policies and approaches to coastal management in your country are effective in achieving the objectives you feel are important?

Jamaican participants definitely did not, though they agreed that the legal basis was sound but not enforced or in many cases not even used to guide management. They generally agreed that the need for jobs and foreign exchange drove policy decisions in the coastal zone.

Puerto Rican participants also felt that policies and decisions were driven by short-term considerations (generally political ones), noted in particular "fast tracking" procedures for development approvals.

Participants from both Jamaica and PR felt that privileged elites generally get away with violating laws in coastal zones, sometimes with major impact.

Cuban participants were concerned about potential impact of mass tourism, but seemed to feel that the systems that existed for reviewing development proposals, negotiating the interests of different stakeholders, and monitoring their implementation were effective.

3. What criteria should be used in deciding who should have use of and access to coastal resources?

Most participants felt the main criteria should be protection of the resource base (to permit sustainable use) and protection of the livelihoods of local people, and that it was possible to balance these.

One participant felt that in MPAs protection of the resource base should be the sole, or main, criterion in determining access (that is, access should be permitted to those whose impact was low and constrained or denied to those whose impact was high).

Decisions regarding access that cut off existing livelihoods (e.g., fishing) in order to create new economic opportunities (e.g. in tourism) were not favoured as they generally did not provide equal returns or acceptable alternatives.

4. Should laws, policies, and management approaches be structured to apply those criteria?

Yes, explain _____

Most participants appeared to like the Cuban model in which stakeholder groups negotiate conditions of access and use, and then sign a formal agreement that is legally binding.

5. Are there any stakeholders not currently involved in coastal zone management who you feel should be? Yes No If yes, explain.

Fishermen from all the countries do not feel they are adequately consulted or involved particularly during implementation phase.

6. What do you think are the causes of coastal resource degradation? How can they best be addressed?

All participants felt the biggest impacts were from intensive coastal development (inshore dredging, beachfront construction leading to beach erosion, upstream construction resulting in sedimentation, sewage flows, blockage of natural drainages and watercourses).

One participant felt that overfishing was a major cause of degradation. Others (both managers and fishers) held the view fishing was blamed because it was (politically) an easy target, not necessarily because it did the most damage.

Fishermen distinguished between good and bad fishing practices. For Jamaican fishermen, bad included fishing in nursery areas, spear fishing, seine fishing, and trap fishing with small mesh $(1" \text{ or } 1 \frac{1}{4}")$.

Several fishermen felt that dive and snorkel tourists did a lot of damage to reefs from walking on them, kicking corals, etc.

In the Orange Bay discussion, fishermen said that detergents and bleaches running off from hotel laundries killed fish. One Orange Bay fisher (not part of the seminar) felt that suntan lotion and cosmetics used by tourists also killed fish, but others disagreed.

Questions about skills (and methods)

Questions 1-3 not answered; to be addressed through a follow-up survey of seminar participants.

- 1. Does your agency/organisation have or have access to skills in stakeholder analysis and other aspects of participatory planning and decision-making? If yes, are these skills used in carrying out responsibilities related to coastal management? If no, do you think these skills would be of value in carrying out your agency's responsibilities related to coastal management?
- 2. Has your agency/organisation been involved in the development of co-management or other types of participatory management arrangements? If so, have these arrangements been effective?
- 3. How does your agency/organisation manage its data related to coastal management? Is the information useful and accessible? Is important information lacking or unavailable to the people who need it? Explain
- 4. a. *For resource users*: Do you think you and others using the same resources are using them well, in ways that ensure that the resources are not being destroyed or wasted?

As noted above, fishermen distinguished between good and bad fishing practices. For Jamaican fishermen, bad included fishing in nursery areas, spear fishing, seine fishing, and trap fishing with small mesh (1" or $1\frac{1}{4}$ ").

Fishermen also distinguished between responsible, serious fishermen, who they felt generally used the resources well and took responsibility for their protection, and others who fish. Second group included:

- a. part-time fishers (including those who move in and out of the sector depending on the availability of other economic opportunities);
- b. recreational fishers (both the fishers themselves and the sport fishing operators); and

c. renegade or pirate fishers, who use fishing as a cover for drug smuggling, fish protected species or in nursery areas, and steal from others' traps.

Fishermen felt that all of these groups were not "real" fishermen and did not make an effort to protect the resource base.

See comments above about tourism sector and water-based tourism.

b. If so, why do you think so and what practices are you using to make your use sustainable? If not, do you know how you or others might improve those practices?

Main practices fishermen felt contributed to sustainability included:

- a. protection of nursery areas
- b. temporary closures of overfished areas to permit recovery
- c. use of large mesh traps $(1 \frac{1}{2})$

Exclusive use areas only for local fishers were discussed, but final consensus seemed to be that these weren't necessary as long as the fishery was healthy and that fishers used appropriate practices.

5. *For resource managers*: Are the resources you are managing being used sustainably? If not, what changes might be needed in practices, policies, or management interventions to achieve sustainable use?

None of the managers felt the resources they were managing were being used sustainably.

Main changes they felt were needed were:

- a. More rigorous policies and criteria on coastal development, and enforcement of building codes and planning laws
- b. Better education of all resource users, large and small
- c. More support from relevant govt agencies to local management efforts

Preferences regarding communication media and pathways

Resource managers and national public officials

1. How do you prefer to receive information about coastal management issues? Please rank the following communication methods in order of preference. Use a ranking from 1 to 5, with number 1 representing your most preferred method and number 5 the least preferred one. Leave blank those that do not apply.

Participants did not rank, but noted the ones they felt were effective and commented on their use.

Informal face-to-face meeting	All types of informal meetings and encounters between managers and stakeholders are effective, the more relaxed the better
Field Visits	Very effective for decision-makers, persons involved in law enforcement including judges, and managers. Should provide opportunities for interaction with local stakeholders.

Staff exchanges	Effective, but contexts must be similar, or new approaches cannot be transferred leading to frustration and sometimes conflict upon return home	
Training workshop	Greatest value is for exchange of experiences, therefore most effective if the scope is multi-country and there are lots of opportunities for informal interaction; also should focus on field experiences and demonstration cases rather than classroom based learning.	
	Workshops and other events should not be limited to only one category of stakeholder (e.g., MPA managers). Promoting co-mgt requires sharing across disciplines.	
Cultural media (popular theater)		
Seminars and conferences		
Exhibitions		
Written case studies	Very valuable, especially to management scientists, and relevant case studies are hard to access. Mini case studies (for example within policy briefs) effective with decision-makers.	
Guidelines docs	Can be useful to managers and management scientists; should focus on "how to" or solutions to common problems	
Visual presentations	Videos on experiences can be effective	
Radio shows		
Newspapers		
Books/scholarly papers	Used mainly by management scientists and need to be targeted to this audience. Decision-makers and managers need more concise formats.	
Brochures		
Policy briefs	Good for decision-makers (anything for this group must be short and easily digestible)	
Educational materials	Packages that include both written and visual materials (e.g., power point, videos) can be useful aids for managers and management scientists	
Internet	An effective pathway for scientific information, case studies, guidelines (but Cubans said they did not have access and so preferred printed materials)	

2. Is there any other method that you would like but we neglected to mention here?

Please list:

Study tours can be valuable; can either focus on experience sharing or skills transfer, and should be designed to do one or the other

Mentoring by more experienced colleague

Community meetings to present results of research (mentioned by Negril participants)

"Access to experts"

3. In your experience what is the most effective communication method to convey coastal zone management messages to the general public?

Responses were from all participants, not only the managers:

Disseminating messages to the public through schoolchildren was rated highly: school programmes, poster and other competitions, environmental fairs (also for adults), environmental word or video games.

Newspaper articles can be used by teachers and community leaders to transfer messages. Newspaper cartoons also mentioned.

Posters, flyers, T-shirts generally more effective than more complex written materials. Need to be well designed, convey appropriate messages, and target specific audiences.

All forms of cultural media: popular theatre, music (songs), art (murals, posters)

Radio shows can reach a lot of people

Managers said they found community presentations and informal encounters the most effective for transferring information related to management issues.

Participants noted that messages to the general public and to stakeholder groups should be worded in a positive rather than negative way.

4. Can you give one or two cases or examples of methods that have been particularly successful?

Examples given for nearly all pathways mentioned.

Resource users

1. How do you prefer to receive information about coastal management issues? Please rank the following communication methods in order of preference. Use a ranking from 1 to 5, with number 1 representing your most preferred method and number 5 the least preferred one. Leave blank those that do not apply.

Informal face-to-face meeting	All informal encounters can be effective
Field Visits	Very effective
Exchanges	Little experience, but much interest, both for country to country exchange and in-country exchanges between communities. But contexts must be similar or new approaches cannot be transferred, leading to frustration and sometimes conflict upon return home (this occurred in the case of a Mo Bay fisher following an exchange).
Training workshop	Did not respond, but later comment by one fisher that the seminar "was the easiest workshop I've been to" indicates that some resource users may find formal training activities difficult or stressful

Cultural media (popular theater)	
Seminars and conferences	Generally dislike formal settings and structures
Exhibitions	
Written case studies	
Guidelines docs	
Visual presentations	Found videos and slide shows very effective; Jamaicans noted that many fishermen cannot read; so visual presentations are the best way to reach them
Radio shows	
Newspapers	Can be effective, especially for leaders of user groups, who can pass on information to others
Books/scholarly papers	
Brochures	Can be useful; need to write in a way that targets resource user audiences
Policy briefs	
Educational materials	
Internet	

2. Is there any other method that you would like but we neglected to mention here?

Please list:

Much resource user learning comes from informal meetings and encounters with MPA staff, teachers, etc.

Strategies for reaching resource users should be based as much as possible on less formal pathways. Formal settings can make some resource users uncomfortable (participants noted that fishers in USVI and PR dislike and avoid meetings and workshops in large hotels, which are favored by agencies organizing the events).

It should be the job of scientists and managers to distil information from formal conferences and meetings and disseminate it to stakeholders in appropriate media.

3. Can you give one or two cases or examples of methods that have been particularly successful?

Examples given for most methods mentioned.

Appendix I

B - Response to Needs Assessment Survey: Skills and Methods in Coastal Resource Management

The survey was distributed by e-mail to six protected area managers who had attended the inception workshop. Only one response was received, which is reproduced below.

 Does your agency/organisation have or have access to skills in stakeholder analysis and other aspects of participatory planning and decision-making? Yes. Some members of the organization have received training in stakeholder analysis and have been exposed to aspects of participatory planning and decision-making through CANARI courses.

If yes, are these skills used in carrying out responsibilities related to coastal management?

NCRPS has involved various stakeholders in the participatory planning process in the past. These skills are also currently being used by the organization in collaboration with other local agencies in the Caribbean Regional Environment Project. However, much more still remains to be done in terms of a wider involvement in the decision-making process as it relates to coastal management in the Negril Environmental Protection Area.

If no, do you think these skills would be of value in carrying out your agency's responsibilities related to coastal management?

 Has your agency/organisation been involved in the development of co-management or other types of participatory management arrangements? NCRPS is currently involved in a co-management arrangement (through delegation) with the Government's National Environment and Planning Agency for the management of the Negril Marine Park.

If so, have these arrangements been effective? Explain.

Largely, these arrangements have not been effective because the Government agency has basically failed to honor its obligations under the instrument of delegation. For example, since signing the agreement in October (to commence 1 November) 2002, the agreed management fee has not been forthcoming in order to support even basic management costs. Additionally, a long awaited user fee system from which (in accordance with the agreement) NCRPS is to access funds, has not yet been implemented. Nevertheless, NCRPS is expected to effectively perform its role and uphold the terms of the agreement signed with the Government.

3. How does your agency/organisation manage its data related to coastal management?

Virtually all data related to coastal management is obtained through specific project funding. As much as possible, the organization makes every attempt at maintaining continuity in the data collection and also in ensuring that the wider community and relevant agencies and organizations are made aware of the findings.

4. Is the information useful and accessible?

The environmental monitoring data that has been collected by NCRPS for more than seven years, is particularly useful in tracking trends and in making the stakeholders aware of what

is happening in the coastal areas. Occasional seminars and presentations of the findings usually involve other organizations, which can assist in addressing and resolving any problems as well as making recommendations for improvements or modifications.

5. Is important information lacking or unavailable to the people who need it? Explain

Admittedly, in some regard, important information may be unavailable to key persons who need it, but the extent to which a small NGO can get the word out to all target groups, is related to its ability and the resources available. There is still much room for improvement and consistency in contact with the stakeholders.

Appendix I

C - Summary of Results of Needs Assessment Survey: Training of MPA Managers

The survey was distributed by e-mail in August 2004 to seven persons involved in the training of marine protected areas in the Caribbean. The group included people working within MPA management agencies, in regional organisations, university programmes, and as private consultants. Five surveys were returned; the results are summarised below.

1. In your experience what are the most effective communication or delivery methods to train MPA managers? Use a ranking from 1 to 5, with number 1 representing your most preferred method and number 5 the least preferred one. Leave blank those that do not apply.

Method	Ranking*
Lectures and presentations	3.8
Group discussions	1.8
Problem solving (individual or small group)	1.8
Videos	3.2
Role playing	2.3
Field visits	1.8
Case study analysis	1.8
Practical demonstrations/skills practice sessions	1.2
On the job mentoring	1.0
Written guidelines	3.0
Written case studies	3.0
Other written materials (please name):	no score
Displays and exhibitions	3.8

* Average of rankings received from returned surveys

2. Are there any other methods that you like but we neglected to mention here? Please list:

Suggested methods included:

- a. outreach and extension activities
- b. attachments or internships
- 3. Can you give one or two cases or examples of methods that have been particularly successful?

Responses included:

- a. combinations of methods, e.g. presentation/field visit/discussion, or problem solving/role play
- b. peer to peer discussions, sharing of concepts
- c. skills training linked closely to and immediately relevant participant's planned or ongoing work

d. exchanges between staff and resource users, e.g. fishers of different MPAs with similar management issues

Appendix II: Communication Plan

Pro-poor policies and institutional arrangements for coastal management

Communication Plan for Experiment 3: Testing the uptake and effectiveness of methods and tools for integrated and equitable coastal resource management

Introduction

This experiment is part of a project aimed at collating and disseminating the results of recent research on the linkages between coastal natural resource management, sustainable human development and poverty reduction in the Caribbean. Its purpose is to identify, test, and assess the ways in which approaches, tools, and methods for integrated and equitable coastal resource management can best be transferred to and used by persons directly involved in the management of coastal resources. The experiment involves the implementation of a Communication Plan to identify and test products and uptake pathways for delivering messages and tools for effective integrated and equitable coastal resource management.

Background to and rationale for the experiment

The experiment targets one representative group of coastal area managers. Managers of marine protected areas throughout the Caribbean and their partners, including organisations and programmes providing technical support to MPA management, were selected as the target because:

- MPAs play a significant role in coastal resource management, but most MPAs are not integrated into broader social and economic development strategies and thus have a less than optimal impact on local livelihoods and community development;
- Caribbean MPA managers have expressed a need for tools and approaches for increasing the contribution of MPAs to larger coastal management and local development strategies and requirements;
- many of the results and products of recent research, particularly that carried out through DFID's Natural Resource Systems Programme and collectively referred to as "Suite 1", are particularly relevant to this need.

The regional scope is required to assure an adequate pool for testing.

The experiment has four components. The first component, initiated at the overall project inception workshop in November 2003 and subsequently developed further, was a characterisation of the main target audiences, the most relevant messages coming out of Suite 1 research for each of these audiences, and the potential pathways for delivering those messages.

The second component was a workshop of key stakeholders held in Negril, Jamaica in June 2004. The purpose of the workshop was to:

- assess the knowledge, attitudes, and practices related to integrated and equitable coastal resource management of a representative group of MPA managers and management partners;
- determine the target audience's preferences regarding types of products and pathways for receiving information on integrated and equitable coastal resource management as it relates to MPAs;
- validate and further develop the Suite 1 results most relevant to the target audience.

The third component included a questionnaire survey to fill in gaps not addressed in the seminar. Because this experiment is particularly interested in the transfer and uptake of technical tools and methods, the survey focused on identifying the uptake pathways considered most effective by trainers of MPA managers in the region.

The final component is the testing of a set of products and uptake pathways derived from the results of the inception workshop and surveys.

The experiment

Characterisation of the target audience and identification of potential messages and uptake pathways: Table 1 provides a broad characterisation of the target audiences for messages and tools on the requirements for integrated and equitable coastal resource management, as well as the main messages coming out of Suite 1 research, and potential uptake pathways that could be tested for each of these targets. Appendix 1 provides a more detailed breakdown of the main targets for this experiment focusing on the "MPA management community".

Types of targets	Main messages and tools to be disseminated	Pathways that could be tested
Managers of coastal areas or resources and their technical staffs	 Tools for: participatory planning, including methods for stakeholder analysis and communications institutional design and organisational development, particularly in a co- management setting integrated protected area 	Mentoring Field visits Exchanges Training workshops Regional seminars/conferences Written case studies Guidelines documents Books/scholarly papers Internet
NGO and CBO co-management partners	 optimising social and economic benefits from protected areas information management, including GIS, mapping and outreach 	Field visits Exchanges Training workshops Regional seminars/conferences Written case studies Guidelines documents Visual presentations Internet

Table 1: Targets, messages, and pathways relevant to the promotion of integrated and	
equitable coastal area management	

Types of targets	Main messages and tools to be disseminated	Pathways that could be tested
Government agencies with oversight responsibility for aspects of coastal area management	 Messages about: need to include a livelihoods perspective in management relevance of coastal management to poverty reduction and social development agendas 	Field visits Training workshops Regional seminars/conferences Written case studies Policy briefs Internet
Organisations and programmes providing technical support to coastal area managers and management institutions	 need for specific approaches and policies that focus on this pro-poor agenda value and opportunities for management partnerships need for social and economic development 	Field visits Regional seminars/conferences Written case studies Guideline documents Policy briefs Internet
Organisations advocating for improved coastal area management, locally, nationally, or regionally	 actors to become involved in coastal management and development potential social and economic benefits from protected areas, especially when established and managed in participatory way potential of co-management, but need to test and learn from experience need for capacity building and empowerment within civil society 	Field visits Cultural media Community meetings Regional seminars/conferences Exhibitions Written case studies Visual presentations Radio shows Policy briefs
Planners and policy makers directly involved in coastal area planning and development	 Messages about development planning: value of and need for integrated coastal management value of participatory planning, but need to remain conscious of requirements and conditions need for flexibility and adaptive management 	Informal face-to-face meetings Field visits Small group meetings Regional seminars/conferences Exhibitions Written case studies Visual presentations Books/scholarly papers (for planners) Brochures (for policy makers) Policy briefs
Coastal resource users who are involved in and impacted by coastal management regimes	 Messages about: importance of coastal resources for development value and opportunities for 	Informal face-to-face meetings Field visits Exchanges Small group meetings

Types of targets	Main messages and tools to be disseminated	Pathways that could be tested
Coastal communities that are impacted by coastal resource management actions	 management partnerships need for social and economic development actors to become involved in coastal management and development potential social and economic benefits from protected areas, especially when established and managed in participatory way potential of co-management, but need to test and learn from experience need for capacity building and empowerment within civil society 	Field visits Cultural media Community meetings Exhibitions Visual presentations Radio shows Educational materials (for local teachers)

Results of inception workshop: The inception workshop took the form of a seminar entitled *Finding Common Ground: A Seminar for Marine Protected Area Managers and Fishing Communities.* The seminar involved MPA managers and management scientists and fishers from communities within or adjacent to MPAs from several countries of the region, as well as representatives of government agencies and regional and international organisations providing technical support to Caribbean MPAs. The theme of the discussions was how MPAs can make a more meaningful contribution to the sustainable development of coastal communities.

The seminar generated considerable information on the knowledge, awareness, practices, and preferred uptake pathways of the main target audiences for this experiment. This information is summarized and supplemented by information available from other sources, particularly the experience, reports and evaluations of relevant CANARI research and training activities over the past few years, in Table 2.

Table 2: KAP	analysis of Ex	periment 3 in	ception workshop	o participants

Target Group	Knowledge	Awareness	Practices	Preferred
				pathways

Target Group	Knowledge	Awareness	Practices	Preferred pathways
MPA managers, including management scientists	Fairly high: good grounding in general concepts but some difficulty in seeing how MPAs can meet both livelihood and conservation objectives	High: well aware of need for new approaches	Medium: feel a lack of appropriate methods and tools	Field visits; staff exchanges; training activities with practical focus and opportunities for sharing experience; case studies and other written material for downloading from Internet
Representatives of technical support agencies	High: quite familiar with current discourse on coastal management and sustainable livelihoods	High	Varied, depending on orientation and mandate of individual agencies	Field visits; meetings for sharing experience; case studies and other material available through Internet
Local management partners (experienced fishers)	Medium: have developed understanding of issues through experience with MPAs	High: have directly experienced the positive and negative impacts of MPAs on local livelihoods	Medium-high: know and try to employ practices that can optimise contribution of MPAs to fishing livelihoods	Field visits; exchanges; visual presentations; community meetings

Results of survey on preferred training methods: The survey on the effectiveness of different training methods was sent to seven persons with considerable experience in training Caribbean MPA managers and five surveys were returned. These indicate a strong preference for practical, hands-on methods, including field visits and case study analysis, group discussions, problem solving, and practical demonstrations. Lectures and presentations, videos, and written guidelines and case studies generally received low marks. This however cannot be taken as an indication that these methods are ineffective in non-training situations.

Testing of products and pathways: Based on the analysis of target audiences, results of the inception workshop and survey, and logistical considerations related to the project's limited timeframe and budget, five activities to test products and pathways are proposed in Table 3 below for disseminating messages on integrated and equitable MPA management. This package of activities:

- targets the main audiences identified for this experiment with the messages and tools noted in Table 1;
- tests pathways ranging from the very broad (the Internet) to the most narrow (activities targeting one person)

 uses a mixture of "hard" (written and visual materials) and "soft" (field visits, guided discussions) products based on the results of Suite 1 projects.

The first four activities use an existing mechanism, already-scheduled event, or potential partnership to gain access to specific target groups. The *Finding Common Ground* seminar for MPA managers and fishing communities that served as the project's inception workshop has been used as the pathway for testing the uptake of messages by resource users and representatives of local communities, since several representatives of these groups participated in the seminar. The fifth activity, a mentoring or study tour arrangement for one inexperienced MPA manager, has been included because these pathways were given high marks in the seminar and survey; however, the high cost may prohibit its inclusion in the experiment unless a financial sponsor can be identified.

The activities will make use of a range of products developed through the Suite 1 projects, particularly the guidelines and case studies produced by the project *Institutional arrangements for Caribbean MPAs and opportunities for pro-poor management*⁵. However the information gathered in the baseline characterisation, inception workshop and training preference survey suggest the usefulness of additional products. Many of these will be "soft" products in support of field-based activities; others will include:

- a package of written and visual materials presenting a case study how the Negril Marine Park has addressed issues related to sustainable livelihoods and the impacts it has had on the local community, The package will draw on the Negril case study prepared in the *Institutional arrangements for Caribbean MPAs* project;
- a policy brief summarising the main lessons and findings coming out of the seminar *Finding Common Ground*.

⁵ These products will be disseminated widely through the associated COMARE Net project, and this experiment will therefore focus on more targeted dissemination and assessment of uptake by specific audiences.

	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5 (optional)
General audience	Resource users and communities impacted by MPAs.	MPA managers and management scientists and coastal area planners.	MPA managers, co- management partners, and government agencies responsible for MPAs.	Organisations providing technical support to MPA management or advocating for improved coastal area management.	Selected MPA manager with limited experience in and little exposure to community issues and needs.
Specific target	Fishers and community members involved in MPA management in Jamaica and Cuba.	All members of general audience with Internet access.	Depends on opportunity selected; see options below.	Four to eight interested organizations.	Depends on potential for partnership/funding.
Objective	Local demand for integrated and equitable MPA management increased, resulting in increased participation in management decisions and activities within 6 months of activity.	Practices and approaches for integrated and equitable MPA management developed and documented in Suite 1 and related products tested by at least three MPA managers by EOP.	Sustainable livelihoods issues understood and incorporated into management objectives and arrangements of three MPAs within 6 months of participation in activity.	A livelihoods dimension incorporated into the MPA technical support approaches of two organizations participating in the activity by EOP.	Selected MPA manager sensitised to the need for management approaches that take community and livelihood needs into account, and able to identify the tools required for such approaches by EOP.
Pathway	Seminar on MPAs and Fishing Communities (held in June 2004).	Internet: webpage posted on CANARI website with links to sites of main partners.	Training workshop.	Study tour of Negril Marine Park and community.	Individual multi-site study tour or mentoring arrangement (face to face meetings).

Table 3: Communication plan for Experiment 3

	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5 (optional)
Products	Guided discussions and field visit based on messages of Suite 1 projects.	 R7559 and R8134 case studies and guidelines policy brief based on MPAs and Fishers seminar links to materials from other research relevant to MPAs and coastal communities. 	 Training materials based on relevant messages and tools from Suite 1, supported by: R7559 case studies R7559 MPA 8 guidelines Policy brief based on results of MPAs and Fishers seminar (to be prepared) Negril case study package (to be prepared). 	Negril case study package (to be prepared).	R7559 MPA Guidelines as framework for meetings and discussions. Suite 1 case studies and Negril case study package to illustrate issues and approaches.
Partners	UPR Sea Grant, NCRPS	CANARI; UWI; Sea Grant	Depends on option selected (see Opportunities below).	NCRPS, Counterpart Caribbean	See Opportunities below
Evaluation	Follow up survey of participants 6 months after seminar to assess use of knowledge gained and changes in level of involvement in MPA management.	Phone survey of random sampling of target audience from list serves used to announce the page: whether they visited, what they visited, how they used it, how useful they found it.	Post-workshop participatory evaluation; Follow up survey on use of materials.	Participatory evaluation of usefulness of case study package at the end of study tour. Follow-up interviews with sample of participants on whether and how they incorporated learning into their work.	Baseline and end-of- project assessments of KAP; diary of participant's observations, impressions, and learning.

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	Activity 1	Activity 2	Acti	Activity 3	Activity 4	Activity 5 (optional)
Opportunities		Use CaMPAM and other list serves to make available to target audiences.	UNEP MPA Training of Trainers Course.	SocMon training workshop for Eastern Caribbean.	AID could be approached to sponsor participants; Sea Grant might be able to contribute to costs of a Puerto Rican participant.	May be possible to arrange study tour for new manager of East End Marine Park, St. Croix with funding from NOAA.
Barriers		Although identified as a preferred pathway by limited sampling of target audience, Internet may not be accessible to or actively used by the entire audience.	Modules now being revised by TNC; date of next course not set (could be too late for project).	Scheduled for 2005 (may be too late?).		High cost for only one person.

Appendix 1

Experiment 3 Target Audiences

- Managers and staff of the 75 MPAs identified in the R7976 MPA characterization study, plus the 6 Puerto Rican MPAs added in the 2004 R8317 update of the study
- Government departments with oversight responsibility for MPAs:
 - Antigua and Barbuda: Fisheries Division
 - Barbados: Coastal Zone Management Unit
 - Belize: Fisheries Department
 - British Virgin Islands: National Parks Trust
 - Cayman Islands: Department of the Environment
 - Cuba: local agencies of the Ministry of Science, Technology, and Environment
 - Dominica: Fisheries Division (Scotts Head); Forestry Dept (Cabrits)
 - Dominican Republic: Subsecretaria de Áreas Protegidas y Biodiversidad
 - Grenada: Fisheries Division
 - Jamaica: National Environment and Planning Agency
 - Netherlands Antilles: individual island Executive Councils
 - Puerto Rico: Departamento de Recursos Naturales y Ambientales
 - St. Lucia: Department of Fisheries
 - St. Vincent and the Grenadines: Ministry of Agriculture
 - Trinidad and Tobago: Department of Marine Resources and Fisheries
 - Turks and Caicos: Department of Environment and Coastal Resources
 - US Virgin Islands: Department of Planning and Natural Resources
- NGO and CBO management partners
 - Belize: Belize Audubon Society, Forest and Marine Reserve Association of Caye Caulker, Friends of Laughing Bird Caye Committee, Hol Chan Trust Fund, Toledo Institute for Development and Environment, Toledo Association for Sustainable Tourism and Empowerment
 - Dominican Republic: CEBSE, Grupo Jaragua
 - Jamaica: CCAM, Montego Bay Marine Parks Trust, Negril Coral Reef Preservation Society
 - Netherlands Antilles: STINAPA, Saba Conservation Foundation, St. Eustatius National Parks Foundation, St. Maarten Nature Foundation
 - St. Lucia: Soufriere Marine Management Association, St. Lucia National Trust

- Organisations and programmes involved in providing technical support to MPA managers and MPA management institutions
 - Counterpart Caribbean
 - OECS Environmentally Sustainable Development Unit
 - The Nature Conservancy
 - The Ocean Conservancy
 - UNEP Caribbean Environment Programme
- Planners and policy makers directly involved in coastal area planning and development
 - Heads of ministries and agencies with overall responsibility for CZM in target countries
 - Heads and senior planners in CZM departments within those ministries and agencies
- Organisations advocating for improved coastal area management
 - Local and national conservation groups in the project countries
 - Caribbean Conservation Association
 - University of Puerto Rico Sea Grant College Program
 - University of the West Indies CERMES
- Coastal resource users involved in and impacted by MPA management regimes (living or operating within or close to MPAs)
 - Fishing cooperatives, associations, informal groupings, and individual fishers and fishing product marketers
 - Other harvesters of coastal and marine products, e.g., sand miners, seamoss harvesters
 - Dive operators associations and individual dive operators
 - Charter boat associations and individual operators
 - Hotels and hotel associations
 - Cruise ship operators
 - Small entrepreneurs and vendors and their associations
- Coastal communities impacted by MPAs
 - Local government institutions
 - Community organisations
 - Schools

Product	Available From	Target audiences	Recommended uptake pathways
Training module on marine protected areas and sustainable coastal livelihoods	CANARI	MPA managers and management partners	Training programmes such as UNEP's MPA Training of Trainers course
Graphic and interactive case study on Negril	CANARI	Coastal community residents Organisations providing technical assistance to MPA and coastal community management Community development organisations and agencies	Seminars, community events
Policy brief on MPAs and sustainable coastal livelihoods (CANARI Policy Brief No. 5)	Printed copies from CANARI Electronic copies from www.canari.org	Policy makers, senior technocrats, coastal area managers	Hand distribution at conferences and meetings; via Internet through professional networks such as CAMPAM
Webpage containing case studies, guidelines and other written materials on MPAs and livelihoods	www.canari.org/mpa.htm	Coastal area managers, planners, researchers, and management consultants; trainers and educators	

Appendix III: List of Experiment 3 Products

The printed products are attached to the FTR at Annex A: Appendix III

Appendix IV: Evaluation Reports

A – Inception Workshop Follow-up Survey Finding Common Ground: A Seminar for Caribbean Marine Protected Area Managers and Fishing Communities

Negril, Jamaica 23-25 June 2004

Participants' responses to semi-structured interviews

General observations:

- Length of time between seminar and interview posed a bit of a problem with participants in recalling more in-depth information. This means that broad ideas are the ones often remembered and there was an inability to extract more specific insights. This made asking some questions redundant.
- Issues that stood out for fishers clearly differed from those that stood out for the managers. Fishers were very interested in and were able to better recall issues that affected their livelihood directly such as the need for increased mesh sizes and resultant catches, the Managers were interested in the processes that could engage fishers and ensure better integration of fisher views and concerns.
- Participants were very happy to hear of the experiences of those around the region and especially of the Cuban experiences, and remarked on the similarity of the issues and challenges being dealt with around the region as well as the similarity of the methods employed to deal with these issues and challenges.
- Participants had not been in touch with the overseas participants whom they interacted with at the seminar, and had not made an effort to do so. There was some communication with local Jamaican participants.
- Fishers have a good understanding of the importance of managing fish stocks although it may reduce their catches in order to revive fish stocks and ensure a continuous supply.
- Fishers believe that MPAs try to help as oppose to hurt them. (*The importance of MPAs to fishers lies in their ability to ensure adequate catch quotas. This seemed to be the fishers' ultimate concern.*).
- Managers were mostly aware beforehand of the issues raised at the seminar, but the seminar served to reinforce the idea that MPAs can provide many benefits to fishers, that there is a need for MPAs, better participation from fishers and a need to find ways to engage them continuously.
- Managers explicitly commended the inclusion of the site visit which they feel was useful for better engaging fishers and at least one manager made recommendations for future workshops.
- All participants understand the beneficial role that MPAs can play in the lives of fishers and fisheries.
- Managers benefited greatly from the seminar, at least one is putting to use his exposure to participatory planning in a new project in his home country, another has shared his experience with colleagues within his Division and others feel that the seminar served to reinforce many of the ideas about the importance of and need for MPAs.

• Only one interviewee had visited the MPA page or been aware of it, but was provided the link and expressed interest in visiting it.

Jamaican fisherman #1

- Had initial problem recollecting the workshop and the content of the workshop because it had been so long ago. *Memory jogged on reference to Tighe Geoghegan and on reference to participants from Cuba and Puerto Rico.*
- What stood out for him was how the seminar brought different people together. What appealed to him especially were the discussions that dealt with the issue of over fishing, those who came from outside the area to fish and the methods used to address these issues.
- Liked that the workshop allowed time for participants to meet with other fishermen in the community of which 90% have agreed to stop fishermen from outside from coming into their fishing grounds
- He interacted with participants from other countries and through them got some valuable insight into the methods they used to care for coral reefs.
- Thinks that MPAs are helpful to fishermen and can help ensure that fishing stocks are available in the future. He understands even more after the seminar the need to ensure that more adult fish are captured as opposed to juveniles so that the stocks would be replenished. He has started using 1 ½ "mesh for his pots as opposed to 1" to assist in this. He also understands that anchoring indiscriminately can be damaging to coral reefs and consequently to fishing habitats and stocks.
- There has been no communication since the seminar with any of the overseas participants, but there has been communication with Jamaican participants (constant contact with Malden Miller to be precise). Discussions have been about moorings, diving and fishing plans in the Negril Marine Park. He would like to see more funding available to install mooring buoys and lines.
- He has made no effort to contact any of the overseas participants.

Jamaican fisherman #2

- Had initial problem recollecting the workshop and the content of the workshop because there have been several different seminars over the past year. *Memory jogged on reference to Tighe Geoghegan and on reference to participants from Cuba and Puerto Rico.*
- It was interesting to hear about the experiences of different persons from around the region. The language barrier was a bit challenging to get around, but translation was very helpful.
- The seminar was especially useful for learning about the protection of the ecosystem and the need to use different mesh sizes for fish pots to preserve fish stocks.
- The seminar made him feel differently about the relationship between MPAs and fishermen in that the MPAs try to actually help fishermen secure catches for a longer period of time. Although he claims that the government tells fishers to use different mesh sizes, he says that he personally understands that because of fish growth rates he must make the change from 1 ¹/₄" to 1 ¹/₂" to reduce catches of juveniles. He gets his new mesh from the NCRPS through an exchange programme where the old mesh is handed in. Under this programme you give up one pot for two new ones. He admits that he does not catch as many fish as before, but that at least he is catching bigger ones. He will still from time to time use 1 ¹/₄" mesh pots as "backup" as sometimes poor catches can be frustrating.
- Feels good that Fisheries' Associations and Fisheries bodies are available to fishers if they need to air their concerns or are unhappy with any new fishing arrangements for instance in the event that the new mesh sizes led to consistent low catches.

• There has been no communication since the seminar with any of the overseas participants, neither has he made the effort to contact them.

Jamaican Fisheries Officer

- Initially felt that the seminar took place long ago and was not sure he would be able to recall valuable information needed for the interview.
- There has been no contact with the overseas participants since the seminar and no effort to contact them.
- The interaction with participants from different countries at the seminar yielded some useful insights into the issues/problems being confronted in other countries. It made him feel better knowing that others were experiencing similar challenges and made him feel less as if he was isolated. Similar methods to dealing with issues/problems were used abroad and Cuban fisheries management strategies were to be admired. Feels that fisheries management works well there as a result of the culture of the people and the type of government structure that does not allow authorities in charge to be as laid back as in other parts of the region. One lesson that may have come out of this insight may be that legislative compliance and enforcement are necessary in addition to asking and encouraging people. This type of approach was also witnessed first hand on a trip to Cuba. Data collection programmes for some species were excellent.
- Pre dating the seminar there was consultation with fishers, but one of the things that came out strongly for him at the seminar was the strong need for the Fisheries Division to integrate more with the fishers, a need for the development of more community fisheries, and a need for fishers to be more aware of the issues which affect them including to receive more information on the status of fisheries and fisheries management plans.
- The insights provided by the seminar has been communicated to others within the Division including Fisheries Extension Officers
- Since the seminar the Officers have been going out more on the beaches to talk to fishers and holding more meetings with them on site. Among other things they have been talking to them about the importance of good data collection, and now they find it easier to get the necessary information from the fishers.
- On a whole he was already aware of many of the issues surrounding MPAs and fishing which the seminar treated with. But while the seminar did not break new ground for him, it did reinforce the idea that MPAs can play an important role in resuscitating fish stocks and thus needed as much support as they could get.
- Thinks that more workshops like these are needed. And since cost is prohibitive, local as opposed to regional ones may be considered. They may also take place more frequently as opposed to once a year.
- One suggestion made is that we always need to remember that traditional methods of engaging fishermen do not always work. New and innovative ways need to employed. Loved the format of the workshop and was sorry that he could not attend it throughout its entirety, but the site visit included in the seminar he felt was a very excellent idea and a good and useful way to ensure that fishermen identified with the content of the seminar and that more of them were exposed to the ideas under discussion. This was preferable to a hotel workshop. Ideal would be to have 3 day workshop with the workshop talking place on 3 different beaches. The meeting would be informal, allow the fishers to be better integrated and will ensure that even

if they could not attend the workshop at a hotel, that they will be there and will be exposed to the issues. Fishers are often suspicious by nature of authorities and this may help them to relax in their milieu and to better assert their opinions.

- Feels that it is often the case that the fishermen attending workshops are often the same ones who keep coming and eventually it becomes a case of preaching to the converted. Also, it helps to have others some into communities from time to time as opposed to having only fishermen return to their communities since once a fisherman is well known in a community people who are used to interacting with him may not be as ready to pay much attention to what he may be saying. Orange Bay fishers as well as some in other communities are improving, but very slowly, in their fishing methods and practices.
- The seminar also emphasised even more the need for a fisheries management plan for the Negril Marine Park which is in process.
- He was really glad this call was made to follow-up and enquire about the experiences gained form the seminar. Follow-up is key to act as a reminder of and to reinforce the events and ideas.
- He was not aware of the webpage on MPAs on the CANARI website but was provided with the link and expressed interest in visiting it.
- He requested another copy of the final seminar report with the updated participants' list.

Regional MPA expert

- Nothing particular from the seminar struck him. He remembers spending a lot of time conversing with Tighe Geoghegan and Patrick McConney than the fishermen on the site visit. Liked that a field visit was incorporated, felt that it a good idea and served to make fishermen feel more comfortable.
- He was quite happy to see Cuba represented at the workshop as they are often underrepresented at forums. He got an insight into the similarity of the problems, conflicts and issues which they faced.
- He had not been in contact with any of the overseas participants since the seminar or has tried to. He knew the participant from PR through a Training of Trainers Programme, but had not been in touch since this Programme either. There has really been no reason to communicate with these participants, but in the event that he must, he will use the contact information on the participants' list.
- The seminar added to his knowledge about fishermen's way of thinking, how they feel about different issues and what their concerns are. He has seen some changes in fishers over time. Mr. Nelson in particular he believes still maintains his views, but is amenable to considering new fishing methods and Ceylon has shifted his views now that he is a game warden.
- The seminar introduced to him the need to think about alternative livelihoods and how fishermen's views must impact on decision making about these alternatives. There were valid ideas about how alternatives should not be imposed, but should be suggested by fishermen as they are the ones who must decide on their future, that it is often difficult for fishermen to change and that programmes should exist to allow older fishermen to continue fishing as a way of earning a living.
- He was not aware of the webpage on MPAs on the CANARI website but was provided with the link and expressed interest in visiting it.

Puerto Rican marine scientist

- The seminar was very informative to him. Being a Biologist it has exposed him to the idea of employing highly participatory approaches to the development of management plans. The idea gave birth to a proposal for a NOAA-funded project to be carried out in NE Puerto Rico called La Cordillera (Being carried out with Manuel).
- He had met with at least one of the Cuban participants before and visited and continues to visit Cuba extensively, therefore was familiar with many of their issues. But has not been in touch with the participants.
- The seminar did make him think differently about MPAs and fishing communities in that he realizes how much the success of the MPA relies on full stakeholder participation. He also understands better how government imposed ideas with no participation can lead to MPA failure which is what happened at La Culebra, PR.
- He has visited the MPA page on CANARI's website, but must revisit it to make use the publications.

Written response to survey questionnaire

Cuban MPA manager

1. Was there anything from the seminar that stood out for you?

The idea that fishermen can cooperate in establishing MPA was very interesting for me.

2. The seminar included fishermen and MPA managers from several countries, including Cuba, Jamaica, Puerto Rico, Barbados, and the Virgin Islands. Did you get any useful ideas or insights from the participants from other countries? If so, what were these?

Yes I did. I get a clue in how to approach to the fishermen that uses MPA. I saw the problems that could happen in the MPA I manage. I got other view of the same problems I have to deal in Cuba. and how they try to solve it.

3. Have these ideas or insights been useful to you since then? How so?

These ideas help me to talk to stakeholders and fishermen in Cuba using the examples we discussed at the seminar. Some research results Hernandez gave me help me to go on with my own research proyects in MPA

4. What are your views about MPAs and fishing? [Do you think that fishing hurts MPAs or that MPAs hurt fishermen?]

I think both ideas. Depending on the specific characteristics of the area Fishermen can hurt MPA, such as the Category of the Area (I don't know how do you call that in your country), the fishing intensity, what kind of fishing gear fishermen use. MPA can hurt fishermen in a short period of time, they can not fish in the areas they used to, but MPA will increase the fishing stocks at long term. The problem with the fishermen (mostly traditional or artisan fishermen) is if they can shift to other job, such as tourism, or they can shift form areas used by generations. Sometimes, I think, we have to protect them as a part of the values of an MPA.

5. Did the seminar make you think any differently about how MPAs affect fishermen and fishing communities? If so, how?

No I thought that way before the seminar, but seminar make me think it clearly.

6. Did the seminar make you think differently about the contributions that fishermen make or can make to MPAs? If so, how?

Now I think fishermen can help to MPA development, one year ago I was doubtful.

7. Have you had any communication since the seminar with any of the people you met there to get or share information? If yes, what have you been able to get or share?

I practically stayed out of communication.

8. If no, have you wanted to get in touch with people you met there? Were there barriers to getting in touch with them?

I want to get in touch with people I met there. The only barrier I have is the e-mail access and now I have it.

9. Did you think you benefited from the seminar? In what ways? How could it have been made more useful to you?

The seminar benefits me not only in the way said in my previous answers but also help me to see how could be the things in my AMP if the fishing and tourism pressures increases. How the conflicts would be, and how those conflicts will be reflecting by the environment.

10. Were there ideas that came out of the seminar that it would be useful to share more widely? If so, what were these and who do you think they should be shared with?

The idea that fishermen can cooperate in establishing and managing MPAs, we don't have to simply exclude them. We have to find a reasonable way to make them involve in a MPA proyect. I think these ideas should be shared with decision makers

Additional:

• Have you had the opportunity to visit the webpage on MPAs that was set up on the CANARI website?

No I haven't

• What did you think of it?

Appendix IV

B - Policy Brief: Report on use and feedback

Marine Protected Areas and Sustainable Coastal Livelihoods (CANARI Policy Brief No. 5)

1st Announcement placed on CaMPAM list serve (<u>campam@yahoogroups.com</u>) 1 June, 2005 (before creation of webpage):

CANARI announces the publication of a new policy brief on Marine Protected Areas and Sustainable Coastal Livelihoods. The policy brief is based on research undertaken by CANARI and others in the Caribbean over the past several years and includes guidelines on developing effective MPA management partnerships that involve local stakeholders; dealing with conflicts between the tourism and fisheries sectors, and sustaining fishery-based livelihoods.

Copies of the policy brief are available free of charge to persons involved in MPA management in the Caribbean. To request copies, please contact CANARI at:

Caribbean Natural Resources Institute Administration Building Fernandes Industrial Centre Eastern Main Road, Laventille Trinidad and Tobago Tel: 868 626 6062 Fax: 868 626 1788

Person/Org	Date	Feedback/comments/intended uses
Lloyd Gardner, Caribbean protected area management consultant	21 June	
Jennifer Jeffers Manager, Regional Marine Strategies Conservation International Washington, DC 20036	20 June	I work in the Regional Marine Strategies Department at Conservation International. I work directly with all of our regional field teams to lend technical support, work on strategy development, and help foster partnerships. Is it possible for me to request a copy of your new publication so that I may share this with our relevant field teams? (Afterward) Thank you very much for this. I found the brief and it is great. Many thanks!
Ramon de Leon. Manager - Bonaire National Marine Park. Bonaire - Netherlands Antilles.	1 June	

Responses to announcement:

Person/Org	Date	Feedback/comments/intended uses
John Ogden, Director, Florida Institute of Oceanography	8 June	
David Shim Programme Coordinator The Trust For Sustainable Livelihoods Trinidad and Tobago	2 June	Both myself and Dr. Floyd Homer (<i>below</i>) have long involvement in Marine Protected Areas and TSL does have a primary focus on livelihoods.
Floyd Homer President The Trust For Sustainable Livelihoods Trinidad and Tobago	1 June	
Leslie John Walling Technical Coordinator Mainstreaming Adaptation to Climate Change (MACC)Project Belmopan, Cayo, Belize	1 June	We are currently involved in the development of coastal community vulnerability assessment and reduction study for the Belizean communities of Dangriga, Hopkins, and Punta Gorda. Initial liaisons with the communities have been made through the PACT protected areas review process, as the protected areas policies have a direct impact on resource availability and sustainable livelihoods.
Damien E. Hughes Executive Director Anguilla National Trust ANGUILLA	1 June	In lieu of its relevance to the work of the Anguilla National Trust we would also like to request 3-5 copies of the new policy brief on Marine Protected Areas and Sustainable Coastal Livelihoods. We look forward to receiving the copies and utilizing experiences and/or drawing on recommendations made in the resource to further enhance the work of Anguilla's Marine Protected Areas.
Colleen Corrigan Marine Protected Area Learning Partnership Facilitator The Nature Conservancy Arlington, VA 22203-1606	1 June	I am currently managing a learning partnership with MPA managers and think this could be of value.
Dave Canny MPA Science Institute National Marine Protected Areas Center Washington, D.C.	1 June	

Person/Org	Date	Feedback/comments/intended uses
Georgina Bustamante, Ph.D. Marine Science and Policy Consultant Hollywood, Florida 33021	1 June	I am working on the update of the UNEP-MPA management manual and assisting UNEP-CEDP in different MPA projects, so your publication is highly valuable. Please, send it to GCFI list serve for dissemination of the annoucement through the listserv <u>Dave.Anderson@KleinschmidtUSA.com</u> and to out a link in GCF web site.
Dr. Stephen C. Jameson, President Coral Seas Inc Integrated Coastal Zone Management Virginia, USA	1 June	
Kathy Kelly Marine-Protected Areas Librarian NOAA Central Library Silver Spring, MD, USA	1 June	
Bryan Oles Senior Social Scientist National MPA Center, NOAA Silver Spring, MD, USA	2 June	Excellent! Many thanks (after receipt)

2nd Announcement placed on CaMPAM list serve 15 June 2005 following posting of policy brief on CANARI website (www.canari.org/brief5.pdf):

CANARI announces the publication of a new policy brief on Marine Protected Areas and Sustainable Coastal Livelihoods. The policy brief is based on research undertaken by CANARI and others in the Caribbean over the past several years and includes guidelines on developing effective MPA management partnerships that involve local stakeholders; dealing with conflicts between the tourism and fisheries sectors, and sustaining fishery-based livelihoods.

Copies of the policy brief are available on the CANARI website at www.canari.org/mpa.htm free of charge to persons involved in MPA management in the Caribbean. Please look under the section heading CANARI Policy Brief #5.

You may direct further inquiries to CANARI at:

Caribbean Natural Resources Institute Administration Building Fernandes Industrial Centre Eastern Main Road, Laventille Trinidad and Tobago Tel: 868 626 6062 Fax: 868 626 1788 E-mail: info@canari.org

Same announcement placed on Gulf and Caribbean Fisheries Institute listserve (<u>GCFINET@LISTSERV.TAMU.EDU</u>), following suggestion from Dr. Georgina Bustamante, 23 June 2005

Policy brief page views, 15 June – 15 September 2005: 309

References or links to policy brief on other websites:

- IUCN Protected Areas Task Force on Island Conservation and Protected Areas (TAFICOPA) publications list (<u>http://www.fnatura.org/paginas/textos.php?id=218&val=35</u>)
- Conservation International's Marine Portal website (including pdf and zip downloads of policy brief) (<u>http://portals.conservation.org/marine/codebase/handlers/objectview_handler.cfm?objectid=</u>2B760014-A8B0-D042-F70B-F157EF49346C&classid=4)
- 9. US Sea Grant International News, Development and Opportunities listserve (<u>http://repete.uri.edu/cgi-bin/wa?A2=ind0506&L=sgi-l&T=0&F=&S=&P=1086</u>)
- 10. US National Marine Protected Areas Center Information Exchange For Marine Educators (www.nature.nps.gov-learningcenters-new-marine_edu_jul05.doc.url)

Appendix IV

C - Webpage visits and downloads 15 June – 15 September 2005

Marine Protected Areas and Coastal Communities Webpage www.canari.org/mpa.htm

MPAs and Coastal Communities Webpage Link	Hits through 15 Sept 05
Main page	550
Policy Brief (pdf document)	303
Project pages with additional documents:	
Conflict in Environmental Conservation: a Jamaican case study	142
Caribbean MPAs and opportunities for pro-poor tourism	137
Requirements for developing successful co-management in the Caribbean	119
Finding Common Ground: Marine Protected Areas and Fishing Communities	111
Institutional and technical options for improving coastal livelihoods	86
Biology, ecology, political economy: seascape and conflict in Jamaica	81
Feedback form	75

References to webpage found on other websites

October 2005 issue of the *National Marine Protected Areas Center Information Exchange For Marine Educators* (mpa.gov/information_tools/education/pdfs/oct05.pdf)

Appendix IV

D - Training Workshop Follow-up Survey

Workshop on MPAs and Sustainable Coastal Livelihoods

13 April 2005 Negril, Jamaica

Participant responses to semi-structured interviews

1. Do you remember any points you or others brought up that you thought were especially important or interesting?

MPA management agency staff person	Local tourism sector representative	Local business association representative	MPA Manager
Can't recall anything	"So many workshops to try and remember" – remember discussion on alternative jobs and employment of fishers and the possibility of training them in other things e.g. tourism	There were a number that stuck in my mind – various stakeholders and how they need to work together for proper management.	Negative impacts of seine nets and spear fishing – very important to eliminate form the marine park.

2. Have you used or thought more about any ideas from workshop?

MPA management agency staff person	Local tourism sector representative	Local business association representative	MPA Manager
No; possibly used things but not linked to the workshop.	Νο	Not specifically except as it relates to things I am working on or concerned about – beach, morass, and impacts morass has on the beach.	Workshop made him think about seine nets and how destructive they are and focus on this issue in management. He held consultations with fishers since the workshop – found out that very few use seine nets and most are totally against them. He listened keenly to what the fishers had to say. It is important to find alternative livelihoods for seine net fishers but he talked to them and they don't want to get into another activity. He is

ГГ	
	focusing since the
	workshop on how to
	lead the charge to
	educate for change. He
	sees the possibility for
	getting the other fishers
	to use peer pressure on
	the seine net fishers,
	but sees difficulties
	with this. He wants to
	start documenting the
	small catch (photos)
	and show the fishing
	community the
	negative impacts of
	seine nets and how
	they are destroying the
	entire fishery - over-
	fished juveniles and
	impact on nursery. He
	is working on a
	fisheries management
	plan under NOAA
	project, getting a
	student to do a fisheries
	census.

- 3. Questions about format of workshop: How was the...
 - a. Balance between presentation of material and discussion?

MPA management agency staff person	Local tourism sector representative	Local business association representative	MPA Manager
Good	Good – a lot of discussion, everybody participated, not just spoken to	Very good	Ok

b. Atmosphere - did people have a chance to air views?

MPA management agency staff person	Local tourism sector representative	Local business association representative	MPA Manager
Yes	It was very open and honest	Yes – engaged because of interaction.	Started out closed but towards the end was fairly open, could have been more as increased understanding varies between persons. He noted that individual personalities meant that some people did not

	open up as easily. But with time the whole
	group opens up more into the discussion.

MPA management agency staff person	Local tourism sector representative	Local business association representative	MPA Manager
Yes	This is one of the better cases in Jamaica. Anywhere in Jamaica could be used. There are a lot of fishing villages and areas (e.g. south coast – Pedro beach) if not looking strictly at tourism. If looking at tourism, then Negril is best.	Excellent, but this has been extensively studies, need to see action.	Yes – because it gives him information for management. He went on to discuss the importance of socioeconomic monitoring to see if and how management impacts on people's lives.

c. Use of Negril as a case study/example?

d. Length (one-day)?

MPA management agency staff person	Local tourism sector representative	Local business association representative	MPA Manager
Should have been longer – there were questions and discussions people wanted to get into	Fine. For someone who works in a marine area, longer. Discussions could have gone on longer – maybe another half day. There was a lot to talk about.	One day is very adequate – everybody attended and nobody ran away – of longer some people don't come for the whole time.	One and a half days maybe. But don't want to break the momentum from one day to the next.

e. Number and mix of participants?

MPA management agency staff person	Local tourism sector representative	Local business association representative	MPA Manager
Good mix, but not enough mix of fishermen – e.g. trap fishing, spear fishing. Some more people	Number was good. Mis was good – representing a variety of areas – discussions were lively because there were many different points of view.	Good because some people there represented more than one interest.	Good – had the key groups, but there needed to be more representatives of the fishing community, but they are not organised and scattered. NCRPS targeted key influential persons hoping that they would be effective in spreading the message, but he noted

	that this was not assured and something may be lost in the process. He noted that the fishing community needed help (e.g. from community development agency) to get organised – to create forums for dialogue. This gets the fishers more involved in management. Add Montego Bay Marine

f. Venue/facilities?

MPA management agency staff person	Local tourism sector representative	Local business association representative	MPA Manager
Good	Fine, especially for Negril, there is not much better.	Adequate for that number but not enough room for break out groups – some had to go outside.	Money determines where you can hold it. Need to weigh between posh hotel versus the community center. Nobody felt uncomfortable where it was held.

- 4. Would you have liked to have had:
 - a. more written materials to take away?

MPA management agency staff person	Local tourism sector representative	Local business association representative	MPA Manager
No, don't end up reading	Yes, there can never be too much, although I take a lot of notes.	Don't think so – adequate – tend to get and put down – can always go back. Good variety of materials given.	Yes for me, but for some fishermen who don't read doesn't matter.

b. a field trip?

MPA management agency staff person	Local tourism sector representative	Local business association representative	MPA Manager
Would have been good – to see the reefs	Could have been interesting – especially to see exactly what was	Not for 1 day workshop – possibly could have one on the	Need to think about what kind of field trip you could hold re the

being talked about.	morning of the next day.	sustainable livelihoods context and what value
	-	a field trip would have
		for the learning. Not
		sure if a field trip
		would be good.
		Possibly could hold
		discussions with
		fishermen and get a
		hands-on view to see
		how they live so would
		have a better feel for
		the issues.

5. If workshop were repeated, what would you add or change?

MPA management agency staff person	Local tourism sector representative	Local business association representative	MPA Manager
Broaden the mix of different types of fishermen. Add a field trip so extend the workshop to 2 days.	Hold it at other sites. Field trip would be excellent – especially for people who are not in that field – especially to see negatives and problems.	Half day field trip and wrap up. Can't recollect details to know what would change.	Include participants form the Montego Bay Marine Park – they have a model permit system that they can share with others. Also have more fishermen participating – get a wide range from that sector.

6. If workshop were repeated in Jamaica, who should be invited?

MPA management agency staff person	Local tourism sector representative	Local business association representative	MPA Manager
Same people – fishers, fisheries division, NEPA, other marine park managers.	More government people – Ministries directly related to marine park management (e.g. Ministry of Land & Environment) and at higher up technical levels and decision- makers who can effect change rather than people on the ground.	Same persons – same organisations – different people in north & east, there are some active groups.	The main groups were there. Same. Keep focused on one site so can get information for management. But the mix of people makes you think out of the box.

The MPA manager also commented that the feedback he got from the participants was that the workshop went well and they left feeling good. Named one participant in particular re this, noting that she is difficult to please; so her positive impressions were highly valued.

Written response to survey questionnaire

Jamaican protected area agency officer

- 7. Do you remember any points you or others brought up that you thought were especially important or interesting?
 - *The framing of a definition of the concept of livelihood;*
 - the thoughts that "people's perception of how involved they are is their reality"; "communication is key".
 - the need to have a clear focus on livelihood enhancement and communicate it clearly
- 8. Have you used or thought more about any ideas from workshop?

Capital assets in a marine park; trade-offs – livelihood security vs natural resource sustainability; how can the Negril Marine Park enhance the assets of the community and the sustainability of people's livelihoods

- 9. Questions about format of workshop: How was the...
 - a. Balance between presentation of material and discussion? Good
 - b. Atmosphere did people have a chance to air views? Yes
 - c. Use of Negril as a case study/example? *Was relevant as it characterizes the issues which the workshop sought to address*
 - d. Length (one-day)? Two days. The first day focus was on Sustainable Coastal Livelihoods in MPA's. The second day focus was that of Socio-economic Monitoring in the Negril Marine Park
 - e. Number and mix of participants? Fair
 - f. Venue/facilities? Good
- 10. Would you have liked to have had:
 - a. more written materials to take away? No
 - b. a field trip? Yes
- 11. If workshop were repeated, what would you add or change?

Visit to some of the local communities within the Negril Marine Park to interact with the users of the resources; Boat tour of the park; more participation of local community representatives in the workshop.

12. If workshop were repeated in Jamaica, who should be invited?

Organizations/groups who that participated as well as : The Police; Craft vendors Association; Fish vendors; Caribbean Coastal Area Management Foundation; Schools in the area; Spear fishermen.

Appendix IV

E - Case study feedback

Requests for feedback on Negril case study posters, hand-outs, and PowerPoint presentation were sent by e-mail to all 32 participants of the seminar on sustainable coastal livelihoods, where they were presented in July 2005. Only four responses were received; these are reproduced below. Because of lack of time, it was not possible to follow up with additional telephone interviews; however, informal inquiries were also made with several participants, and these were taken into account in the lessons drawn from the experiment.

Response #1:

I noticed the posters; it is certainly fair to say that they are eye-catching - size and layout contribute. I think that literacy levels would certainly be a factor re audience. I picked up some of the handout material but mainly to pass on to another project.

I think that things like Environment Day activities would be pretty obvious venues for display; also the library/schools; kids doing geography for CXC/CAPE/AA Levels, and their teachers, might be a natural audience too. You might want to seek partnership with NEPA and other relevant agencies including the ENGOs to bring together the various marine parks and delegated areas for a sharing...

And if there are 'Green' hotels in the Negril area, they might be willing to allow mounting of the material in the lobby or elsewhere for a period - though the aim of this would need to be clear (image, fund-raising, awareness among visitors and staff, first step to sponsorship etc)

Response #2:

1. Were the posters visually appealing; did they catch your eye and draw you in to the story they were telling?

Absolutely, because of their design, but also the size, of course. The fact that the size is unusually large helps a lot.

2. Did you feel that the oral history approach was effective in telling the story of Negril and the Park?

Yes. It gave a 'human face' and a 'news face' to a subject (a park) that is not normally an exciting subject. The use of newspaper clippings was particularly effective. Perhaps it would have been good if the pictures of the people interviewed could have been placed on the poster. One comment: the posters had a lot of information, perhaps too much for people who are not automatically interested in this stuff.

3. Do the posters tell a compelling story about coastal development and its impacts on livelihoods? Do they bring out some of the key lessons and points?

I would need to look at them again to respond well, but I recall that the story was clear and well put together, the time lines were very useful, and the messages were clear. Hard to say how it could have been done better.

4. At what kinds of events and venues might the posters be usefully displayed?

In Negril, you wish they could be placed in temporary displays in churches, schools and banks. They could also go in the halls and corridors of national agencies in Jamaica. They could be included in national exhibitions of all kinds that promote Jamaica and what it does, even trade shows. And they should go to the next editions of regional conferences on protected areas, environment, tourism and sustainable development, such as the first Congress of Marine Protected Areas (impac –http://www.impacongress.org) to be held in Geelong (Australia) on 24-28 October.

Response #3

1. Were the posters visually appealing; did they catch your eye and draw you in to the story they were telling?

Yes they were very appealing and their size attracted my attention immediately.

2. Did you feel that the oral history approach was effective in telling the story of Negril and the Park?

I believe the oral history approach was a very clever one. There is no better way to tell someone a story than from "the horse's mouth.". The posters reflected the wide spectrum of stakeholders.

3. Do the posters tell a compelling story about coastal development and its impacts on livelihoods? Do they bring out some of the key lessons and points? *Main lessons: working together takes a lot of work. (It's been two months.)*

4. At what kinds of events and venues might the posters be usefully displayed? *Posters may be very effective at multi-stakeholder meetings where everybody could see themselves (a stakeholder similar to them) and everybody else represented. Conferences in which co-management may be a topic.*

5. If you read the hand-outs, did you find that the information they provided was useful? *Very much so for the purpose of seeing how co-management worked in the Negril context.*

Response #4:

1. Were the posters visually appealing; did they catch your eye and draw you in to the story they were telling?

Posters were very visually appealing. The way in which the information was organised on the poster to tell the story was creative and easy to follow visually especially considering that the material was text intensive. Material if this sort is commonly displayed in dull, colourless formats that make the information unappealing and hard to follow, but this was not the case.

2. Did you feel that the oral history approach was effective in telling the story of Negril and the Park?

The oral history/narrative approach made the story more real and human. I especially liked the ideas of sticking the pictures up next to the narratives as this really brought home the fact that everyday, ordinary people were involved and made this initiative happen and not just faceless organisations. It one, gives a story of hope to other every other everyday person and two, reminds those whose work is focussed on sustainable livelihoods that their work actually means something for their constituents.

3. Do the posters tell a compelling story about coastal development and its impacts on livelihoods? Do they bring out some of the key lessons and points?

Considering the limited space that a poster provides and the amount of information available on the Negril area, the posters did a great job of collating lessons and key points. The idea of the poster differs so drastically to a case study or technical document. The important points for anyone wanting a summary of how and why the Negril protected area began are there. Reading the poster was a relaxing and entertaining experience in a way that reading a technical document isnt't. Obviously the latter has its purpose, but wide readership is encouraged by the poster as it engages those who won't ordinarily read a technical document. I feel that prominent, constant display of the posters should be encouraged so that those who may never reach the stage of picking up a technical document would be fed valuable information.

4. At what kinds of events and venues might the posters be usefully displayed?

Community events in Negril (for tourists and locals); Forums (regional and local) that focus on protected area management, sustainable coastal livelihoods and even tourism development). Training workshops and seminars which focus on these themes. I thinks its important that as many local people see them (both for self-esteem and pride, appreciation of what can be done and to help them to rationalise what happened) and that those from outside the area (Jamaican and non-Jamaican) would have a better sense of the discord and challenges to local people that result from unintentional activities. It would be good if the information from the posters and handouts could be distributed to the relevant University programmes.

5. Did you pick up copies of the hand-outs? If so, did you read them? *I read all the handouts.*

6. If you read them, did you find that the information they provided was useful? The information was very useful in all of them. Two of them essentially provided back up to the information appearing on the posters, these were "The transformation of Negril from the 1950s to today" and "Development and change in Negril". I found however that the information on "Trade-offs in the design and management of a Marine Park" was a bit hard to follow, more as a matter of layout and fonts used than clarity of information. I think it was the horizontal lines and how they sectioned off the information made it hard visually. This was not a big issue for the handout on "Stakeholder approaches to MPA Planning and Management".

7. How might the hand-outs be further improved, and in what activities could they be most useful?

Definitely get them to University students in relevant programmes such as CERMES -the information is presented in such a concise, but useful way. At training workshops and seminars. There is no need to wait for an event to send them to trainers who could use this type of information and maybe request the relevant publications. The information on tradeoffs and stakeholder approaches should be disseminated through CaMPAM or other appropriate listserve.

8. Did the presentation I made focus on points you felt were relevant and important regarding MPAs and sustainable livelihoods? How could it have been made more effective?

The points made were relevant. I can't recall thinking at that time that there was anything that should have been included to make it more effective.