

R8317
Institutional Arrangements for
Coastal Management in the Caribbean

FTR Annex A: Project Report

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R8317 Institutional Arrangements for Coastal Management in the Caribbean

Annex A: Project Report

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1 INTRODUCTION

1.1 Background

The Caribbean Natural Resources Institute (CANARI), the Caribbean Conservation Association (CCA) and the Marine Resources Assessment Group Ltd. of the United Kingdom (MRAG) have collaborated in the implementation of a project entitled ***“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 (reference 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 processes and institutions required to achieve integrated and equitable natural resource management in the coastal zone in the insular Caribbean are complex, and they have not received much attention in the past. The Caribbean is, by definition, a coastal region, a region where coastal resource management is critical to sustainable human development. Even when there are no large-scale economic activities (resort tourism, transportation, urban settlements, industry), the value of coastal resources remains high, as they provide a range of social and economic goods and services to local communities and offer great potential for economic development and diversification. However, because the coastal zone is subject to a range of severe environmental impacts from both terrestrial and marine sources, environmental degradation, resource use conflicts and unsustainable forms of resource use are threatening this value. Coastal resource management issues are therefore both urgent and important to the social and economic development of the region.

In spite of this reality, the place of coastal resources in livelihood strategies and the potential contribution of coastal resource management to social and economic development, and especially to poverty reduction, are not well understood in the region. The links between coastal management, sustainable livelihoods and poverty reduction are currently weak, because:

- the concept of integrated coastal zone management is inadequately understood by policy makers;
- most of the agencies that are responsible for coastal planning, management and development do not have a livelihoods perspective, and are not directly concerned with poverty reduction and social development agendas;
- coastal zone management plans and instruments such as Marine Protected Areas (MPAs) play a significant role in coastal resource management, but most are not integrated into broader social and economic development strategies and thus have a less than optimal impact on local livelihoods and community development;
- the “big issues”, especially those that relate to the development and management of ports, industrial plants and large-scale tourism infrastructure, have received and continue to receive the attention of researchers and planners,

but there is too little research being carried out on the “small issues”, in spite of their relevance to thousands of people in small coastal communities;

- the scientific and development literature from other regions of the world is extensive and useful, but it does not always apply to the specific conditions of the insular Caribbean.

Over the past six years, research projects funded by DFID under the NRSP have made substantial contributions to improved understanding of the processes and institutions required to achieve integrated and equitable natural resource management in the coastal zone in the insular Caribbean. The primary focus of the R8317 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 and other complementary research projects are communicated effectively.

1.2 Project Overview

At the regional inception workshop that was held in San Juan, Puerto Rico in November 2003 (see Appendix 1 for workshop report), it was agreed that the overall purpose of the project should be reframed as: “to change policies and practice in order to effectively implement integrated and equitable natural resource management in the coastal zone”.

The project was then conceptualised as four experiments designed to test communication strategies with a range of target audiences and differing sub-objectives of the overall purpose:

- Experiment 1: to test uptake of policy messages at the national level (led by CANARI)
- Experiment 2: to test uptake and effectiveness of co-management tools and methods for training natural resource managers (led by CCA in association with CERMES).
- Experiment 3: to test uptake or effectiveness of methods and tools for integrated and equitable management (led by CANARI).
- Experiment 4: to test uptake of a research agenda (led by CANARI).

All project activities were designed as contributions towards the production of a comprehensive Communication Strategy and toolbox that would 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.

1.3 Definitions

The definitions which have been adopted for this project are:

Term	Definition
Results	Public policy messages, management tools, and research priorities

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).

Term	Definition
	coming out of the research projects.
Target audiences	Specific audience segments to which the messages will be addressed, e.g. coastal resource users, public officials, resource managers, local residents. These audiences can also be defined as coastal management stakeholders .
Products	Materials that synthesise and package the results in forms (e.g. case studies, video documentaries, training curricula, PowerPoint presentations, policy briefs) appropriate for dissemination to specific target audiences through appropriate pathways.
Pathways	Channels and activities through which results and products are delivered to target audiences (e.g., distribution of print materials, use of intermediaries, meetings, field visits, training workshops, visual presentations, mass media).
Uptake	Acceptance and use of products by target audiences, as evidenced by changes in practices, behaviours, attitudes, institutional arrangements and policies.

2 METHODOLOGY

2.1 Common Elements

As noted above, the project was launched with a regional inception workshop in Puerto Rico in November 2003 which validated a list of key messages extracted from Suite 1 research and then defined the respective experiments. Although each experiment was conducted discretely, it was agreed that they should be grounded in a common methodology, namely:

- The prioritisation and selection of the most important messages for the respective experiment target audiences;
- Compilation of a table outlining the baseline knowledge, awareness and practices of the respective experiment target audiences;
- Development of an initial experiment communication plan, including objectives, target audiences, products, pathways, evaluation methodology, barriers to uptake and identification of non-project dissemination opportunities, such as workshops and seminars;
- Development of an implementation and evaluation workplan;
- Production of a final report for each experiment.

The communication plan summaries in table format for each experiment are attached at Appendix II and the detailed experiment reports, including experiment products, are appended as Annexes B-E.

In addition, two communication specialists were contracted to produce inception and mid-term communication plans to guide the project, as well as a regional communication strategy based on project learning. This Communication Strategy is appended at Annex B.

2.1 Experiment 1

2.1.1 Overview

Experiment 1, which was conducted by CANARI between June 2004 and September 2005, was designed to identify and test the ways in which policy messages related to equitable and integrated natural resource management in the coastal zone can best be communicated to those who play a significant role in policy formulation and implementation at a national level in the Caribbean region. Trinidad was selected as the research site on the basis that its policy and institutional framework for natural resource management in the coastal zone was sufficiently well-developed to facilitate dissemination of the messages. Monitoring of uptake within the relatively short project timeframe would also be facilitated by the fact that CANARI's head office is based in Trinidad. Tobago was excluded because its policy environment differed significantly from that of Trinidad.

2.1.2 Experiment Activities

The core activities during the design and implementation phase comprised:

- Baseline analysis of the institutional framework for natural resource management in the coastal zone;
- National inception workshop in June 2004 with senior representatives from various government agencies, academic institutions, non-governmental organisations (NGOs) and private consulting companies to validate the baseline and design the communication plan;
- Development and dissemination of two 2-page briefing papers entitled *Coastal Zone Management: Whose responsibility* and *Integrated Coastal Zone Management: benefiting people* for promoting experiment messages;
- Development of a diagram mapping the state agencies involved in coastal zone planning and management in relation to major terrestrial and marine activities for use at ministerial meetings and at meetings of Chief Technical Officers (CTOs) in the public sector
- Meeting with the Minister of Public Utilities and the Environment, both to sensitise her to the messages and to explore the possibility of her acting as an intermediary in organising a larger meeting with her other Cabinet colleagues with responsibilities for aspects of coastal zone planning and management;
- Discussions and meetings with environmental journalists to solicit help in disseminating experiment messages;
- Arrangement of a field trip for public sector CTOs to a coastal community in north-east Trinidad to discuss the role of public sector agencies in coastal zone management and its relation to coastal livelihoods;
- PowerPoint presentation entitled *The linkage between land-based activities, coastal resources management and coastal livelihoods, and the role of public agencies – Trinidad* to a multi-sectoral audience comprising CTOs, representatives of the private sector (oil and gas industry), and community based organisations;
- PowerPoint presentation entitled: "*Influencing coastal zone management policy in Trinidad: challenges and opportunities*" at the regional seminar *Improving Coastal Livelihoods: lessons learned from experiences and priorities for research* in Soufriere, St. Lucia in July 2005.

The following activities were also initiated but could not be completed within the project time frame due to the difficulty of finding dates which suited both presenters and participants:

- Breakfast meeting with five key government ministers;
- PowerPoint presentation (in conjunction with presentation of Experiment 4 messages) at a specially convened meeting of Health, Safety and Environment (HSE) professionals from national and multinational oil and gas companies, together with their colleagues from Public Affairs and Community Relations Departments.

However, CANARI still intends to pursue these opportunities over the next few months.

2.1.3 Experiment findings and conclusions

Experiment findings and conclusions can be divided into two main categories: those that relate to the specific institutional context in Trinidad and those that provide broader regional lessons about the dissemination and uptake at a national level of policy messages related to equitable and integrated natural resource management in the coastal zone.

2.1.3.1 Trinidad institutional context

- No common definition of the coastal zone was shared by all stakeholders;
- The institutional and policy framework in Trinidad is complex as it involves overlapping environmental policies and ministries, public agencies and committees, leading to a lack of clarity about who has management responsibility in the coastal zone.
- Levels of awareness of, and openness to, messages about the need for equitable and integrated coastal zone management varied significantly, necessitating the production of two briefing papers, one sensitising the target audience to the issues and the second advocating an integrated and livelihoods-sensitive management approach.

2.1.3.2 Uptake promotion lessons

- Creating a climate for policy change can be effected more rapidly if multiple audiences are targeted simultaneously (e.g. ministers, senior technical staff, civil society change agents, influential private sector companies);
- Since few channels currently exist for inter-sectoral dialogue between government agencies and departments, strategies such as the field trip or breakfast meeting, which bring together stakeholders from several sectors, can be particularly effective;
- The consultative process used in the design of the main products (using participants from the inception workshop) was effective in fine-tuning the messages and pathways to the respective audiences but resulted in later-than-anticipated dissemination, which in turn reduced the likelihood of uptake at the level of actual policy change;
- Senior ministers and technical staff have a preference for short briefing papers of 1-2 pages in length, with bulleted text, tables and examples from relevant case studies, preferably from the region;

- Products worked best when used together or sequentially, rather than as stand-alone products and preferably in face-to-face presentations or meetings;

A full report of Experiment 1, including experiment products, is appended at Annex C

2.2 Experiment 2

2.2.1 Overview

Experiment 2, which was implemented by CCA and CERMES between April 2004 and September 2005, was designed to:

- identify the ways in which tools and messages can effectively and efficiently be made available to the personnel of tertiary education and training institutions, particularly the teaching staff;
- highlight the ways in which these people and institutions can be informed of the benefits to be derived from the inclusion of such tools and messages within their curricula and programmes.

The experiment focused on products from the Suite 1 project on coastal resource co-management (R8134), with attention to marine protected area (MPA) management (R7976) and coastal livelihoods generally (several projects). The primary target for the experiment was the Cave Hill Campus of the University of the West Indies (UWI) in Barbados. However, within the constraints of time, logistics and budget, the experiment was extended to the other campuses of UWI (in Jamaica and Trinidad) and to another university in the wider Caribbean (in Nicaragua).

2.2.2 Experiment Activities

The core activities during the design and implementation phase comprised:

- Inception workshop at the Cave Hill Campus in July 2004 with lecturers and persons in information services;
- Production and delivery of an enhanced slide presentation of the co-management guidelines developed under R8134 (see Appendix IE and/or Annex D, Appendix 2 for full reference) e.g. use of Caribbean photographs, breakdown of complex concepts, together with lecture notes focusing on the concepts and conditions for successful co-management);
- Drafting of summaries of lessons learned from the six coastal co-management case studies produced under R8134 (see Appendix IE and/or Annex D, Appendix 2 for full references);
- Production of a CD with co-management guidelines, case studies with summaries and comparative analysis for distribution at meetings and workshops;
- Use of the Suite 1 and new products in three CERMES graduate courses;
- A series of informal workshops with Cave Hill faculty and staff to test materials and elicit feedback;

- Internet promotion and dissemination of products via CCA and CERMES websites with linked promotion of CANARI and MRAG websites;
- Use of the DFID-funded UWI Coastal Management Research Network (COMARE Net) to distribute the original products from Suite 1;
- Meetings with relevant faculty at UWI Mona and St. Augustine at which products were distributed and potential uses discussed;
- Use of guidelines and enhanced slide presentation in graduate course at UWI Mona and Co-management workshop in Belize;
- Use by a lecturer from the Bluefields campus of the Universidad de las Regiones Autónomas de la Costa Caribe Nicaraguense (URACCAN), Nicaragua of the slide presentation handout at an outreach workshop on co-management and responsible fisheries;
- PowerPoint presentation on *Coastal resource co-management* at the regional seminar *Improving Coastal Livelihoods: lessons learned from experiences and priorities for research* in Soufriere, St. Lucia in July 2005.

2.2.3 Experiment findings and conclusions

- The products tested and their associated messages were well received by the target audiences and were an effective means of informing them about the concepts of coastal co-management;
- Several lecturers expressed willingness to incorporate the materials in their courses, but not all were able to do so within the project time frame;
- Students tended to respond better to practical exercises than to conceptual debates and discussion-oriented seminars, and lecturers have observed a general student decline in interest in the conceptual aspects of academic topics in favour of more job-oriented skills development;
- More widespread use of the products could be facilitated by packaging them as self-contained learning modules;
- The CANARI Mankòtè mangrove educational pack was the only “pre-packaged” product being extensively used by lecturers and reflected their preference for video or DVD materials based on relevant case studies and including prompts for classroom exercises;
- The addition of small group exercises and games alongside the slide presentation was a useful tool when applied in an outreach context;
- Products need to be made available electronically although opportunities for incorporation of the materials in an online course appear limited at present but may be an option in the future;
- Discussions at UWI Mona and St Augustine highlighted the large amount of relevant grey literature from other projects and consultancies, which is often difficult to access and poorly promoted but could provide additional useful case study material;
- Discussions also reinforced the findings of Experiment 1 that conflicting and competing jurisdictions in the coastal zone are a persistent problem and that policy briefings could usefully address the need to change the currently constraining policies on participation in many Caribbean countries,

A full report of Experiment 2, including experiment products, is appended at Annex D

2.3 Experiment 3

2.3.1 Overview

Experiment 3, which was implemented by CANARI between June 2004 and September 2005, was designed to test the uptake and effectiveness of methods and tools for integrated and equitable coastal resource management.

The experiment targeted one representative group of coastal area managers: managers of 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:

- 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 Suite 1 projects, are particularly relevant to this need.

2.3.2 Experiment Activities

The core activities during the design and implementation phase comprised:

- An inception seminar entitled *Finding Common Ground: A Seminar for Marine Protected Area Managers and Fishing Communities* held in Negril, Jamaica in June 2004 with a representative sample of the experiment's target audiences, including MPA managers, resource users and co-management partners, community representatives and technical advisors to identify:
 - a set of key messages as the basis for the subsequent products;
 - target audiences' information needs and pathway preferences;
 - skills needs and training pathway preferences.

The inception seminar was also used to determine the effectiveness for uptake promotion of a seminar format (including a field trip through the Negril Marine Park), with a very mixed group of participants.

- Development of a 4-page Policy Brief entitled *Marine Protected Areas and Sustainable Livelihoods* followed by promotion on the Coastal and Marine Protected Area Managers network (CaMPAM) and dissemination both by mail and electronically (via CaMPAM and CANARI's webpage);
- Testing of the Internet as a pathway for information via the creation on CANARI's website of a webpage entitled *MPAs and Coastal Communities* which included pdf downloads of relevant Suite 1 and other project documents;
- Development and delivery in April 2005 of a one-day training module entitled *MPAs and Sustainable Coastal Livelihoods* intended primarily for MPA

management staff but on this occasion delivered to a broader audience including local conservation NGOs, fishers and tourism sector interests;

- Development of a case study of the Negril Marine Park and coastal livelihoods based on existing materials as well as new research, and designed to be delivered in multiple complementary formats including:
 - Large posters (2 of 7 completed)
 - Field trip (not possible within project timeframe)
 - Structured panel discussion (not possible within project timeframe)
 - PowerPoint presentation of the case study's main lessons (completed)
 - Handouts to accompany several of the above components (completed)
- Delivery of the PowerPoint presentation and display of two posters and several handouts from the case study at the regional seminar *Improving Coastal Livelihoods: lessons learned from experiences and priorities for research* in Soufriere, St. Lucia in July 2005.

2.3.3 Experiment findings and conclusions

- The experiment helped to expand the range of products available on MPAs and sustainable coastal livelihoods in the region, as well as the potential audience.
- Most products appeared to 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.
- The experiment target audiences speak a wide range of languages and idioms. Materials prepared in technical English can only reach a small proportion of that audience. Specifically, the policy brief and webpage need to be translated into Spanish.
- Because the target audience is highly diverse, there is a need for a diversity of products and pathways to reach them. Strategies that are highly 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.
- Guided discussions, semi-formal presentations and field trips can be more effective than tangible products in communicating concepts because they allow people to draw on their own context and experience and provide space for interactive discussion.
- 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.
- 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.
- 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.

- Reinforcement of messages helps assure uptake so strategic design of any communication activity must include provision for follow-up.
- 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.
- Case study material stimulated widespread interest and funding should be sought to complete it and to target it at new audiences.

A full report of Experiment 3, including experiment products, is appended at Annex E

2.4 Experiment 4

2.4.1 Overview

Experiment 4, which was implemented by CANARI between July 2004 and September 2005, aimed at identifying, testing and documenting the ways by which a specific research agenda can be developed and incorporated into the priorities, programmes and activities of research institutions, with a focus on integrated and equitable coastal resource management, and with a particular attention to policy, institutional arrangements, governance, and approaches to poverty reduction.

It was based on recognition of the need for new and increased research efforts that involve a range of disciplines and methods, towards a better understanding of coastal management and development issues, and towards the participatory definition of suitable policy, institutional and technical responses to these issues. While earlier NRSP projects have made substantial contributions to this understanding in the insular Caribbean, they have also served to identify and highlight research gaps, priorities and opportunities that now need to be conveyed to the various institutions and actors who are in the position to influence and implement research activities in this domain.

2.4.2 Experiment Activities

The core activities during the design and implementation phase comprised:

- A brief baseline study of recent and current research in integrated and equitable natural resource management in the coastal zone.
- A compilation and analysis of the main messages arising from Suite 1 projects.
- A scientific meeting held in Trinidad in July 2004, attended by 12 participants including the two communications specialists, representatives of CCA, CANARI and the University of the West Indies (Cave Hill, Mona and St Augustine Campuses) that:
 - Reviewed the baseline study.
 - Reviewed the main results available or expected from recent and current research.
 - Identified the main research priorities and opportunities in the region.
 - Identified the target audiences.
 - Identified the pathways available to promote a research agenda with the various target audiences.

- Developed a communication plan (including monitoring and evaluation procedures) to promote the agenda with the various target groups.
- Development of a 4-page Policy Brief entitled “*Linking coastal management, sustainable livelihoods and poverty reduction: a research agenda for the Caribbean*” and dissemination by mail and at a number of regional workshops and seminars.
- Development of a poster on the theme of “*Linking coastal management, sustainable livelihoods and poverty reduction: a research agenda for the Caribbean*” and dissemination by mail and at a number of regional workshops and seminars.
- Development of a basic PowerPoint presentation on “*Linking coastal management, sustainable livelihoods and poverty reduction: a research agenda for the Caribbean*” which was tailored to suit the needs and interests of individual target audiences, and testing of the presentation with several audiences.
- Co-sponsoring and participating in a seminar on “*Improving Coastal Livelihoods: Lessons Learned from Experience and Priorities for Future Research*” held in Soufriere, Saint Lucia in July 2005 on the occasion of the 10th Anniversary of the Soufriere Marine Management Area (SMMA). The seminar coincided with the final phase of R8317 as well as that of other projects that share a common vision of development and a common ambition to contribute to the strengthening of coastal livelihoods through sustainable resource use, participatory governance and empowerment. The objectives of the Seminar were to:
 - share, compare and analyse experiences and lessons learned in research and development work on coastal livelihoods and coastal resource management in the eastern Caribbean, including Trinidad and Tobago;
 - share information on current research and results obtained;
 - identify and define opportunities and priorities for future research.
 A report of the seminar has been produced and is available on request from CANARI.

2.4.3 Experiment findings and conclusions

2.4.3.1 Pathways and products

- Effective uptake promotion of key messages must begin with a face-to-face interaction, for example in a seminar or workshop setting;
- Products such as the PowerPoint presentation, policy brief and poster that were developed and tested in this experiment can be useful in the advocacy process but need to be introduced by other pathways, in order to generate interest and receptivity;
- The most efficient pathways are often those that are based on normal and regular activities of the intended targets. For example, in this experiment, the primary message was one of change, and the best way to convey this message of change is to carry it into the existing forums and processes of the target groups and institutions.

2.4.3.2 Barriers to uptake

The experiment, in conjunction with the seminar on *Improving Coastal Livelihoods: Lessons Learned from Experience and Priorities for Future Research* highlighted the existence of significant obstacles to the uptake of the messages that Experiment 4 intended to disseminate, including:

- the competition that exists among researchers and institutions, and the lack of collaboration among actors involved in research;
- the absence, or the inadequate use, of established and effective mechanisms to share information on research initiatives and results at the regional level;
- the unavailability of adequate expertise and skills in the disciplines relevant to this research agenda;
- the unavailability and inadequate management of research data and results, often leading to the repetition of work and to insufficient dissemination of knowledge;
- the nature of funding and contracting procedures, compromising the independence and flexibility of research efforts, especially in the area of poverty assessments and poverty studies;
- the negative impacts of political and bureaucratic interference in the conduct of research and in the formulation and dissemination of results;
- the frequent disconnectedness between the needs of intended “beneficiaries” on the one hand and the actual content and process of research on the other, and the insufficient involvement of civil society and private sector actors in defining priorities and implementing research activities;
- the dearth of policy research at both the regional and national levels;
- the increased use by many institutions of positive concepts (e.g. participation, equity, sustainability) to mask inadequate and potentially dangerous intentions, processes and interventions;
- the prevailing perception, especially among civil society and governmental agencies, that “coastal management” is concerned with natural resources and processes, not with livelihood and development issues;
- the absence of meaningful development partnerships between governmental agencies, civil society and the private sector;
- the difficulties being encountered by civil society organisations to sustain and finance their work, resulting in their inability to become involved in long-term research and policy processes;
- the continued biases of most research institutions and activities, even when inter-disciplinarity and integration are ostensibly professed, and the absence of effective mechanisms to cut across disciplines and issues;
- the existence of many obstacles (local capacity, policies and practices of research and management agencies, inadequacy of communication initiatives) that prevent the poor and the powerless from accessing data and influencing research processes and outcomes.

2.4.3.3 Towards a research agenda

The main conclusion of this experiment is that there remains a critical need to promote a research agenda that links coastal management, sustainable livelihoods and poverty reduction in the Caribbean region, but this promotion requires a long-term effort and significant resources in order to be effective. The experiment, in conjunction with the presentations made to the seminar on “*Improving Coastal Livelihoods: Lessons Learned from Experience and Priorities for Future Research*” and the debates that took place in the various technical sessions allowed for the

identification of a number of key themes that should provide an additional focus for, and help guide the design of, future research.

A full report of Experiment 4, including experiment products, is appended at Annex F.

3 COMMUNICATION STRATEGY

3.1 Overview

As indicated in 1.2 above, the development of a communication strategy was considered from the outset to be a key project output. *Coastal Management to Improve Livelihoods: A regional communication strategy for policy and institutional change* which draws on the experiment findings, is intended to provide guidance to other research and advocacy institutions in the Caribbean region, as well as to governmental and civil society organisations involved in promoting changes in policy and practice towards integrated and equitable coastal management and development.

The strategy consists of:

- A set of messages and tools derived from research on coastal area management and livelihoods in the Caribbean, which can be packaged into communication products and materials;
- A “toolbox” of existing communication products and materials based on those messages and tools;
- Guidance on:
 - identifying, assessing the communication needs of, and reaching key target audiences,
 - optimising the impact of communication products on attitudes, behaviours, practices, institutional arrangements and policy,
 - measuring the effectiveness of the strategy’s activities;
- Suggestions on a regional partnership for implementation.

3.2 Optimising uptake

Key findings on optimising uptake, which are highlighted in the strategy document, include the importance of:

- **starting with a strategy** which identifies:
 - What kinds of changes in attitudes, behaviours, practices and policies are desired?
 - What are the main factors that influence change in the target audience, either negatively or positively?
 - What are the messages or tools that can result in or support those changes?
 - Who exactly needs to receive products containing these messages and tools?
 - Why do they need them and what are they expected to do with them?

- **considering products and pathways in tandem.**
- **reinforcing messages in various formats** which may include a mix of intensive – and relatively costly – approaches such as presentations, meetings and workshops, reinforced by a range of less effective methods, including use of electronic mail, Internet, and popular media.
- **considering the messenger as well as the message:** people’s understanding and acceptance of information is filtered through their attitudes towards and relationships with the source of that information. It is therefore necessary to consider and understand the underlying dynamics of message delivery, which are affected by such factors as the professional, class, gender, political and other social relations between the messenger and the target audience. Understanding the power relations between the messenger and the receiver and the messenger’s stake in the outcome can also be important, particularly when the messenger has been selected as an ‘intermediary’ or ‘opinion leader’ within the target audience.
- **Seeing communication and uptake as a dynamic two-way process:** generally, products and pathways that bring people together, draw on their own perceptions and experiences, and provide space for discussion, and even heated debates, are most likely to result in changes in attitudes and increased understanding of issues. Process and experience products such as seminars, field trips, study tours or exchange visits, and guided discussions are particularly useful for:
 - bringing people with different ideas and perspectives together — and overcoming language and cultural barriers;
 - creating a shared understanding, or common ground, among stakeholders;
 - contributing to the general level of knowledge on the subject;
 - engaging those audiences who are unlikely to be reached by products such as written and video materials, e-mail discussion groups, or the Internet.

The full communication strategy is appended at Annex B.

4 PROJECT SUMMARY AND CONCLUSIONS

The multi-experiment research approach adopted for R8317 “*Institutional arrangements for Coastal Management in the Caribbean*” was designed to achieve two key objectives, both of which have been substantially met:

- to contribute to improved understanding by a wide range of stakeholders of the processes and institutions required to achieve integrated and equitable natural resource management in the coastal zone in the insular Caribbean.
- to identify the products and pathways which contribute most effectively and efficiently to uptake by a wide range of target audiences of key messages related to integrated and equitable natural resource.

The project produced a number of outputs, of which the following are the most significant:

- A Tool Box of products² including:
 - The original Suite 1 products

² New (i.e. non-Suite 1) products are appended at Appendix III and are also included in electronic version on the FTR CD under Annex H toolbox.

- Four Policy Briefs
- Poster
- Case study (slide presentation and posters)
- PowerPoint presentations
- MPA Training Module
- Academic teaching materials (slide presentation, lecture notes and adapted case studies)
- MPA Webpage
- Final reports of the four experiments
- A Communication Strategy entitled *Coastal Management to Improve Livelihoods: A regional communication strategy for policy and institutional change*
- A draft Research Agenda for future work on integrated and equitable natural resource management in the coastal zone in the insular Caribbean.

In spite of the complexity of the project design, only a few of the activities outlined in the inception experiment communication plans could not be completed within the project timeframe and budget. However, in all cases target audience interest was established and it is hoped that further funding can be found to complete the activities as outlined in 5.1 below..

5 PROJECT FOLLOW UP

5.1 Completion of R8317 activities from Experiments 1-4:

- Breakfast meeting with government ministers in Trinidad with significant responsibility for coastal zone management;
- Presentation to representatives of the oil and gas industry in Trinidad;
- Completion and dissemination of the Negril case study, particularly to audiences in Jamaica, but also at regional and international activities;
- Translation of MPA policy brief into Spanish and creation of a Spanish portal for the webpage;
- Incorporation of the MPA training module into UNEP's Training of Trainers course;
- Identification of other outlets for the MPA training module and Negril case study that are targeted at non-professional and mixed groups of MPA management stakeholders;
- Production of a self-contained teaching DVD, incorporating various resources on co-management such as the Mankòtè Mangrove case studies, co-management guidelines, slide show and other relevant materials.

5.2 Implementation of recommendations contained in Communication Strategy and Research Agenda

The project has clearly concluded that there remains a critical need to promote and implement a research agenda that links coastal management, sustainable livelihoods

and poverty reduction in the Caribbean region and it is clear that this promotion requires a long-term effort and significant resources in order to be effective.

Additionally, the communication strategy has identified the potential roles that a range of coastal zone actors can play in promoting and implementing policies and institutions that support equitable and integrated natural resource management in the coastal zone. It is therefore recommended that the next step be to call a regional meeting of actual and potential partners to discuss the findings of R8317, to agree on research and communication priorities, and to develop a funding proposal and workplan for this new round of research and advocacy.

APPENDIX I: INCEPTION WORKSHOP REPORT

Caribbean Natural Resources Institute

Institutional Arrangements for Coastal Management in the Caribbean

Presentation of a Research and Communications Project

November 2003

Introduction

This report describes the main elements of a research project entitled *Institutional Arrangements for Coastal Management in the Caribbean*³. The logical framework for this project is presented at Appendix . This project is 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). It is being implemented by the Caribbean Natural Resources Institute (CANARI), in collaboration with the Caribbean Conservation Association (CCA) and the Marine Resources Assessment Group (MRAG).

The purpose of this report is to summarise and present the conclusions reached at a workshop held in San Juan, Puerto Rico on 7 and 8 November 2003. The overall objective of the workshop was to develop the tools, methods and work plans for the implementation of this project. The workshop's agenda is presented at Appendix . A list of workshop participants and their contact information is provided in Appendix . The workshop was organised jointly by CANARI and the Sea Grant College Program at the University of Puerto Rico.

Purpose and objectives of the project

The workshop confirmed the goal, purpose and objectives as defined in the various project documents, but also concluded that the project's overall purpose could be usefully reworded as: *to change policies and practice in order to effectively implement integrated and equitable natural resource management in the coastal zone.*

The workshop further confirmed that the project should have three main complementary sets of activities:

- the formulation of lessons, methods and tools applicable to pro-poor policies and institutional arrangements;
- the dissemination of these lessons, methods and tools to relevant audiences;

³ The project's official title is *Pro-poor policies and institutional arrangements for coastal management* and its DFID reference number is R8317. On the basis of recommendations made at the workshop held in November 2003 in Puerto Rico, it has been decided that the project should now be known as *Institutional Arrangements for Coastal Management in the Caribbean*.

- the identification of the strategies and pathways that can best ensure that these lessons, methods and tools are communicated effectively.

Conceptual issues

The workshop examined a number of conceptual issues, and concluded that:

- the concept of *coastal zone* has varied interpretations, especially in a small island context, where the entire island territory could be defined as coastal. The concept remains useful nevertheless, as it captures the specificity of development and management issues and of livelihood strategies at the interface between terrestrial and marine systems;
- *poverty* is the most critical development issue in the region, and it should remain at the centre of this project's research agenda. The scope of the project should however be broader than poverty, and should encompass issues of *sustainability* and *equity*, within the framework of a human development agenda. For this reason, the terms "integrated and equitable" is generally preferred to the term "pro-poor" when referring to the project's research agenda, and to the policies and institutional arrangements that are being studied and promoted;
- for the purpose of this project, *poverty* is defined in economic, social and cultural terms, as "a situation where individuals, households and communities do not have:
 - spending power to meet basic needs;
 - access to basic social services, notably water, sanitation, health and education;
 - natural, financial and physical assets, including physical belongings, access to land, savings, tools and equipment, and other means of production;
 - security and safety, including protection from economic shock, natural disasters and human sources of impact, e.g. pollution, or industrial and transportation accidents;
 - self-esteem and cultural identity;
 - autonomy, capacity of choice and opportunities to participate in development processes";
- the "boundary" between MPAs and "non-MPAs" may be artificial, and the case studies developed as part of Suite 1 projects indicate that the distinction between these two management regimes is not reflected in practice. Instead, experience suggests that management regimes can be placed along a continuum, where areas with a single protection objective would be placed at one end of the continuum, while multiple-use and multiple-function areas would appear at the other end.

Background: the "capital" for project design

The workshop confirmed that the project would use, and build upon, the results, products and documents of completed research projects funded by NRSP and collectively referred to as *Suite 1*, namely:

- building consensus among stakeholders (University of East Anglia, reference: R7348);
- 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).

The workshop also concluded that the results, products and documents of several other past and on-going research projects should be incorporated into this process, and notably:

- the preparation and dissemination of Socioeconomic Monitoring Guidelines for Coastal Managers in the Caribbean (Global Coral Reef Monitoring Network, University of the West Indies, U.S. National Oceanic and Atmospheric Administration, and World Commission on Protected Areas);
- other on-going research and outreach initiatives of the Centre for Resource Management and Environmental Studies (CERMES) of the University of the West Indies (UWI);
- various on-going research initiatives and management processes involving coastal protected areas and coastal zone management institutions in Puerto Rico (Sea Grant College Program and other organisations in Puerto Rico);
- the preparation and dissemination of guidelines on conflict management, participatory planning and stakeholder analysis (CANARI);
- the preparation and delivery, by the Caribbean Conservation Association, of a training module on participatory planning for protected areas (Caribbean Regional Environment Programme – CREP);
- work carried out by the FAO in fisheries policy and fisheries management, including case studies on policy formulation and subsidies in the fisheries sector.

The workshop noted the bibliography of documents and other materials produced by Suite 1 projects and agreed to include other selected materials in the list of materials available to this new project. The revised bibliography is provided in Appendix E.

In its analysis of these documents, the workshop noted that the documentation of Suite 1 projects covered four related themes:

- participatory planning,
- marine protected areas (MPAs),
- co-management, and
- coastal resource management and development outside of MPAs.

It concluded that the documentation of lessons, methods and tools falling under the first three themes (participatory planning, MPAs and co-management) is quite extensive, relying on a substantial body of literature and experience, while the documentation of the fourth theme is limited primarily to the case study developed by R7559. A table used at the workshop to summarise these outputs and documents is provided at Appendix .

Outputs from the workshop

The workshop delivered a number of outputs, as presented and discussed in Table 1 below.

Table 1: Summary of workshop outputs

Expected output (as stated in pre-workshop documentation)	Workshop outputs and discussion
Develop a sketch/outline of a “tool box”	The workshop agreed that the compilation of results into a single “tool box” was neither practical nor desirable. The workshop concluded instead that a range of communication media and pathways should be used, in this project, for the purpose of testing and documenting approaches to and methods for uptake promotion. The workshop identified the main results from Suite 1 projects, and agreed on a process for the analysis and compilation of these results.
Design a communications strategy	The workshop: <ul style="list-style-type: none"> ➤ concluded that the primary purpose of this project should be to test and document approaches to and methods for uptake promotion, and that the purpose of validating results of Suite 1 projects should become secondary, because of the short time frame available for project implementation; ➤ agreed on all the main components of a communications framework (see Table 2 and Table 4), as the basis for the formulation of a comprehensive Communications Strategy.
Develop work plans and budgets for individual field testing and validation projects	The project identified four field testing projects (also called experiments) and agreed on key considerations to be taken into account in the design of these projects. The workshop however concluded that, in the absence of a detailed analysis of the results of the various Suite 1 projects, it was not yet possible to develop specific work plans and budgets. Priority should therefore be given, immediately after the workshop, to the analysis and compilation of the results of Suite 1 projects, and to the subsequent design of these four field projects.
Design a monitoring and evaluation framework	The meeting made a number of observations and conclusions that will be used in the design of monitoring and evaluation procedures, within the communications strategy and within the individual field testing projects.

Expected output (as stated in pre-workshop documentation)	Workshop outputs and discussion
Develop a work plan for the complementary dissemination of Suite 1 documents	The meeting agreed that: (a) the uptake of the results and products of project R7348 should be evaluated, and (b) there is a need to support the dissemination of other Suite 1 documents, while monitoring and assessing their uptake.
Strengthen collaboration among research agencies	The workshop served to strengthen collaboration among the agencies in the design and implementation of this project, but also provided an opportunity for several of these agencies to discuss potential collaboration in other projects and activities, and to exchange information on past and current programmes

Communications framework

The workshop agreed that the communications framework that will be used in this project should be tailored to its specific needs and objectives. In particular, the workshop concluded that the project should aim at disseminating, and at testing the dissemination of, the results of Suite 1 projects. In other words, this project should not: (a) attempt to produce new results, nor (b) be concerned with the dissemination of results that do not originate from Suite 1 projects. The results from Suite 1 projects should therefore constitute the basis for the development of the communications strategy.

The workshop conducted a brief review of the main results of Suite 1 projects, with the understanding that these results would provide the basis for the formulation of the messages that will be communicated, and tested, through this project. The workshop concluded that these results could and should be grouped under three main categories, namely:

1. Public policy messages, particularly with respect to:
 - importance of and rationale for coastal zone management (i.e. need for policies, institutional arrangements and management tools that achieve the goal of integrated and equitable coastal development);
 - links between coastal resource management, governance, poverty reduction and livelihoods, emphasising the relevance of integrated and equitable coastal development to a human development and poverty reduction agenda;
 - institutional arrangements and organisational requirements for integrated and equitable coastal zone management and development.

2. Management tools, notably:
 - methods for participatory planning and decision-making, including methods for stakeholder analysis;

- approaches to and methods for the design of participatory institutions (e.g. fisheries legislation for co-management);
 - instruments and methods for information management.
3. Priorities and opportunities for further research in integrated and equitable coastal zone management and development, including the testing and validation of the results of Suite 1 projects.

The workshop also noted that the results and the documentation from Suite 1 projects include new knowledge (e.g. identification and analysis of issues, policy requirements and institutional arrangements, methods and tools), as well as validations and concrete illustrations of previous knowledge (especially with a number of well-documented case studies).

In the development of the communications framework, the workshop examined the main targets that should benefit from communications activities and resulting uptake, as summarised in Table 2.

Table 2: Main communication targets

Sector	Main targets (in public sector, civil society and private sector)
Public policy	Senior national public officials Selected international and regional agencies (to be specified) Consultants Resource users and their organisations Advocacy NGOs
Development planning	Consultants Public sector planners Development Finance Institutions NGOs and development agencies
Integrated coastal resource management	Resource management agencies (broad, within and outside coastal zone) Marine protected area management agencies
Education, training and capacity building	Universities NGOs (International, regional, national and local) involved in training and capacity-building (to be specified)
Research	Funders of research Regional research agencies

The workshop agreed that the characteristics of these main target groups should be analysed, in terms of their current awareness of issues and approaches, receptivity to various communication pathways, and ability to effect change in

policy and practice. These characteristics should assist the development of the communications strategy, by providing useful information on the effectiveness and relevance of various communication pathways.

The workshop also reviewed the various communications pathways available, and conducted a brief analysis of the impacts and usefulness of these pathways in various situations and under various conditions.

It was agreed that communication that results in changed behaviour is of three general types: demonstration, examples, and arguments. The matrix presented in Table 3 indicates uptake pathways that have proven effective in changing behaviours related to natural resource management in the Caribbean. They are ordered along a dissemination scale ranging from the narrowest focus (one-on-one meetings) to the widest (Internet).

Table 3: Matrix of potential uptake pathways

	Demonstration (how to do)	Examples (what's been done)	Arguments (why do it)
One-on-one meetings			X
Field visits	X	X	
Staff exchanges	X	X	
Small group meetings			X
Training workshops	X	X	X
Cultural media			X
Seminars/conferences	X	X	X
Exhibitions	X	X	X
Written case studies		X	X
Guidelines documents	X	X	
Visual presentations (incl public access TV)	X	X	X
Radio shows		X	X
Press coverage			X
Books/scholarly papers		X	X
Brochures		X	X
Policy briefs		X	X
Educational materials	X	X	
Internet	X	X	X

Different approaches are required depending on what works for the intended target audiences. It was noted that messages should be delivered using multiple pathways, in order to test various approaches and to reach the target audience from different directions, thereby assuring delivery and reinforcing the message.

On the basis of these various elements, the workshop developed a preliminary communications framework that needs to be completed with: (a) the actual design of the experiments, (b) the identification of the pathways to be used in each experiment, and (c) the selection of adequate indicators of uptake.

Table 4: Preliminary communications framework

Result and message to be disseminated	Targets	Communications objective	Considerations for the design of experiment
<p>Public policy messages, particularly with respect to:</p> <ul style="list-style-type: none"> ➤ importance of and rationale for coastal zone management ➤ links between coastal resource management, poverty reduction and livelihoods ➤ institutional requirements for integrated and equitable coastal zone management and development 	<p>All potential targets of communication have an impact on policy. For the purpose of this project, activities will focus on:</p> <ul style="list-style-type: none"> ➤ senior political and technical officials ➤ public opinion 	<ul style="list-style-type: none"> ➤ acceptance of need for policy change ➤ actual change in policy ➤ awareness of need, and demand, for policy change 	<p>The dissemination of these public policy messages can best be tested through a range of activities in one country. This country should be one where:</p> <ul style="list-style-type: none"> ➤ the policy environment with respect to coastal management requires significant change; ➤ it will be possible to assess changes in public opinion within specific localities and communities.
<p>Management tools, such as:</p> <ul style="list-style-type: none"> ➤ methods for participatory planning and decision-making ➤ approaches to and methods for institutional design ➤ instruments and methods for information management 	<p>The main potential users of these management tools are:</p> <ul style="list-style-type: none"> ➤ organisations and individuals involved in coastal resource management ➤ advocates of the use of these management tools ➤ organisations and individuals that provide training to managers 	<ul style="list-style-type: none"> ➤ awareness of the tools ➤ actual use of the tools ➤ awareness of the tools ability to assess the use of the tools by managers ➤ awareness of the tools use of the tools in teaching 	<p>This component should consist of two experiments, using a range of pathways:</p> <ul style="list-style-type: none"> ➤ one experiment to disseminate a set of tools to a community of managers; ➤ one experiment to disseminate a selected tool or set of tools to one selected training organisation and its faculty.

Result and message to be disseminated	Targets	Communications objective	Considerations for the design of experiment
<p>Priorities for research in integrated and equitable coastal zone management and development</p>	<p>Research organisations and researchers Agencies that provide financial support to research Organisations and individuals involved in coastal resource management and development</p>	<ul style="list-style-type: none"> ➤ awareness of this research agenda (all targets) ➤ use of research agenda in research activities (research organisations and researchers) ➤ willingness to fund research (funding agencies) ➤ provision of support to research (funding agencies) ➤ demand for research (managers) 	<p>This component of the project should consist of a regional initiative aimed at promoting the research agenda.</p>

With respect to monitoring and evaluation, the workshop provided an outline framework that consists of:

- a. the establishment of baselines regarding current management practices and policies and of their effectiveness;
- b. the identification of indicators of uptake (internalisation of messages) and of changes in practice or policy;
- c. a reassessment of management effectiveness following uptake and change.

Project activities

This framework suggests that the project should consist of the following activities:

1. Four experiments, to be implemented over a twelve months period beginning in January 2004:
 - a. one national project aimed at disseminating, and testing the methods of dissemination of, the main policy messages developed by Suite 1 projects;
 - b. one regional project aimed at disseminating, and testing the method of dissemination of, the main management tools developed by Suite 1 projects. The target of this activity should be a selected set of coastal resource managers (most likely MPA managers);
 - c. one project aimed at disseminating, and testing the method of dissemination of, a selected management tool to one training organisation and its faculty;
 - d. one project aimed at promoting, and testing the extent of adoption of, a research agenda that incorporate the needs and opportunities identified in Suite 1 projects.
2. An assessment of uptake of the results of R7348⁴.
3. The dissemination of the guidelines on co-management (R8134) and MPA management (R7976), and the monitoring and assessment of their uptake.

Next steps

In order to complete this project planning process, the following steps are now required:

1. Preparation of this presentation note and completion of the communications strategy.

Action: Facilitator to draft presentation note, all workshop participants to provide comments, CANARI to finalise and Communications Specialists to develop into a communications strategy.

2. Analysis, synthesis and “packaging” of the policy lessons, tools and research priorities emerging from past Suite 1 projects.

⁴ In subsequent discussions between the various agencies involved, it has been agreed that the assessment of uptake of the results of R7348 as well as the dissemination of the guidelines on co-management (R8134) and MPA management (R7976), and the monitoring and assessment of their uptake should be carried out under the auspices of the Caribbean Focus Group, and should therefore not be directly part of this project.

Action: Leaders of Suite 1 projects to produce messages from individual projects. On this basis, CANARI to lead analysis and synthesis, with inputs from collaborating agencies and other workshop participants.

3. Design of four experiments, including selection of targets and sites.

Action: CANARI to lead, in collaboration with CCA, MRAG and UPR.

Appendix A: Logical framework

Narrative summary	Objectively verifiable indicators	Means of verification	Important assumptions
Goal			
NRSP-LW output 1: Improved resource-use strategies in coastal zone production systems developed and promoted	<ul style="list-style-type: none"> By 2003, new approaches to integrated natural resource management, including prevention of pollution, which explicitly benefit the poor validated in two target areas By 2005, these new approaches incorporated into strategies for the management of coastal resources and adopted by target institutions in one target region 	Reviews by Programme Manager Reports of research team and collaborating /target institutions Appropriate dissemination products Local national and international statistical data Data collected and collated by the Programme Manager	Enabling environment exists Budgets and programmes of target institutions are sufficient and well managed
Purpose			
Institutional arrangements and policies for implementation of integrated pro-poor natural resource (and pollution prevention) management in coastal zones developed and promoted	<p>By 2005, informed policies, structures, strategies or methods incorporated in the programmes of management institutions in at least five countries of the region, reflecting increased emphasis on the promotion of sustainable socio-economic benefits of coastal resources, especially for the poor</p> <p>By 2005, decision support tools for livelihood sensitive (pro-poor) integrated coastal management applied by management agencies in at least five locations, and used as teaching materials by at least three regional institutions</p>	Electronic and print media reporting on environmental issues Project monitoring and evaluation reports National economic and social statistics Reports of collaborating target institutions End of project survey of a representative sample of target institutions	

Outputs			
<p>1. Decision support tools for livelihood sensitive (pro-poor) integrated coastal management arising from projects in NRSP/LWI Suite 1 defined, refined and designed</p>	<p>Tool box synthesising cross-cutting lessons and tools developed in NRSP/LWI projects Suite 1</p> <p>Involvement of collaborating organisations and key target institutions in development of tool box</p> <p>Observation sites established at key locations of Suite 1 projects</p> <p>Established system to monitor and evaluate field testing projects and observation sites, and feed outcomes into improved decision support tools</p>	<p>Printed, electronic and audio-visual products presenting decision-support tools (some developed by month 6, others by end of project)</p> <p>Report of project workshop (month 3)</p> <p>Quarterly project reports</p> <p>Communications strategy</p>	<p>Validity and replicability of results obtained and products prepared in projects in NRSP/LWI Suite 1</p>
<p>2. Communications strategy and specific mechanisms for promotion of decision support tools and other products defined and implemented</p>	<p>Demand for uptake products and tools confirmed by at least 15 management agencies (via their involvement in developing or endorsing the communications strategy) by month 6</p> <p>At least five media types developed and promoted for awareness raising of the combined products by end of project</p> <p>At least 15 institutions reached by awareness raising by end of project</p> <p>Uptake products adopted by at least ten target institutions by end of project</p>	<p>Endorsements of communications strategy by target institutions</p> <p>Electronic and print media reports on environmental issues</p> <p>Work plans and progress reports of target institutions</p> <p>Project quarterly reports</p>	

<p>3. Communications strategy, promotion mechanisms and support tools tested and validated</p>	<p>Five⁵ field testing projects established by month 6 to test and validate (a) improved institutional arrangements and decision support tools for livelihood sensitive (pro-poor) integrated coastal management (including co-management) for MPAs and non-MPA contexts, and (b) strategies and mechanisms for uptake promotion</p> <p>Monitoring and evaluation framework developed for and applied in all five field testing projects as well as in the observation sites</p> <p>Monitoring systems incorporated into five target institutions that effectively monitor their own improved CZM programmes by end of project</p> <p>Results of field testing projects and observation sites incorporated in revised tool box and in recommended follow-up communications strategy by end of project</p>	<p>Project mid-term review</p> <p>Work plans for field testing and validation</p> <p>Project newsletter</p> <p>Professional publications and journals</p> <p>Monitoring and evaluation systems and programmes of target institutions</p> <p>Project quarterly reports</p>	<p>Needs of target institutions are consistent with Suite 1 research outputs</p>
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⁵ The approved logical framework for the project assumed that there would be five testing projects. The workshop held in November 2003 concluded that only four such projects would be required.

Activities	Milestones	Important assumptions
Output 1. Decision support tools for livelihood sensitive (pro-poor) integrated coastal management arising from projects in NRSP/LWI Suite 1 defined, refined and designed		
1.1 Develop framework for the analysis and compilation of the products previously developed by each of R7408, R7559, R7976 and R8134 (months 1-2)	Framework (end of month 2) MS 1.a	All products from Suite 1 projects are available by the start of the project
1.2 Convene project workshop to develop work plans, communications strategy and tool box (month 3)	Report and other outputs from workshop (end of month 3) MS 1.b	
1.3 Provide limited support to the dissemination and promotion of the products previously developed by each of R7408, R7559, R7976 and R8134 (months 1-16)		Workplans for the uptake of specific products from R7559, R7976 and R8134 in place by project inception
1.4 Observe institutional change and decision-making processes at selected observation sites in order to extract lessons on change processes and effective institutional arrangements (sites of projects R7408, R7559 and R8134) (months 1-15)	Reports from observation sites presented at final project workshop. MS1.c	Institutions in observation sites remain interested in collaborating and contributing to monitoring and analysis
1.5 Identify and prepare new set of products (institutional arrangements and decision support tools) using results and products of R7408, R7559, R7976 and R8134 (months 3 – 6)	"Tool box" prepared by month 6. MS 1.d	
1.6 Use findings from field testing projects and observation sites to inform revisions of institutional arrangements and decision support tools (months 5 - 16)	Final set of products prepared by month 16 MS 1.e	
1.7 Convene final workshop to prepare revised products (month 17)	Workshop report MS 1.f Final report MS 1.g Final set of products (all by month 16) MS 1.e	
Output 2. Communications strategy and specific mechanisms for promotion of decision support tools and other products defined and implemented		
2.1 Develop a communications and uptake promotion strategy for detailed and targeted activities following completion of activity 1.2 (month 3)	Communications and uptake promotion strategy developed by month 4. MS 2.a	Communications review network effectively develops and improves the communications and uptake promotion strategy
2.2 Develop monitoring and evaluation framework to assess the effectiveness of uptake promotion and testing and validation (month 4)	Monitoring and evaluation framework MS 2.b	
2.3 Apply monitoring and evaluation framework to the implementation of the communications and uptake promotion strategy (months 5 – 16)	Reports on monitoring and evaluation, as part of quarterly project reports MS 2.c	

Activities	Milestones	Important assumptions
2.4 Use findings from field testing projects and observation sites to update the communications and uptake promotion strategy (months 17 - 17)	Revised communications and uptake promotion strategy by end of project MS 2.d	
2.5 Promote shared lessons for uptake in conjunction with the Caribbean Focus Group (CFG) (months 6, 12 and 18)	Submissions made for inclusion in CFG work plan at months 6, 12 and 18 MS 2.f	CFG functions effectively, and provides mechanism for dissemination of lessons and products
Output 3. Communications strategy, promotion mechanisms and support tools tested and validated		
3.1 Identify and confirm criteria for selection, locations, issues and potential institutional partners for field testing and validation (months 1-3)	Selection finalised and included in report on project workshop MS 3.a	
3.2 Develop work plans for field testing in five locations (month 3)	Work plans developed and contained in report on project workshop MS 3.b	
3.3 Conduct and document results of field testing projects (months 4 - 17)	Monitoring and evaluation reports on individual field testing projects, and other field testing project documents MS 3.c	
3.4 Design and implement monitoring and evaluation systems and frameworks within all five locations/projects (months 4 - 17)	Monitoring and evaluation reports on individual field testing projects MS 3.d	
3.5 Develop revised communications strategy (months 16 - 17)	Revised communications and uptake promotion strategy prepared and made available to relevant regional and national organisations by end of project MS 3.e	
		Pre-condition
		Suite 1 projects are all completed on schedule with products suitable for uptake promotion, and testing and validation

Appendix B: Workshop agenda, 7 and 8 November 2003

1. Introduction: who is here and why are we here?
 - a. Introduction of participants
 - b. Presentation of the purpose, expected outputs and intended beneficiaries of the project and discussion (CANARI to present)
 - c. Formulation of agreement on expected results from workshop
 - d. Confirmation of agenda
2. Concepts and boundaries: "Pro-poor policies and institutional arrangements for coastal management", what does that mean to us? are all the main concepts and definitions clear?
3. The capital: what are the outputs and documents that we can use?
 - a. overview and preliminary stock-taking (Yves Renard)
 - b. presentation of outputs of R7348
 - c. presentation of outputs of R7559 (Yves Renard)
 - d. presentation of outputs of R7976 (Robert Wakeford)
 - e. presentation of outputs of R8134 (Patrick McConney)
 - f. more resources, Sea Grant College Program (Manuel Valdés-Pizzini)
 - g. more resources, University of the West Indies, including Socio-economic Monitoring Guidelines for Coastal Managers in the Caribbean (Patrick McConney)
 - h. more resources, CANARI, including Guidelines for Conflict Management, Participatory Planning and Stakeholder Analysis (Vijay Krishnarayan)
 - i. more outputs and resources, others
4. Analysis of the products of the Suite 1 projects, presentation and discussion:
5. Presenting, packaging and communicating the products:
 - a. agreement on a framework (objectives, products and pathways)
 - b. who are the targets and potential users?
 - c. what is the demand for the products identified in item 4?
 - d. what should be the form in which these products should be disseminated? is the "tool box" idea valid?
 - e. agreement on process to develop the products
6. Testing communication and dissemination, and learning how to disseminate:
 - a. confirmation of the approach: testing and validating the products in the field, implementing a communications strategy within field projects and regionally, and monitoring and assessing the impact of the communications strategy
 - b. confirmation of the selection of field-testing activities
 - c. design of the communications strategy
 - d. formulation of monitoring and evaluation framework
7. Agreement on project implementation
8. Opportunities for collaboration beyond the scope of this project

Appendix C: List of participants

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Appendix D: Overview of outputs and documents, Suite 1 projects

IMPROVED RESOURCE USE STRATEGIES IN COASTAL ZONE PRODUCTION SYSTEMS			
Participatory planning	Marine Protected Areas	Co-Management	Pro-poor CZM outside MPAs
Used and tested by all Suite 1 projects, adding to already extensive experience, no systematic documentation	Fields in which there is now extensive experience, Suite projects have taken stock of that experience, and have distilled it into guidelines. In addition, Suite 1 projects have developed a number of case studies	Review of regional experience, and a literature review by R8134 Analysis of that experience by R8134 Analysis of case studies by R8134 Observations on co-management by R7559 and R7976	New field, little experience, more questions than answers, some observations and one local case study
R7348 work on trade-off analysis Documentation by all projects of methods for stakeholder analysis Documentation of participatory planning from experience, particularly case studies in R7976 and R8134 Integration of methods available from the global literature into Caribbean guidelines Field testing by R7559	Review of regional status and experience by R7976 Analysis of lessons of that experience by R7976 Analysis of case studies by R7976		A field experiment by R7559
R7348 publications R7976 guidelines R8134 guidelines R7559 report R7559 video Documented case studies, all projects	R7976 guidelines Documented case studies	R8134 guidelines R7976 guidelines (co-management of MPAs) Documented case studies, all projects	R7559 report and documented case study
<p>Most of the documentation from Suite 1 projects, and most of the broader CZM literature, do not address livelihood and poverty issues, and deal with participation and co-management as ends in themselves, as means of conservation effectiveness, not as means of integrated and equitable management.</p> <p>Consequently, there are few linkages between these four themes in Suite 1 products and documents</p>			

Appendix E: References

R7408: building consensus among stakeholders

Main documents⁶

Brown, K., E.L. Tompkins and W.N. Adger. 2002. Making waves: integrating coastal conservation and development. Earthscan Publications Ltd., London, U.K. 164 pp.

Brown, K., E. Tompkins and W. N. Adger. 2001. Trade-off analysis for participatory coastal zone decision-making. Overseas Development Group, United Kingdom. 109 pp.

Selected publications

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Brown, K., E. Tompkins and W. N. Adger. 2001. Trade-off analysis for participatory coastal zone decision-making. Overseas Development Group, United Kingdom. 109 pp.

Brown, K., W. N. Adger, E. Tompkins, P. Bacon, D. Shim and K. Young. 2000. Trade-off analysis for marine protected area management. *Ecological Economics* (2001)37: 417-434.

Brown, K., W. N. Adger, E. Tompkins, P. Bacon, D. Shim and K. Young. 1998. A framework for incorporating stakeholder participation in marine resource management: a case study in Tobago. CSERGE Working Paper GEC 98-23:25 pp.

Tompkins, E., W. N. Adger and K. Brown. 2002. Institutional networks for inclusive coastal management in Trinidad and Tobago. *Environment and Planning A* (2002)34: 1095-1111.

R7559: institutional and technical options for improving coastal livelihoods

Final Technical Report

CANARI. 2003. Improving coastal livelihoods in the Caribbean, institutional and technical options, NRSP project R7559, Final Technical Report. 25pp.

Main document

CANARI. 2003. The Sea is our Garden: a report on a study of institutional and technical options for improving coastal livelihoods in Laborie, Saint Lucia. CANARI Technical Report No. 322. 146 pp.

Selected publications

⁶ This category of "Main documents" aims at identifying the publications in which the main project findings and conclusions have been analysed and presented.

Burt, M. 2002. A study of the social and economic impacts of sea urchin harvesting in 2002 in Laborie, St. Lucia. CANARI LWI Project Document no. 7. CANARI Technical Report no. 318. Vieux Fort, Saint Lucia: Caribbean Natural Resources Institute. 7 pp.

Buttler, C. 2002. Assessing marine resources: institutions and institutional development in Laborie, St. Lucia. CANARI LWI Project Document no. 6. CANARI Technical Report no. 305. Vieux Fort, Saint Lucia: Caribbean Natural Resources Institute. 56 pp.

Clauzel, S. and Joyeux, G.. 2001. Tourism in Laborie, St. Lucia: baseline study and identification of potential for development. CANARI LWI Project Document no. 3. CANARI Technical Report no. 293. Vieux Fort, Saint Lucia: Caribbean Natural Resources Institute. 15 pp.

Hutchinson, G. 2001. Water quality in the Laborie Bay. CANARI LWI Project Document no. 5. CANARI Technical Report no. 301. Vieux Fort, Saint Lucia: Caribbean Natural Resources Institute. 10 pp.

Hutchinson, G., George, S. and James, C. 2000. A description of the reef fishery of Laborie, St. Lucia. CANARI LWI Project Document no. 1. CANARI Technical Report no. 291. Vieux Fort, Saint Lucia: Caribbean Natural Resources Institute. 10 pp.

Renard, Y. 2005. The Sea is Our Garden: Coastal resource management and local governance in the Caribbean. pp 152-179. *in*: Bass, S., H. Reid, D. Satterthwaite and P. Steele. Reducing poverty and sustaining the environment, the politics of local engagement. Earthscan, London.

Smith, A.H. and Gustave, J. 2001. A description of the harvest of wild seamoss in Laborie, St. Lucia. CANARI LWI Project Document no. 2. CANARI Technical Report no. 292. Vieux Fort, Saint Lucia: Caribbean Natural Resources Institute. 4 pp.

Smith, A.H. and Koester, S. 2001. A description of the sea urchin fishery in Laborie, St. Lucia. CANARI LWI Project Document no. 4. CANARI Technical Report no. 294. Vieux Fort, Saint Lucia: Caribbean Natural Resources Institute. 8 pp.

Smith, A.H.. 2003. Mapping Laborie Bay, Saint Lucia.. CANARI LWI Project Document no. 8. CANARI Technical Report no. 323. Vieux Fort, Saint Lucia: Caribbean Natural Resources Institute. 13 pp.

Audio-visual materials

Video: The People and the Sea, Managing our Sea Urchin Harvest.

Video: Earth Report, Hands-On, Net Profits (BBC World/TVE)

R7976: Institutional arrangements for Caribbean Marine Protected Areas and opportunities for pro-poor management

Final Technical Report

MRAG. 2003. Final Technical Report: Institutional arrangements for Caribbean MPAs and opportunities for pro-poor management. MRAG Ltd., London, UK. 26pp.

Main documents

Garaway, C. and N. Esteban. Working draft. Increasing MPA Effectiveness Through Working with Local Communities: Guidelines for the Caribbean. MRAG Ltd, London, UK. 45pp.

Geoghegan, T., A. H. Smith, and K. Thacker. 2001. [Characterization of Caribbean marine protected areas: An analysis of ecological, organisational and socio-economic factors](#). CANARI Technical Report No. 287. 27pp.

Selected publications

Anderson, W.; Best, M., Richards, R. 2002. Marine Protected Areas: Legal And Policy Framework. Project Report. Barbados: Faculty of Law, UWI. November 2002.

Best, M. 2002. A Review of Legislation, Policy And Institutional Arrangements, Assisting Or Constraining, The Implementation Of Marine Protected Areas In Dominica And The Turks And Caicos Islands. MSc thesis. NRM Program, UWI Cave Hill, Barbados.

Best, M. 2002. A Review Of Legislation, Policy And Institutional Arrangements, Assisting Or Constraining, The Implementation Of Marine Protected Areas In Dominica And The Turks And Caicos Islands. Proceedings Annual Conference of the Sustainable Economic Development Unit of the University of the West Indies. UWI, Trinidad. June 2002.

Cummings, A.R. 2002. An Assessment Of The Ecological Impacts Of Two Successfully Implemented Marine Protected Areas In Belize. MSc thesis. NRM Program, UWI Cave Hill, Barbados.

Esteban, N., Garaway, C., Oxenford, H., McConney, P. and Anderson, W. 2002. Project Workshop: Institutional Arrangements For Caribbean MPAs And Opportunities For Pro-Poor Management. A Special Concurrent Session At The 55th Annual Meeting Of The Gulf and Caribbean Fisheries Institute, Xel Ha, Mexico, 11-16 November 2002.

Esteban, N. and Garaway, C. 2003. Institutional Evaluation Of Caribbean MPAs And Opportunities For Pro-Poor Management. Poster presented at World Parks Congress. Durban, South Africa, September 2003.

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Annual Meeting Of The Gulf And Caribbean Fisheries Institute (GCFI). Xel Ha, Mexico, November 2002. UK: MRAG Ltd.

Francis, S. 2002. An Assessment Of The Impacts Of Two Successfully Implemented Marine Protected Areas On The Livelihoods Of Stakeholders In Jamaica And The Turks And Caicos Islands. MSc thesis. NRM Program, UWI Cave Hill, Barbados.

Francis, S.K.Y., O'Sullivan, C.H., Best, M.N., Richards, R.A., Oxenford, H.A. and Anderson W. In press. A Preliminary Investigation Of The Impacts Of Legislative Status, Management And Ecological Condition Of Marine Protected Areas On The Socio-Economic Status Of Stakeholders In Jamaica And The Turks And Caicos Islands. Proceedings 55th GCFI, Xel Ha, Mexico, November 2002.

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Garaway, C. and Esteban, N. 2002. Institutional Evaluation Of Caribbean MPAs And Opportunities For Pro-Poor Management. European Meeting of the International Society for Reef Studies. Cambridge, UK, September 2002.

Garaway, C. and Esteban, N. 2003. Case Study Reports On MPAs: Negril Marine Park, Jamaica; Princess Alexandra Land And Sea National Park, Turks And Caicos; Glover's Reef Marine Reserve And Hol Chan Marine Reserve, Belize. Project Report. UK: MRAG Ltd.

O'Sullivan, C.H. 2002. A Preliminary Assessment Of The Ecological Impacts Of Two Marine Protected Areas In The Wider Caribbean. MSc thesis. NRM Program, UWI Cave Hill, Barbados.

R8134: requirements for developing successful co-management

Final Technical Report

Caribbean Conservation Association. 2003. Final Technical Report. Developing guidelines for successful co-management in the Caribbean. St Michael, Barbados: Caribbean Conservation Association

Main documents

McConney, P., R. Pomeroy and R. Mahon. 2003. Caribbean Coastal Co-management Guidelines Project: Guidelines for coastal resource co-management in

the Caribbean: communicating the concepts and conditions that favour success. Caribbean Conservation Association, Barbados. 60 pp.

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McConney, P. 2002. Caribbean Coastal Co-management Guidelines Project: Co-management literature review and project research framework. Caribbean Conservation Association, Barbados. 15 pp.

McConney, P. 2003. Caribbean Coastal Co-management Guidelines Project: Grenada case study: the lobster fishery at Sauteurs. Caribbean Conservation Association, Barbados. 67 pp.

McConney, P. 2003. Caribbean Coastal Co-management Guidelines Project: Grenada case study: legislation of beach seine traditional rules at Gouyave. Caribbean Conservation Association, Barbados. 72 pp.

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Audio-visual materials

None

Other selected documents

Bunce, L. and B. Pomeroy. 2003. Socioeconomic Monitoring Guidelines for Coastal Managers in the Caribbean. World Commission on Protected Areas and Australian Institute of Marine Science. 88 pp.

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Renard, Y. 2003. Guidelines for Stakeholder Identification and Analysis. CANARI Guidelines Series 5. In press.

Krishnarayan, V. 2003. Guidelines for Conflict Management. CANARI Guidelines Series 6. In press.

APPENDIX II: EXPERIMENT COMMUNICATION PLAN TABLES

Experiment 1

Target	Policy message	Objective	Pathway	Product	Partner	Evaluation (All to be confirmed at second national workshop 2005)	Barriers to getting messages across	Opportunities
Government Ministers: <ul style="list-style-type: none"> ▪ PUE ▪ Energy ▪ Agriculture, Land and marine Resources ▪ Tourism ▪ Planning and Development 	The value and need for integrated coastal management The importance of coastal resources for development	Increase awareness of ICZM and of role; getting buy-in to the messages; transfer of information	Breakfast meeting with 5 Ministers	Suite 1 case studies; 2-page briefing		Indicators of uptake: Attendance of invitees at meeting, commitment to further action (follow-up meeting) relay of information to PSs	Culture of short-termism – lack of continuity, Lack of sensitisation of press and media	Rethinking Tourism Plan; Receptivity of Ministry of PUE; ESA Committees; Vision 20/20
		Getting buy-in; effect transfer of information	Information relayed to PS by government ministers	Suite 1 case studies; 2-page briefing		Indicators of uptake: Transfer of information to other units, commitment to follow-up action (use in programmes and projects)		
Environmental Journalists	The need to include a livelihoods perspective in coastal resource management The need for capacity-building and empowerment within civil society	Effect transfer of information to wider audience	One-on-one press briefing with 2 or 3 environmental journalists	Suite 1 case studies; 2-page briefing		Indicators of uptake: Use of information in articles and columns		
		Increase awareness of role in ICZM; getting buy-in	ICZM meeting	Suite 1 case studies; 2-page briefing,	BPTT, BG or BHP	Indicators of uptake: Willingness to participate in or host project activities	NOSCP (Min. of Energy) no implementation or sufficient push to implement	Strategic Environmental Impact Assessments (1 for SE Mayaro and 1 for NE coast)
Corporations: <ul style="list-style-type: none"> ▪ BG ▪ BPTT ▪ BHP Billiton ▪ First Citizens' Bank (Env. programme) 	The need for social and economic development actors to become more involved in coastal management							

Target	Policy message	Objective	Pathway	Product	Partner	Evaluation (All to be confirmed at second national workshop 2005)	Barriers to getting messages across	Opportunities
CTOs: <ul style="list-style-type: none"> ▪ EMA ▪ IMA ▪ TCPD ▪ WASA 	and development	Increase awareness of ICZM and of role; getting buy-in in	Field trip to coastal community	Suite 1 case studies; 2-page briefing	CBO rooted in coastal community - BEAT or NS	Indicators of uptake: Willingness to attend field trip; willingness to participate in follow-up activities (including sponsorship of materials for CBOs); inclusion of policy messages in any disseminated publications or project activities		
CBOs/NGOs		Increase awareness of ICZM and of role; transfer of information to community	Flyers; brochures (to be used) in their own community campaigns	Flyers; brochures using information from Suite 1 case studies	NS or BEAT	Indicators of uptake: Willingness to distribute and use flyers and brochures		Matura to Matelot Network; ESA Committees; CREP BEAT project

Experiment 2

Targets	Objectives	Pathways	Products	Partners	Evaluation	Opportunity	Barriers
<p>University lecturers</p> <p>Managers or heads of department</p> <p>Librarians or similar</p> <p>See <i>target descriptions in previous tables.</i></p> <p><i>For this experiment the targets may all be treated similarly</i></p>	<p>Approval by heads of departments and other managers to include coastal co-management in course curricula in the first semester (ends Dec 2004)</p> <p>Increased number of co-management messages in coastal management courses by second semester (ends May 2005)</p> <p>Increased access to materials related to co-management in UWI libraries and teaching units by second semester</p>	<p>Face-to-face meetings with heads of department and senior lecturers</p> <p>Referral to visit COMARE Net web site</p> <p>Presentations at training workshops for UWI faculty</p> <p>Lectures/seminars in departmental series</p> <p>On-line course for teaching of co-management</p> <p>Field trip briefings and presentations</p>	<p>Guidelines documents</p> <p>Case studies</p> <p>Guidelines case updates (new item)</p> <p>Summary of lessons (new item)</p> <p>Case studies slides (new)</p> <p>Lecture notes/quick reference guide (new)</p> <p>On-line course (new)</p> <p>Co-management slide show (new or modified)</p>	<p>Experiment partners are likely to be key change agents in the target groups especially in CERMES and similar departments that lead in coastal management training</p>	<p>Number and extent of approvals to incorporate co-management materials received from heads of units</p> <p>Number and extent of use of messages reported in the terminal workshop compared to the inception</p> <p>Survey of faculty and students to assess any changes in the accessibility of items included in the experiment</p>	<p>UWI faculty and students will attend the annual GCFI conference in Nov. 2004</p> <p>UWI Cave Hill campus is promoting the development of on-line courses</p> <p>Governance has been identified as a cross-cutting theme for CERMES courses</p> <p>Several series of seminars and discussions at UWI</p> <p>Inter-campus environmental network exists</p>	<p>It can take long for curriculum changes to be approved</p> <p>Some course outlines for the 2nd semester may have been finalised</p> <p>Literature and other teaching materials do not necessarily circulate well among faculty and may not reach students</p> <p>The COMARE Net web site and mailing list must be fully operational for original project products to be distributed</p>

Experiment 3

	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).
Products	Guided discussions and field visit based on messages of Suite 1 projects.	<ul style="list-style-type: none"> X R7559 and R8134 case studies and guidelines X policy brief based on MPAs and Fishers seminar X links to materials from other research relevant to MPAs and coastal communities. 	<ul style="list-style-type: none"> X R7559 case studies X R7559 MPA guidelines X policy brief based on results of MPAs and Fishers seminar (to be prepared) X 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.

	Activity 1	Activity 2	Activity 3	Activity 4	Activity 5 (optional)
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 downloaded, 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.
Opportunities		Use CAMPAM and other list serves to make available to target audiences.	<p>UNEP MPA Training of Trainers Course.</p> <p>SocMon training workshop for Eastern Caribbean.</p>	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.	<p>Modules now being revised by TNC; date of next course not set (could be too late for project).</p> <p>Scheduled for 2005 (may be too late?).</p>		High cost for only one person.

Experiment 4

Targets	Messages	Objectives	Pathways	Products	Partners	Evaluation	Opportunities	M&E
Activity 1: Civil society "brokers"	See table 1	Increased confidence and ability to become involved in influencing and designing research processes	Presentation at regional workshop – (Conflict Management or Organisational Development), April 2005	PowerPoint presentation on concepts, issues and roles, illustrated by the case of the SMMA and other examples Policy brief on research gaps, priorities and opportunities	CANARI to implement	Pre-workshop baseline survey among workshop participants Survey of uptake, September 2005	Existing partnerships between CANARI and civil society organisations in the region Planned workshop with opportunity to insert agenda item	Pre-workshop baseline survey among workshop participants compared against survey of uptake
Activity 2: Funding agencies		Awareness of needs and opportunities for research Readiness to provide support to research Commitment to inter-agency collaboration to support research	Distribution (mailing and electronic) of documents (brief and posters) One-on-one communication	Poster (interactive, well designed)	Sea Grant College Program at UPR	Questionnaire on pathway preferences Telephone interviews	Various meetings and conferences, direct mailing and visits to funding agencies	Telephone interviews

Targets	Messages	Objectives	Pathways	Products	Partners	Evaluation	Opportunities	M&E
Activity3: Large-scale private sector resource user (one targeted company, with Public Affairs department)		Increased appreciation of the benefits to be derived from supporting research on coastal management issues that is relevant to poverty reduction and social development agendas	Mentoring and one-on-one communication	All Suite 1 products	Garret Manwarring	Case study of impact and change	Current involvement of GM in work with target group Recent involvement of SM in work with target group	Telephone interviews and observations of behavioural change, documented in report/case study
Activity 4: Local communities		Awareness and appreciation of potential role in defining and influencing research agenda Recognition of value and importance of local knowledge	Exhibition	Mobile exhibits	Local partner in TT, to be identified		Link to BG Science Bus/NIHERST Science Weeks and other school- or community -based activities	Interviews with key informants in target communities

Targets	Messages	Objectives	Pathways	Products	Partners	Evaluation	Opportunities	M&E
Activity 5: Research units, and faculty within regional universities		Awareness of agenda Willingness to support implementation of agenda	Distribution (mailing and electronic) of brief and poster One-on-one communication	Policy brief Poster	COMAREN Universities	Questionnaire with sample	Dissemination at regional events, including academic meetings	Interviews with key informants in UWI system to assess uptake

APPENDIX III: SUMMARY OF MAIN CONCLUSIONS AND RECOMMENDATIONS FROM COMMUNICATION EXPERIMENTS

While dissemination can be achieved within a reasonably short time frame, the changes in practices, attitudes, behaviours and policies that confirm 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 can be considered incomplete. More work is needed on assessing uptake, especially tools and approaches, over the medium and long term.

The project has enabled many lessons to be learned about the products, pathways and uptake of various messages targeted to a wide range of stakeholders, but these are necessarily preliminary and incomplete. The following general recommendations have been compiled from each communication experiment.

- 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 organisations with greatest access to the main target audiences for the products.
- Because the target audience is often highly diverse, there is a need for a similar diversity of products and pathways to reach them. Strategies that are effective for reaching some segments of the audience may completely miss other. For the same reason, messages 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.
- In general, products should not be limited to tangible materials. Guided discussions, semi-formal 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.
- Uptake of tools and approaches appears highest when stakeholders can immediately apply them. This suggests that strategies to disseminate tools and approaches should include their application to real issues that the target audience is dealing with.
- Reinforcement of messages helps assure uptake. Strategies should therefore make provision for follow-up after a communication activity.
- Uptake can be improved by promoting a range of products with similar messages, for example a PowerPoint presentation with associated printed material or CD.
- 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.
- In general, face-to-face meetings proved the most effective means of promoting the uptake of products, whereas distribution of products and obtaining feedback, particularly via email was not very effective.
- In addition to the above, the main conclusion from experiment 4 was that there remains a critical need to promote a research agenda that links coastal management, sustainable livelihoods and poverty reduction in the Caribbean region, but this

promotion requires a long-term effort and significant resources in order to be effective. This study has confirmed or revealed that there are significant obstacles to the uptake of the messages that this experiment intended to disseminate.

- The best pathways are often those that are based on normal and regular activities of the intended target audience

APPENDIX IV PRODUCT TOOLBOX

Experiment 1

CANARI. 2005. *Integrated Coastal Zone Management.* R8317 Briefing paper. Laventille: CANARI, 2pp.

CANARI. 2005. *Trinidad's Coastal Zone: Whose responsibility?* R8317 Briefing Paper. Laventille: CANARI, 2pp.

CANARI. 2005. Slide presentation. *Influencing coastal zone management policy in Trinidad: Challenges and Opportunities* . Laventille: CANARI.

CANARI. 2005. *Role of key stakeholders in coastal zone management – Trinidad and Tobago* Laventille: CANARI, 1pp.

CANARI. 2005. *The linkage between land-based activities, coastal resources management and coastal livelihoods, and the role of public agencies – Trinidad* Laventille: CANARI, 1pp.

Experiment 2

Parsaram, K and McConney, P. 2004. *Barbados Case Study: The fisheries advisory committee, a summary of lessons learnt.* Barbados: Caribbean Conservation Association. 10pp.

Parsaram, K and McConney, P. 2004. *Barbados Case Study: The sea egg fishery, a summary of lessons learnt.* Barbados: Caribbean Conservation Association. 10pp.

Parsaram, K and McConney, P. 2004. *Belize Case Study: Fisheries advisory board in the context of integrated coastal management, a summary of lessons learnt.* Barbados: Caribbean Conservation Association. 10pp.

Parsaram, K and McConney, P. 2004. *Belize Case Study: Marine protected areas co-managed by Friends of Nature, a summary of lessons learnt.* Barbados: Caribbean Conservation Association. 9pp.

Parsaram, K and McConney, P. 2004. *Grenada Case Study: Legalisation of Beach Seine traditional rules at Gouyave, a summary of lessons learnt.* Barbados: Caribbean Conservation Association. 10pp.

Parsaram, K and McConney, P. 2004. *Grenada Case Study: The lobster fishery at Sauteurs, a summary of lessons learnt.* Barbados: Caribbean Conservation Association. 10pp.

Parsaram, K and McConney, P. 2004. *Lecture notes. Guidelines for coastal resource co-management in the Caribbean: communicating the concepts and conditions that favour success. Pro-poor policies and Institutional arrangements for coastal Management in the Caribbean.* Barbados: Caribbean Conservation Association. 50pp.

Experiment 3

CANARI. 2005. *Marine Protected Areas and Sustainable Livelihoods.* CANARI Policy Brief No. 5. Laventille: CANARI. 4pp.

CANARI. 2005. Training Module Outline *Marine Protected Areas and Sustainable Livelihoods* Laventille: CANARI. 2pp.

CANARI. 2005. Training Module Slide Presentation *Marine Protected Areas and*

Sustainable Livelihoods Laventille: CANARI.

CANARI. 2005. Slide Presentation. *Marine Protected Areas and Sustainable Livelihoods: Lessons from Negril Marine Park* Laventille: CANARI.

CANARI. 2005. Poster. *Negril Marine Park and Sustainable Coastal Livelihoods: A village transformed* Laventille: CANARI.

CANARI. 2005. Poster. *Negril Marine Park and Sustainable Coastal Livelihoods: Creating a marine park.* Laventille: CANARI.

Experiment 4

Suite 1 Products as listed on pp 39-44 above

CANARI. 2005. *Linking coastal management, sustainable livelihoods and poverty reduction: a research agenda for the Caribbean* CANARI Policy Brief No. 6. Laventille: CANARI, 4pp.

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