## **R8317**

## Institutional Arrangements for Coastal Management in the Caribbean

Annex: B Coastal Management to Improve Livelihoods: A regional communication strategy for policy and Institutional change

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## Coastal Management to Improve Livelihoods: A regional communication strategy for policy and institutional change

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### Preface

There has been increasing interest in the Caribbean in understanding the ways in which different approaches to coastal zone management (CZM) impact on local livelihoods. This understanding is important for developing management strategies that optimise benefits, particularly for poor and vulnerable groups whose livelihoods often depend heavily on coastal resource use. A number of research projects on this issue have been carried out over the past few years, many of them within the framework of the UK Department for International Development's Natural Resources Systems Programme (NRSP) (see <u>Appendix I</u> for a list of these projects and their outputs).

Between 2003 and 2005, several of the organisations involved in this research collaborated on a project to understand how to make the results available to the wide range of coastal zone management stakeholders in the region<sup>1</sup>. Guidance on integrating livelihood considerations in CZM institutions and initiatives was synthesized and packaged in a range of forms and tested on different audiences, including decision-makers; policy influencers such as the private sector, non-governmental organisations (NGOs), journalists, and development agencies; educators and trainers; coastal area managers; researchers; and coastal resource users. The project offered numerous insights into the requirements for effectively disseminating information to these audiences. This Communication Strategy has been prepared to make use of that learning in order to effect widespread changes in attitudes, practices, policies and institutional arrangements related to the role of coastal area management in sustaining local livelihoods.

While the strategy has been developed by the project partners and their main collaborators, it is meant 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:

- 1. 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;
- 2. A "toolbox" of existing communication products and materials based on those messages and tools;
- 3. Guidance on:
  - a. identifying, assessing the communication needs of, and reaching key target audiences,
  - b. optimising the impact of communication products on attitudes, behaviours, practices, institutional arrangements and policy,
  - c. measuring the effectiveness of the strategy's activities;
- 4. Suggestions on a regional partnership for implementation

<sup>&</sup>lt;sup>1</sup> The partners in the project "Institutional arrangements for coastal management in the Caribbean" included the Caribbean Natural Resources Institute (CANARI), which had lead responsibility for implementation; the Caribbean Conservation Association (CCA); and MRAG, Ltd. Other collaborators included the University of the West Indies' Centre for Resource Management and Environmental Studies (CERMES) and the University of Puerto Rico's SeaGrant College Program.

## 1. Setting the Stage

### 1.1. Definitions

The authors have made every effort to use language that is clear and free of jargon, but some key terms used in the document may be unfamiliar to readers, or may be used in a sense that is somewhat different from their everyday use. These terms include the following:

Term	Definition	
Results	Public policy messages, management tools, and research priorities 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 <i>coastal management stakeholders</i> .	
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.	

Table 1. Definitions used in this document

#### **1.2.** Objective and expected results

Caribbean coastal zones, like those of most small islands, are at the same time high value areas that provide critical goods and services to large numbers of people and sites of intense humaninduced environmental pressure. Coastal resource management issues are therefore both urgent and important to the social and economic development of the region, and as such are given considerable attention. Yet national governments and international development partners mainly focus on the "big" issues of coastal management, including industry, ports, and tourism infrastructure, and give little attention to the livelihood needs and day-to-day patterns of coastal resource use of local people, many of whom are poor or economically vulnerable. Natural resources often feature heavily in the livelihood strategies of these groups, who can be disproportionately impacted when coastal resources are destroyed, degraded or appropriated for other uses. Any development agenda for the region that is committed to equity, sustainability, and poverty reduction must therefore take account of the crucial importance of coastal resources in protecting, sustaining and enhancing local livelihoods.

In support of such an agenda, the overall objective of this strategy is *to contribute to the development of attitudes, practices, institutional arrangements and policies for coastal management that support poverty reduction and improved coastal livelihoods*. The strategy aims to achieve that objective through activities that will have the following outputs, outcomes and long-term impact:

Outputs	Short-term outcomes	Medium-term outcomes	Long-term impact
Development, testing, and promotion of products based on messages about livelihood-sensitive coastal management	Products that support livelihood sensitive coastal management are used by target audiences as tools for planning, management, and decision-making	Stakeholder attitudes about coastal management are more sensitive to the interests and livelihood needs of coastal communities	Policy, legislation, institutional arrangements and practice reflect a commitment to empowerment and participation of, and
Development, testing, and promotion of methods and approaches for fostering integrated coastal management	Practices of stakeholders involved in use and management of coastal resources incorporate livelihood considerations	Policies and programmes related to coastal management take account of livelihood issues and give specific attention to the needs of poor and vulnerable groups	partnerships between, stakeholders and a readiness to support new livelihood-based approaches to coastal management and development.
		Coastal management institutions fully and equitably involve local stakeholders in planning and decision-making processes	

Table 2. Strategy outputs, outcomes and impacts

## 2. Research results: the basis of communication products

The results of research can be translated into messages, tools and materials and packaged and delivered in a range of ways, depending on the intended audience and use.

A number of products for delivering messages and tools about coastal management and livelihoods have already been developed and tested by the organisations that have prepared this strategy; these are listed in <u>Appendix II</u>, along with guidance on accessing and using them. Additional products will be needed to achieve the strategy's objectives and results. This section provides suggestions on the contents of these new products based on the results of recent research.

#### 2.1. Messages

Key research-based messages about policy and institutional requirements for effective coastal management that improves livelihoods include these:

- *Coastal resources are important* for Caribbean development.
- Coastal resource management and development is an *integrated process* that requires the inputs of various disciplines, sectors and perspectives.
- Effective integrated coastal management needs to include a *livelihoods perspective*.
- Coastal management is relevant to *poverty reduction and social development* agendas, and there is a need for management approaches and policies that focus on these agendas.
- **Property rights and conditions of access** must be designed and secured in ways that protect the interests of those whose livelihoods depend on, and contribute to, the sustainable and equitable use of coastal resources.
- Coastal management benefits from *management partnerships* involving a range of stakeholders.
- *Social and economic development actors* need to become involved in coastal management and development.
- *Coastal protected areas* can potentially provide important social and economic benefits, especially when they are established and managed in participatory ways.
- *Co-management* can be an important tool for integrating livelihood considerations into coastal management, but co-management arrangements require further testing in order to learn from experience.
- *Participatory planning* is another tool for managing coastal zones for improved livelihoods, but can only be effective if there is equitable participation of all stakeholders.
- Coastal areas need *flexible and adaptive management* in order to contribute to poverty reduction and improved livelihoods and to respond to complex and evolving contexts.

#### 2.2. Tools

The main tools for integrated coastal management that supports local livelihoods are related to:

*participatory planning*, including methods for stakeholder analysis and communications;

- *institutional design and organisational development*, particularly in a co-management setting;
- protected area planning and management;
- *livelihood approaches* to optimise social and economic benefits from coastal areas;
- *information management*, including GIS, mapping, and outreach;
- *applied and collaborative research*, drawing on both popular knowledge and scientific data, to inform management decisions and to build a 'culture of learning' within management institutions and organisations;
- *monitoring and evaluation*, to guide the design and implementation of management arrangements.

*Materials for education, training and capacity-building*, especially materials that convey the messages and present tools for integrated coastal resource management.

In addition, there is a need for *further research* that incorporates priorities and opportunities for investigation on integrated and equitable coastal management, including:

- factors of management effectiveness in protected areas;
- forms of property rights and their implications for management and for livelihoods;
- conditions and requirements for co-management in a Caribbean context;
- approaches and methods for the integration of popular and scientific knowledge in management;
- techniques and approaches to enhance livelihood benefits from coastal resource use, especially for the poor;
- institutional arrangements, and their impacts on management outcomes (environmental sustainability, participation and empowerment, poverty reduction and socio-economic benefits);
- issues of power and equity, and approaches to conflict management;
- strategies and requirements for entrepreneurship and business development as instruments of poverty reduction and sustainable resource use in coastal areas;
- the policy process and the role of communication and advocacy in influencing policy content.

## 3. Identifying and assessing target audiences

To be effective, communication products need to be designed for and targeted at those specific individuals or groups who are essential to the achievement of a communication strategy's objectives. The tools of stakeholder analysis can help in determining exactly who these groups and individuals are, and what types of products and pathways would be most effective in reaching them.

#### 3.1. The strategy's main audiences

The main target audiences for this communication strategy are likely to be found within the following broad categories:

Main actors affecting or affected by coastal management	Desired action or response	Target audiences
State and local management agencies	Increase their use of livelihood- based management approaches and tools	Coastal resource managers and planners, e.g. marine protected area managers, fisheries officers, staff of local planning authorities
User groups	Demand an increased role in management and decision- making	Commercial, subsistence and recreational coastal resource users, e.g. fishers, hoteliers, yacht charterers, mangrove harvesters, scuba divers
Governments	Adopt policies in support of livelihood-sensitive coastal management	Public policy makers, including government ministers, senior technocrats, consultants and advisors
International and regional development and natural resource management agencies	Support and facilitate adoption of livelihood-sensitive coastal management policies and approaches	Field and policy-level staff involved in coastal management and livelihood issues, and consultants employed by these agencies
Local and national policy influencers	Create demand for adoption of livelihood-sensitive coastal management policies and approaches	Civil society, including personnel of NGOs, community- based organisations and the private sector
The media	Disseminate messages about links between coastal management and livelihoods to the public	Journalists, radio and television writers and producers
Educational and training institutions	Disseminate livelihood-based management concepts, tools and approaches to students and trainees	University faculty, staff of training institutions, trainers of trainers, in-house trainers

Main actors affecting or affected by coastal management	Desired action or response	Target audiences
Research institutions	Conduct and participate in inter- disciplinary research on the requirements for increasing the contribution of coastal management to local livelihoods and poverty reduction	Researchers in all relevant disciplines, and funding agencies (including the public and private sector clients of applied research)

#### Table 3. Coastal management actors

#### **3.2.** Getting to know your target audiences

Strategic communication requires a thorough understanding of the target audiences who must be reached to effect the desired changes. The tools of stakeholder identification and analysis are required to do this well. To identify target audiences for communication on coastal management and livelihoods, some of the questions to ask would include:

Who are the individuals, groups and institutions:

- a. affected by or affecting the issues being addressed?
- b. benefitting from the use of the resources in the coastal zone?
- c. benefitting from or being hurt by the current situation?
- d. who stand to benefit from or will be hurt by the desired changes?
- e. who are in a position to effect or facilitate the desired changes?
- f. who are in a position to block change?

Each type of stakeholder needs to be considered in designing an effective communication strategy, since each has a role in bringing about the desired changes. There is therefore a need to make inroads at different levels simultaneously: approaches that focus on only one group or that treat all groups in the same way are unlikely to succeed. Communication strategies must also take account of the dynamic and changing nature of stakeholder groups, whose composition, characteristics, and relationship with each other and with the issues being addressed are in constant flux. Thus a strategy designed to reach a set of target audiences at one point in time is unlikely to have the same effect at another time or under slightly different conditions.

For more information on stakeholder identification and analysis, see Renard 2004.

#### 3.3. Assessing levels of openness, awareness and understanding

In implementing this communication strategy it is important to keep in mind, before making any assumptions, that there are several assessments that need to be conducted. First it is important to assess the level of openness on the part of the different audience groups and even members within similar groups. *Openness* refers to the predisposition of the audience to receiving messages, or to considering the use of methods or tools.

In addition to assessing levels of openness, implementing agencies should be careful to assess, and make a distinction between, levels of awareness and levels of understanding. *Awareness* refers to knowledge and recognition of a certain issue: in this case coastal resource management

and its connection to poverty reduction and livelihoods. One can be aware that a certain approach to integrated and equitable coastal management exists, but may not necessarily understand what it is, how it works, etc. For example, audience members may be aware that co-management is one possibility for equitable coastal management, yet they may not be aware of the various property rights and management regimes that may determine the nature of the co-management arrangement. The same could be said for Marine Protected Areas (MPAs) and the wide variety of approaches to coastal resource conservation. A government agency in charge of implementing a MPA may not be aware of the repercussions it could have on coastal livelihoods.

*Understanding*, on the other hand, refers to comprehension or interpretation of concepts. Differing interpretations of issues *among* stakeholder groups are almost a given, since coastal management often happens in a context of conflict. Yet differing levels of understanding of the issues and possible solutions could also happen *within* stakeholder groups.

One area in which assumptions should be avoided is the definition of the terms being used. In the project that serves as the basis for this communication strategy it was clear that individual stakeholders interpreted the terms "livelihood", "coastal zone" and "poverty reduction" differently. It is thus recommended that implementing organisations explore the spectrum of interpretation or understanding rather than impose a set of definitions. Two general considerations should illustrate the previous point. It seems that the messages about coastal livelihoods have not yet reached people designing and implementing poverty alleviation strategies. The frame of reference of this latter group may be different from that of fisheries people who seem to be more "aware" of the linkages between coastal management and livelihoods. On the other hand, those working in coastal management are not yet using coastal livelihoods as a frame of reference.

The significance of this approach (exploring the spectrum of interpretations at the outset) is that it will allow the implementing organisation to assess the vocabulary and perspectives from which the issue could be approached when dealing with different audience groups. This approach also allows for tailoring messages to specific audiences in an effort to improve chances for uptake.

A useful way to explore openness, levels of awareness and levels of understanding of issues and concepts is a *needs assessment survey* administered before any uptake project begins. What do people already know, have, do? What do they lack? Are they willing to consider new approaches, solutions, perspectives? Although specifically used to establish needs and then develop an "intervention" to satisfy those needs, this type of survey should incorporate questions to determine awareness and understanding of the issues. Appendix III has an example of a needs assessment survey that could be used for this purpose. The survey might also usefully explore the target audience's preferences for pathways to receive messages. This information will facilitate delivery of the messages via self-identified pathways.

## 4. Selecting pathways

#### 4.1. Pathways that work for different audiences

Just as every stakeholder has a slightly different role to play in achieving the objectives of a communication strategy, each stakeholder accesses and absorbs information differently, and these "pathway preferences" also need to be well understood. Some of the pathways most commonly used in the region, as well as their main target audiences, are indicated in the following table.

	Sample target audiences					
Dissemination method	Managers and researchers	Policy- makers	Civil society	Resource users	Educators and trainers	General public
Informal face-to-face meetings	X	Х	X	X	Х	
Field visits	Х	Х	Х	X	Х	
Staff exchanges	Х					
Small group meetings		Х				
Training workshops	Х	Х	Х	X	Х	
Cultural media				X		Х
Seminars/conferences	Х	Х	Х		Х	
Exhibitions		Х		X		Х
Written case studies	Х		Х		Х	
Guidelines documents	Х		Х		Х	
Visual presentations, including videos and PowerPoint	X	Х	X	X	Х	Х
Public media including radio shows and public access television		Х				Х
Press coverage						Х
Books/scholarly papers	Х				Х	
Brochures	Х					
Policy briefs		Х				
Educational materials			Х		Х	
Internet	Х		Х		Х	

#### Table 4. Dissemination pathways and audiences

For a great many stakeholders, the most effective pathways to convey messages and promote tools and approaches involve face-to-face communication. Broader dissemination pathways, including e-mail, Internet, newspapers, radio, exhibits and other special events, only reach certain target audiences and are therefore of no value with others. There is thus a need to

understand what media are used by different target audiences, and in what ways, before disseminating through them.

#### 4.2. Designing products and pathways with specific audiences in mind

For messages to be listened to and understood, they need to be couched within a particular target audience's own perspective and context, and these can vary widely. Different stakeholders can have very different views on key issues such as the relative values of coastal resource protection, livelihood sustainability, and economic development. For example, politicians tend to think about coastal management issues from the perspective of financial investment and employment creation, while local residents think about them in terms of their livelihoods and quality of life, resource managers in terms of conservation and conflict mitigation, and holiday-makers in terms of recreational opportunities. Products and pathways need to be designed in ways that will stimulate interest rather than alienate individual audiences.

Products also need to be accessible to their targets, which means they must take account of the different ways in which people absorb information and the time they have available. For example, graphics, including photographs, illustrations, tables and diagrams, can be quite effective in reaching stakeholders (such as politicians or busy technocrats) who can not spare much time, those with limited literacy skills, or audiences who speak different languages. Box 1 provides some other tips for reaching specific audiences.

#### Box 1: Tips for reaching key target audiences

Research on uptake promotion on coastal management and livelihoods has provided a few lessons, summarized in the following table, on what works and what does not with some key audiences.

Target group	Main challenges	Tips
Policy-makers	Getting their attention: lack of time may preclude face-to-face meetings and prevent them from reading much of the material they receive.	Try reaching them through intermediaries who have access to them.
		Keep messages succinct: a two page briefing is better than four pages; one page is even better.
		Provide them with examples of tangible benefits, even from other countries or regions.
		Make liberal use of illustrations, diagrams and graphics in material and in presentation.
		Be prepared to make oral presentations or have discussions as opposed to more formal presentations with visual aids.
Senior technocrats	Getting them to consider issues and problems in non-traditional ways.	Field trips for this audience can both bring the complexity of issues to life and generate cross-sectoral dialogue.

Target group	Main challenges	Tips
Teachers and trainers	Are often unwilling or uncomfortable presenting material they feel they lack expertise in.	Providing training materials and guidance on using them may not always be enough; it is sometimes also necessary to provide a co- trainer until comfort levels improve.
		Because most students and trainees are interested in practical application, provide materials with examples and case studies rather than simply theory.
Journalists	Accommodating their schedules and deadlines.	Provide background material and direct them to sources with relevant information: case studies and examples are very helpful.
		Present the message you want them to send clearly and specifically, but accept that they will convey it in their own way.
Researchers	Collaborating with other disciplines, linking with the field and accepting new notions and approaches.	Create opportunistic partnerships between researchers and field practitioners, and involve researchers in policy processes.
		Provide case studies and examples of inter-disciplinary work.

## 5. Guidelines for optimising uptake

Dissemination is easy; effective dissemination that results in positive change through uptake of the products disseminated is far more difficult. Some of the keys to achieving uptake that have been identified through research and experience are discussed in this section.

#### 5.1. Start with a strategy

For research and advocacy on coastal management and livelihoods to make a difference, it needs to produce and make use of information that can change attitudes, behaviours, practices and policies. That information must be provided to the right audiences in forms they can use. Before beginning to consider the forms in which information can be packaged for dissemination, the following questions need to be carefully considered and answered:

- a. What kinds of changes are desired?
- b. What are the main factors that influence change in the target audience, either negatively or positively?
- c. What are the messages or tools that can result in or support those changes?
- d. Who exactly needs to receive products containing these messages and tools?
- e. Why do they need them and what are they expected to do with them?

For more detailed information on developing effective communication strategies, see Jacobson 1999 and Norrish *et al.* 2001.

#### 5.2. Consider products and pathways in tandem

Products cannot be separated from pathways: the best product will have little value if it is not effectively and strategically disseminated and promoted. Many products may be more "deliverer-dependent" than commonly believed, for example, as indicated in Table 5, training materials may not be used unless they come with a trainer. Most often, uptake of messages requires face-to-face meetings and discussions, and uptake of tools and approaches requires hands-on training and instructions for use. While remote dissemination of products may work for specific groups of stakeholders, is unlikely to be widely effective.

#### 5.3. Reinforce messages in various formats

Uptake is a gradual process that requires repeated effort. A single product or intervention is unlikely to achieve a desired change; it is generally necessary to make use of multiple tools, strategically sequenced for reinforcement. These can include a mix of intensive – and relatively costly – approaches such as presentations, meetings and workshops, reinforced by a range of less expensive but also less effective methods, including use of electronic mail, Internet, and popular media. Follow-up communication or activities a few months after the delivery of a product can also be an effective means of reinforcing messages.

#### 5.4. Consider 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. The use of intermediaries, including "opinion leaders" within target groups, is often an effective method of message delivery, as it can reinforce the power of the message through the credibility of the messenger. But in these cases, it is particularly important to:

- understand the different levels of power relations between messenger and receiver, and choose messengers with care;
- assess the messenger's own "stakes" in the issues being communicated, and understand that these affect the way s/he will convey the message as well as how it will be received by its audience;
- realise that intermediaries may cease to be effective messengers if their own stakes or involvement in an issue change.

#### 5.5. See communication and uptake as a dynamic process

Communication is always a two-way process, and real uptake only occurs through thoughtful consideration and gradual understanding. This is why face-to-face communication tends to be a particularly effective means of dissemination. Generally, products and pathways that bring people together, draw on their own perceptions and experiences, and provide space for discussion, are most likely to result in changes in attitudes and increased understanding of issues.

Because understanding about coastal management and livelihoods is still partial and evolving, there is a particular need for communication products that are flexible and adaptable and that allow audiences to bring their own experience into them, rather than products that are rigid and didactic. 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.

By giving people a chance to debate and share differing perspectives, these activities can in themselves reinforce key messages and tools related to participatory and integrated approaches to coastal area planning and management.

In designing such products, a few lessons to keep in mind include these:

- discussions, and even heated debates, that engage audiences about contexts and situations they know are particularly useful in conveying complex ideas and concepts;
- most messages and tools are better absorbed when presented in interactive environments where audiences can discuss, test, and adapt to their own context;
- targeting specific stakeholder groups can be counterproductive; bringing them together increases learning and uptake through sharing of perspectives.

## 6. Evaluation: measuring uptake

The definition of uptake used in this strategy is "acceptance and use of products by target audiences, as evidenced in changes in practices, behaviours, and attitudes." Based on this definition *uptake can be measured at five levels*:

- a. further and onward use of products,
- b. application of tools,
- c. changes in attitudes,
- d. changes in policy, and
- e. transformation, which is more difficult to measure.

In this section we will discuss approaches to assessing uptake at each of these levels through the use of indicators.

#### 6.1. Selecting indicators

Indicators can be defined as statistics or parameters that provide a means of measuring what actually happens against what has been planned in terms of quantity, quality and timeliness. Indicators can therefore be used for measurement at all levels of programming, including goals, objectives, outcomes and outputs. Indicators can involve both qualitative and quantitative information.

The selection of indicators should be guided, in part, by the existence of a baseline – or the possibility to develop a baseline in the short term and without significant additional resources – and by the ability to monitor. More detailed information on the selection and monitoring of indicators can be found in WEDC 2000.

The table below suggests some potential indicators that can be used to measure uptake of messages and tools about coastal management and livelihoods at each of the above levels.

Level of uptake	Possible indicators
Further or onward use of products	<ul> <li>Increased use of messages by target audiences</li> </ul>
	<ul> <li>Requests for additional information and materials</li> </ul>
	<ul> <li>Incorporation of materials into course curricula</li> </ul>
	<ul> <li>Use of messages in press articles and columns</li> </ul>
	<ul> <li>Relaying of messages to superiors and co-workers</li> </ul>
	<ul> <li>Recommendations for improvements and type of products required</li> </ul>
	<ul> <li>Incorporation of messages into proposals or internal programming instruments</li> </ul>
	<ul> <li>Further use of products with subordinates</li> </ul>

Level of uptake	Possible indicators
Application of tools	<ul> <li>Increased use of participatory planning tools by target audiences</li> <li>Development of training activities using co-management</li> </ul>
	<ul> <li>Development of training activities using co-management tools</li> </ul>
	<ul> <li>Incorporation of participatory and co-management tools into management plans</li> </ul>
	<ul> <li>Increased use of websites to download tools</li> </ul>
	<ul> <li>Increased involvement of researchers and research institutions in coastal research</li> </ul>
	Use of participatory planning tools and livelihoods approaches by private sector companies and NGOs working in the coastal zone
Changes in attitudes	<ul> <li>Integrated planning for coastal management</li> </ul>
	<ul> <li>Participatory development and implementation of strategies, plans and research projects</li> </ul>
	<ul> <li>Inclusion of policy messages in publications for dissemination</li> </ul>
	<ul> <li>Civil society and private sector interest in playing greater role in supporting strategy's aims</li> </ul>
	<ul> <li>Willingness to engage in follow-up action</li> </ul>
	<ul> <li>Participation in follow-up activities</li> </ul>
	<ul> <li>Offers to host activities related to strategy's purpose</li> </ul>
	<ul> <li>Attendance at activities related to strategy's purpose</li> </ul>
	<ul> <li>Commitment by decision-makers to further action</li> </ul>
	Participation in relevant meetings and workshops
Changes in policies and practices	<ul> <li>Governmental commitment to initiating integrated coastal management approaches</li> </ul>
	<ul> <li>Corporate commitment to integrated coastal management</li> </ul>
	<ul> <li>Civil society organisations' commitment to introduce policy messages in their projects</li> </ul>
	<ul> <li>Shift in organisational strategic planning and agenda toward the issues addressed in the strategy</li> </ul>
	<ul> <li>Increased stakeholder participation in coastal management decisions and activities</li> </ul>
	<ul> <li>Commitment to implement co-management</li> </ul>
	<ul> <li>Integration of the issues addressed in the strategy in research and funding agendas</li> </ul>
	<ul> <li>Inclusion of discourse on coastal management and livelihoods in speeches and policy statements</li> </ul>
	<ul> <li>Coastal management and livelihoods as a topic for discussion in meetings</li> </ul>

Level of uptake	Possible indicators		
Transformation	<ul> <li>Coastal management institutions that equitably involve all stakeholders</li> </ul>		
	<ul> <li>Coastal management programmes and projects that have a strong livelihoods dimension</li> </ul>		
	<ul> <li>National and organisational budgets that make provision for livelihood aspects of coastal management</li> </ul>		
	<ul> <li>Incorporation of sustainable livelihood issues into management objectives and arrangements</li> </ul>		
	<ul> <li>Implementation of co-management regimes</li> </ul>		
	<ul> <li>Governmental implementation of integrated coastal management approaches</li> </ul>		
	<ul> <li>Corporate implementation of integrated coastal management approaches</li> </ul>		
	<ul> <li>Inclusion of coastal livelihood interventions into the programmes and budget of funding agencies</li> </ul>		
	<ul> <li>Incorporation of coastal zone livelihood and participatory management strategies in poverty reduction and rural</li> </ul>		
	development programmes		

Table 6. Indicators of uptake

#### 6.2. Monitoring uptake

Methods for tracking progress against indicators at each level are discussed below.

#### 6.2.1. Further and onward use of products

This initial level of uptake could be assessed using several methods. One simple method would be to keep a record of the requests for: more information on products, additional copies of products, additional training sessions or workshops, and even authorization to transfer materials into new formats (e.g. a printed document transformed into a PowerPoint presentation or a video transcribed for closer analysis).

A second method of uptake assessment could be follow-up phone calls to determine if and how audience members have used the products. These could be conducted one, three and six months later. Follow-up calls may range from informal conversations to more formal phone surveys consisting of three to five questions. In addition, a short survey could be distributed among the audience to assess uptake. Anecdotal information gathered from audience members, albeit not quantitatively significant, is certainly very valuable.

#### 6.2.2. Application of tools

This second level of uptake assumes a step further from receiving the messages—in this case messages about participatory planning tools as well as co-management tools—into using them. Monitoring training activities and management plans may indicate if tools are being applied. For web-based materials, statistics about downloads may prove useful. A word of caution: when using this type of measure keep in mind the same people may be doing repeat downloads, thus the numbers may not be accurate.

Brief baseline (before) and after surveys should provide information about the integration of participatory planning tools and/or co-management tools into the stakeholder's field of work.

#### 6.2.3. Changes in attitudes

This is the most abstract level of uptake because it implies a change in a person's or a group of persons' mental disposition to accept an idea, concept, tool or practice as viable. To be able to assess changes in attitude those using this communication strategy should conduct an initial assessment of attitudes among their audience groups. Never assume for example that all those in charge of implementing public policy will share the same attitude. As discussed in a previous section, levels of openness, awareness and understanding vary within target audience groups, and coastal policy makers and managers are no exception. In addition, public policy towards coastal management should be analysed to determine if it already takes an integrated approach.

Civil society groups may influence public policy by demanding that a livelihoods perspective be integrated into government plans for coastal management. Therefore, their participation and interest in the issues should be considered an important step towards the final goal of coastal management practices that take into account livelihoods and poverty reduction issues. It should be noted that many of the indicators for this level of uptake may be expressed in a disposition to participate in follow-up activities documented in one on one exchanges or follow-up phone calls. Here qualitative information gathering is as important as quantitative surveys.

Finally, it should be said that it can take time for attitudes to change and thus measuring may require a longitudinal approach (over a certain period of time).

Organisational strategic planning documents may also offer clues about the incorporation of messages into new or continuing projects, funding priorities, or research priorities. This type of document often is widely distributed and could be compared with previous documents to ascertain changes. A shifting in focus of corporate research or social responsibility programmes might also serve as an indicator.

Changes in institutional structures and partnerships can also provide evidence of uptake at this level. Participatory institutional mapping exercises that examine the structures and hierarchies within target organisations, as well as their networks and relationships with others, can be conducted at intervals of one to five years. Multiple interventions to convey the message may be necessary to effect a change in attitude, and follow-up surveys or phone calls could be used at intervals of three months, six months, and one year.

#### 6.2.4. Changes in policies and practices

Changes in policies are often easily assessed by carefully monitoring public statements made by officials as well as the new laws and other policy instruments adopted by public agencies. Those statements can also be made to the organisation implementing this communication strategy via a formal communication or phone call. Periodic follow-up surveys (at intervals of six to nine months) after an audience has received the messages can be useful in determining to what extent those messages have influenced changes in policies and practices. These could reveal changes that indicate greater attention to coastal and livelihood issues.

#### 6.2.5. Transformation

For this fifth level of uptake to occur the overall objective of this communication strategy has to be accomplished.

Transformation could be measured in the level of stakeholder participation in coastal management planning and implementation. Surveys among different stakeholders could easily assess this. By the same token, management approaches should have a strong livelihoods

component as evidenced by strategic documents and actions on the ground. At this point the government, civil society organisations, corporations, funding institutions and other actors should move from commitment into action to implement integrated coastal management within their respective spheres of influence. Country- and situation-specific co-management arrangements will be in place, and their implementation could be monitored via one-on-one interviews, focus groups or surveys administered to stakeholders.

The aims of this strategy can only be achieved through a serious commitment of funds. In addition to any laws or policies that may be put in place, an analysis of the government's budget allocation would serve to indicate if transformation has taken place. If there is a serious commitment from government, coastal management agencies and institutions will have the resources and budget required to accommodate livelihood and poverty reduction considerations into their coastal management plans.

## 7. Suggestions on implementing the strategy

Achieving real and lasting improvement in the contribution of coastal management to livelihoods will require a coordinated and sustained effort from a wide range of partners. There are key roles for governments, regional organisations, NGOs, community organisations, the private sector, universities, research and training institutions, and donor agencies. The ways these different actors can be part of the strategy include these:

Potential partners	Main roles
<b>Governments,</b> particularly ministries, departments, and agencies involved in coastal management issues, community development, poverty programmes, and education	<ul> <li>Adopt and promote the strategy's tools and approaches</li> <li>Disseminate the strategy's products through official channels, media and distribution lists</li> <li>Incorporate the strategy's messages in public statements, speeches and documents</li> <li>Provide forums for stakeholders to discuss and further develop the strategy's messages and tools</li> </ul>
<b>Regional organisations</b> involved in coastal resource management, sustainable development, and capacity building	<ul> <li>Incorporate the strategy's messages in regional policies and agreements</li> <li>Provide governments and other actors with information needed to develop policies and institutions in support of the strategy's aims</li> <li>Support key messages through programmes and projects</li> <li>Disseminate tools and approaches through publications, conferences and training activities</li> <li>Support the development and dissemination of new communication products to reach key target audiences</li> <li>Provide forums for stakeholders to discuss and further develop the strategy's messages and tools</li> <li>Encourage donor agencies and international partners to contribute to and support the strategy's aims</li> </ul>
NGOs working in the fields of conservation, natural resource management, poverty reduction, and education	<ul> <li>Support the strategy's messages in programmes and projects</li> <li>Encourage governments to support the strategy's aims</li> <li>Provide governments and other actors with information needed to develop policies and institutions in support of those aims</li> <li>Develop and disseminate new communication materials to reach key target audiences</li> <li>Channel the strategy's messages through media contacts and policy influencers</li> <li>Provide forums for stakeholders to discuss and further develop the strategy's messages and tools</li> </ul>

Potential partners	Main roles		
Community organisations	<ul> <li>Advocate for policies and practices that support the strategy's aims</li> </ul>		
	<ul> <li>Channel the strategy's messages through local opinion leaders and politicians</li> </ul>		
	<ul> <li>Encourage and build the capacity of local stakeholders to adopt the strategy's tools and approaches</li> </ul>		
	<ul> <li>Test and refine messages and tools to suit local contexts and needs</li> </ul>		
Private sector	<ul> <li>Support the strategy's messages in research and corporate social responsibility programmes, projects and public relations campaigns</li> </ul>		
	<ul> <li>Encourage politicians and other private sector interests to support the strategy's aims</li> </ul>		
	<ul> <li>Assist in further development of tools and approaches through research</li> </ul>		
Universities, particularly faculties dealing with natural resource	<ul> <li>Incorporate the training materials included in the strategy's tool box in relevant curricula and short courses</li> </ul>		
management and social sciences	<ul> <li>Develop new training materials to suit the needs of specific courses and programmes</li> </ul>		
	<ul> <li>Incorporate the strategy's messages into the design of undergraduate and graduate programmes and courses</li> </ul>		
Research and training institutions	<ul> <li>Conduct research on issues related to integrated coastal management and livelihood improvement</li> </ul>		
	<ul> <li>Provide training in the use of the strategy's tools and approaches</li> </ul>		
	<ul> <li>Build partnerships between themselves and other management actors (government, civil society, private sector) as well as between disciplines within the institutions</li> </ul>		
	<ul> <li>Ensure the dissemination of research results in a form and manner that make them usable and useful</li> </ul>		
Donors and technical assistance agencies	<ul> <li>Support the implementation and further development of this strategy</li> </ul>		

 Table 7. Implementation roles of strategy partners

#### References

Jacobson, S. 1999. Communication skills for conservation professionals. Washington, D.C.: Island Press.

Norrish, P., Lloyd Morgan, K. and Myers, M. 2001. Improved communication strategies for renewable natural resource research outputs. *Socioeconomic methodologies for natural resources research: Best practice guidelines.* Chatham, UK: Natural Resources Institute.

**Renard, Y. 2004**. Guidelines for stakeholder identification and analysis: a manual for Caribbean natural resource managers and planners. *CANARI Guidelines Series 5*. Laventille, Trinidad: Caribbean Natural Resources Institute.

Water Engineering and Development Centre. 2000. Dissemination pathways and indicators of impact on development: a review of literature. http://www.lboro.ac.uk/wedc/projects/stw/lr6.pdf.

## Appendix I: NRSP projects on pro-poor coastal management in the Caribbean

## People and the Sea: Institutional and technical options for improving coastal livelihoods

#### Implemented by CANARI March 2000 – June 2003

Laborie is a small coastal village on the southwest coast of St. Lucia. Villagers have traditionally depended on the marine resources for their livelihoods - reef fishery, and harvesting of seaweeds and sea urchins. The sea and the coastal areas also play an important role for recreation and for the provision of a range of environmental services, and have the potential to support tourism development. Laborie was the focal point for this 3-year research project, which sought to identify some of the technical and institutional requirements for the sustainable development of coastal communities in the Caribbean. The project was a joint venture with the Laborie Development Planning Committee, and the Department of Fisheries in the Government of St. Lucia.

The project tested the hypothesis that active participation of stakeholders in local resource management will increase the likelihood that coastal resources can be used in a sustainable manner. Beginning with an inventory of the natural resources available to Laborians (identified by resource users from Laborie), the project looked at the past and current uses, the issues affecting them and their potential for increasing economic and social benefits, for example through the expansion of seamoss cultivation and marine-based tourism. Ways in which these activities could bring sustainable and equitable benefits to people in the community are also being assessed. Finally, the project also looked at desirable roles and functions for existing organisations in providing services to constituents and contributing to natural resource management.

Newsletters, oral presentations, community workshops and a video documentary were used to keep project participants and the wider community updated on progress, get feedback, disseminating the results of the research.

#### Selected project documents:

- 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. Caribbean Natural Resources Institute, Vieux Fort, Saint Lucia.
- Renard, Y., Smith, A. and Krishnarayan, V. 2000. Do reefs matter? Coral reef conservation, sustainable livelihoods and poverty reduction in Laborie, St. Lucia. Paper presented at a regional conference on Managing Space for Sustainable Living in Small Island Developing States, Port of Spain, Trinidad and Tobago, October, 2000r CANARI Communication No. 274.

#### **Caribbean Marine Protected Areas and opportunities for pro-poor management**

#### Implemented by MRAG Ltd., April 2001 – August 2003

Many marine protected areas (MPAs) throughout the Caribbean have been established as tools for managing coastal resources. MPAs have succeeded to varying degrees in achieving their

primary aims, which have usually been ecologically based (e.g., to conserve biodiversity and sustain fisheries), while struggling to gain acceptance from stakeholders and effectively implement management measures. Little attention has been paid to the impact on poorer sectors of the community who rely on the resources within MPAs, impacts that may help explain some of the problems MPAs have had with implementation and compliance.

The purpose of the research project was to identify current institutional constraints to successfully implementing MPAs in ways that lead to a sustained improvement in the livelihoods of poor people in the Caribbean, and to develop options for addressing these constraints. This project was implemented through a partnership between MRAG Ltd and the Natural Resource Management Programme of the University of the West Indies, with the collaboration of CANARI.

A review was undertaken of the institutional and ecosystem characteristics of 80 MPAs in the insular Caribbean, followed by more detailed studies at selected sites. These included legal and policy reviews (11 sites), ecological impact studies (4 sites), and participatory appraisals of the effect of MPA management on poor people's livelihoods and current institutional constraints and opportunities for improving them (4 sites).

Results were presented at a regional workshop and ideas further developed through working group sessions. Following this, a working group of Caribbean MPA practitioners, funding agency representatives, and policy makers was set up to assist in the synthesis of project findings and production of guidelines for implementing MPAs that are sensitive to the needs of poorer groups living in and around them. A series of newsletters kept project participants and the wider community updated on progress of research findings. In addition, the project produced a number of academic theses from the University of the West Indies and scientific papers.

#### **Project Documents:**

Anderson, W., M. Best, and R. Richards. 2002. *Marine Protected Areas: Legal and policy framework*. University of the West Indies Faculty of Law, Barbados.

Esteban, N.; C. Garaway; H. Oxenford; W. Anderson, and P. McConney. 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 (GCFI), Xel Ha, Mexico, 11-15 November 2002.

Garaway, C. and N. Esteban. 2003. *Increasing MPA effectiveness by working with local communities: Guidelines for the Caribbean.* MRAG Ltd., UK.

Garaway, C. and N. Esteban. 2003. *Improving MPA Effectiveness by working with local communities: Guidelines for the Caribbean*. Poster display for the Vth World Parks Congress, Durban, Republic of South Africa, September 2003. MRAG Ltd., UK.

Garaway, C. and N. Esteban. 2003. *The Impact of Marine Protected Areas on poorer communities living in and around them: Institutional opportunities and constraints.* MRAG Ltd., UK. *Includes*:

Appendix 2. Case study of Princess Alexandra Land and Sea National Park, Turks and Caicos Islands.

Appendix 3. Case study of Hol Chan Marine Reserve, Belize.

Appendix 4. Case study of Glover's Reef Marine Reserve, Belize.

Appendix 5. Case study of Negril Marine Park, Jamaica.

Geoghegan, T., A. Smith and K. Thacker. 2001. *Characterisation of Caribbean Marine Protected Areas: An analysis of ecological, organisational, and socio-economic factors.* CANARI Technical Report No. 287.

#### Requirements for developing successful co-management in the Caribbean

#### Implemented by the Caribbean Conservation Association 2002-2003

The goal of the project was to ensure that integrated coastal management in the Caribbean is done in a way that involves and benefits those who depend on the resources of coastal areas, especially where there is poverty. The purpose was to understand the conditions required for establishing and sustaining successful co-management of coastal resources in the Caribbean.

The project addressed the natural resource and human institutional aspects of co-management through a series of participatory investigations of conditions that favour, or do not favour, the co-management of coastal and marine resources at selected sites. The project resulted in a guidelines document for developing successful co-management in the Caribbean.

The guidelines document was developed from lessons and experiences of co-management initiatives in the Caribbean and other regions. These lessons were combined with new information generated from case studies of coastal and marine resources co-management at selected sites in Barbados, Belize and Grenada. The guidelines and case studies embraced the wide range of aspects that can affect the sustainability and performance of co-management arrangements and activities from resources and fisheries, to cultural and institutional dimensions.

#### Selected project documents:

McConney, P., R. Mahon and H. Oxenford. 2003. *Barbados case study: the Fisheries Advisory Committee*. Report of the Caribbean Coastal Co-management Guidelines Project. Caribbean Conservation Association, Barbados.

McConney, P., R. Mahon and R. Pomeroy. 2003. *Belize case study: Fisheries Advisory Board in the context of integrated coastal management*. Report of the Caribbean Coastal Co-management Guidelines Project. Caribbean Conservation Association, Barbados.

McConney, P., R. Pomeroy and R. Mahon. 2003. *Guidelines for coastal resource comanagement in the Caribbean: Communicating the concepts and conditions that favour success.* Report of the Caribbean Coastal Co-management Guidelines Project. Caribbean Conservation Association, Barbados. (PowerPoint presentation also available.)

Pomeroy, R.S. and T. Goetze. 2003. *Belize case study: Marine protected areas co-managed by Friends of Nature.* Report of the Caribbean Coastal Co-management Guidelines Project. Caribbean Conservation Association, Barbados. 73pp.

Pomeroy, R., P. McConney and R. Mahon. 2003. *Comparative analysis of coastal resource comanagement in the Caribbean*. Report of the Caribbean Coastal Co-management Guidelines Project. Caribbean Conservation Association, Barbados.

# Appendix II: A toolbox of products on coastal management and livelihoods

The following products have already been developed in support of this strategy. They can be used directly in communication activities or serve as examples of the types of products that can be developed in support of the project. Further information on each product is available from the organisations indicated.

Product	Available From <sup>1</sup>	Target audiences	Recommended uptake pathways
Training module on marine protected areas and sustainable coastal livelihoods	CANARI	MPA managers and management partners	Training programmes such as UNEP's MPA Training of Trainers course
Graphic and interactive case study on Negril	CANARI	Coastal community residents	Seminars, community events
		Organisations providing technical assistance to MPA and coastal community management	
		Community development organisations and agencies	
Policy brief on MPAs and sustainable coastal livelihoods	CANARI	Policy makers, senior technocrats, coastal area managers	Hand distribution at conferences and meetings; via Internet through professional networks such as CaMPAM
Case studies, guidelines and other written materials on MPAs and livelihoods	MRAG, CANARI, CCA, CERMES, others	Coastal area managers, planners, researchers, and management consultants; trainers and educators University faculty	Website dissemination (CANARI webpage on MPAs and coastal communities, MRAG, CCA, and CERMES)
		Graduate students (reference material)	Face-to-face meetings (lectures/workshops/focus group meetings)
		Managers of training institutions, coastal resource users, tourism and government representatives, NGOs, coastal and fisheries management authorities, CBOs	

Product	Available From <sup>1</sup>	Target audiences	Recommended uptake pathways
2-page briefing paper (delivered in two parts)	CANARI	Policy-makers, chief technical officers in public sector agencies, private corporations, journalists, NGOs, community members	Hard copy distribution to target groups. Can be distributed both at point of meeting or sent in advance
Diagram on role of public sector in CZM	CANARI	Policy-makers, chief technical officers in public sector agencies	Hard copy distribution to target groups, preferably at point of meeting and especially during presentation when additional explanation could be given
PowerPoint presentation on the linkage between coastal resources management, coastal livelihoods and the role of public sector agencies	CANARI	Chief technical officers in public sector agencies	Group meeting of chief technical officers from various agencies
Guidelines for coastal resource co-management publication Coastal co-management case studies (Barbados,	Hard copies and CD-ROM from CCA and CERMES	University faculty Graduate students (reference material) Librarians Managers of training institutions, coastal	Face-to-face meetings (lectures/workshops/focus group meetings) Email and e-groups such as COMARE Net Field visits
Belize, Grenada) Co-management power point slide presentation and hand out Video case study on Mankote Mangrove, St. Lucia	Downloadable from CCA and CERMES websites CANARI	resource users, tourism and government representatives, NGOs, coastal and fisheries management authorities, CBOs	Website dissemination (CCA, CERMES and MRAG)
Summary of lessons learnt from case studies	Downloadable from CCA and CERMES websites	University faculty Graduate students (reference material)	Face-to-face meetings (lectures/workshops/focus group meetings)
Co-management guidelines lecture notes	Downloadable from CCA and CERMES websites	Managers of training institutions, coastal resource users, tourism and government representatives, NGOs, coastal and fisheries management authorities, CBOs	Website dissemination (CCA, CERMES and MRAG) Internet (COMARE Net)

Product	Available From <sup>1</sup>	Target audiences	Recommended uptake pathways
PowerPoint presentation "Linking coastal management, sustainable livelihoods and poverty reduction: a research agenda for the Caribbean" adapted to suit the needs and interests of the specific target audience	CANARI	Civil society "brokers" and change agents, funding agencies, management agencies, and private sector companies, currently or potentially involved in research	Presentation at specially arranged meetings or at relevant workshops and seminars which are of a size that facilitates interactive discussion
Policy brief on "Linking coastal management, sustainable livelihoods and poverty reduction: a research agenda for the Caribbean"	CANARI	Researchers, research institutions, funding agencies, management agencies and private sector companies currently or potentially involved in research	Hand distribution at workshops, seminars and presentations at academic meetings, preferably in conjunction with the PowerPoint presentation (see above)
Poster on "Linking coastal management, sustainable livelihoods and poverty reduction: a research agenda for the Caribbean"	CANARI	Civil society "brokers" and change agents, researchers, research institutions, funding agencies, private sector companies, and management agencies currently or potentially involved in research	Hand distribution to agencies and organisations where display of poster will provide cost-effective access to multiple target audiences

<sup>&</sup>lt;sup>1</sup> **CANARI**: Caribbean Natural Resources Institute, Administration Building, Eastern Main Road, Laventille, TRINIDAD, W.I. Email: <u>info@canari.org</u>; Tel: 868 626 6062; Fax: 868 626 1788; Website: www.canari.org

**CCA**: Caribbean Conservation Association, 'Chelford', The Garrison, St. Michael, BARBADOS, W.I. Email : admin @ccanet.net ; Tel : 246 426 5373 ; Fax : 246 429 8483 ; Website: www.ccanet.net

**CERMES:** Centre for Resource Management and Environmental Studies, University of the West Indies, Cave Hill Campus, St Michael, BARBADOS, W. I. Email: <u>cermes@uwichill.uwi.edu.bb</u>, Tel: 246 417-4317; Fax: 246 424-4204; Website: http://www.cavehill.uwi.edu/cermes/

**MRAG:** Marine Resources Assessment Group, 18 Queen Street, London, W1J 5PN, UNITED KINGDOM. Email: <u>enquiry@mraj.co.uk</u>; Tel: +44 (0) 20 7255 7755; Fax: +44 (0) 20 7499 5388; Website: http://p15166578.pureserver.info/MRAG/Home.htm

## Appendix III: Sample needs assessment survey instrument

#### Questions about level of knowledge: awareness and understanding

- 1a. For resource managers: How is your agency/organisation involved in coastal management?
- 1b. For resource users: What activities do you/your group/organisation/company carry out in the coastal zone?
- 2. What does integrated coastal zone management mean? Why is it important to local and national development?
- 3. How can coastal management contribute to poverty reduction and improved livelihoods for local people? Are there any policies, programmes, or activities in your country/area that are making this link?
- 4. What agencies, organisations, and stakeholder groups are involved in coastal management in your country/area? What mechanisms do they use to work and communicate with one another?
- 5. What information that you now lack would help you in carrying out your work in coastal zone management?
- 6. Would you be interested in receiving materials about ...?
- 7. What does coastal co-management means to you? Could you provide examples?
- 8. How can co-management contribute to reduce poverty?

Questions about attitudes

- 1. What should coastal management aim to achieve? Do you think the policies and approaches to coastal management in your country are effective in achieving the objectives you feel are important?
- 2. What criteria should be used in deciding who should have use of and access to coastal resources? Should laws, policies, and management approaches be structured to apply those criteria?
- 3. Are there any stakeholders not currently involved in coastal zone management who you feel should be?
- 4. What do you think are the causes of coastal resource degradation? How can they best be addressed?

Questions about skills (and methods)

 Does your agency/organisation have or have access to skills in stakeholder analysis and other aspects of participatory planning and decision-making? If yes, are these skills used in carrying out responsibilities related to coastal management? If no, do you think these skills would be of value in carrying out your agency's responsibilities related to coastal management?

- 2. Has your agency/organisation been involved in the development of co-management or other types of participatory management arrangements? If so, have these arrangements been effective?
- 3. How does your agency/organisation manage its data related to coastal management? Is the information useful and accessible? Is important information lacking or unavailable to the people who need it?
- 4a. For resource users: Do you think you and others using the same resources are using them sustainably? If so, why do you think so and what practices are you using to make your use sustainable? If not, do you know how you or others might improve those practices?
- 4b. For resource managers: Are the resources you are managing being used sustainably? If not, what changes might be needed in practices, policies, or management interventions to achieve sustainable use?

Preferences regarding communication media and pathways

Resource managers and national public officials

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

3 1 2 4 5 Informal face to face meeting Field Visits Staff exchanges Training workshop Cultural media (popular theatre) Seminars and conferences Exhibitions Written case studies Guidelines docs Visual presentations Radio shows Newspapers Books/scholarly papers Brochures Policy briefs Educational materials Internet

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

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

Resource users

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

5

1 2 3 4 Informal face to face meeting Field Visits Cultural media (popular theatre) Exhibitions Written case studies Guidelines docs Visual presentations Radio shows Newspapers Books/scholarly papers Brochures Educational materials Internet

5.Is there any other method that you would like but we neglected to mention here? Please list:

Trainers of managers

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

1 2 3 4 5

Informal face to face meeting

Field Visits

Cultural media (popular theatre)

Exhibitions

Written case studies

Guidelines docs

Visual presentations

Radio shows

Newspapers

Books/scholarly papers

Brochures

Educational materials

Internet

Demonstrations

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

Please list:

More questions could be added to assess levels of awareness and understanding of specific issues and/or concepts.