



*DFID Natural Resources Systems Programme*

**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  
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## ACRONYMS

ACLSNP	Admiral Cockburn Land and Sea National Park
CANARI	Caribbean Natural Resources Institute
CCA	Caribbean Conservation Association
CNP	Cabrits National Park (Dominica)
CSNP	Chalk Sound National Park (TCI)
DFID	UK Department for International Development
GCFI	Gulf and Caribbean Fisheries Institute
GRMR	Glover's Reef Marine Reserve (Belize)
HCMR	Hol Chan Marine Reserve (Belize)
ICAM	Integrated Coastal Area Management
ICZM	Integrated Coastal Zone Management
ISRS	International Society for Reef Studies
LBS	Land Based Sources
LAMA	Local Area Management Authority
MBMP	Montego Bay Marine Park (Jamaica)
MMA	Marine Management Area
MPA	Marine Protected Area
MRAG	Marine Resources Assessment Group Ltd
NCRPS	Negril Coral Reef Protection Society (Jamaica)
NEPA	National Environment and Planning Agency (Jamaica)
NEPT	Negril Environmental Protection Trust (Jamaica)
NGO	Non Governmental Organisation
NMP	Negril Marine Park (Jamaica)
NRCA	Natural Resources Conservation Authority
NRM	Natural Resources Management
NRSP	Natural Resources Systems Programme
OECS	Organisation of Eastern Caribbean States
ORMP	Ocho Rios Marine Park (Jamaica)
PA	Participatory Appraisals
PALSNP	Princess Alexandra Land and Sea National Park (TCI)
SMMA	Soufriere Marine Management Association (St Lucia)
SSMR	Soufriere-Scottshead Marine Reserve (Dominica)
TCI	Turks and Caicos Islands
UNEP	United Nations Environment Programme
UWI	The University of the West Indies
WCS	Wildlife Conservation Society

## EXECUTIVE SUMMARY

### 1.1 Background

- This one-day workshop on institutional arrangements for Caribbean MPAs was held on 12<sup>th</sup> November 2002 as a concurrent session at the 55<sup>th</sup> GCFI Annual Meeting in Mexico. It was hosted by MRAG Ltd in association with UWI, CANARI and CCA.
- The workshop was a final activity within the DFID funded research project *Institutional arrangements for Caribbean MPAs and opportunities for pro-poor management* (NRSP R7976).
- The workshop was attended by 43 people, representing 16 countries and 28 agencies. They included MPA managers, fishers, policymakers, donors, NGOs and scientists.
- The objectives of the workshop were to disseminate research findings, assess relevance of findings to wider Caribbean and identify means of dissemination.

### 1.2 Research findings

- The workshop focussed on two of the research activities that were seen to be particularly relevant to identifying institutional opportunities for pro-poor MPA management. These included results of a legal and policy review and results from a study investigating the impacts of MPAs on poorer “communities”.
- Three legal typologies were identified in the legal and policy review: traditional resource conservation laws, *ad hoc* legislation relating to the creation and operation of specific MPAs, and generic regulations providing a framework for the designation of such areas whilst injecting some degree of flexibility into the management arrangements applicable to specific MPAs. Whilst the latter may be a preferred regulatory regime, it is neither sufficient, nor necessary, for achieving operational management of an MPA.
- Other factors contributing to operational management were found to include development of systems to implement specific international obligations, rationalisation and clarification of governance structures, the articulation and effective operation of area-specific policies to guide administrative action in respect of all activities impacting the protected area, availability and effective deployment of human and material resources, and meaningful community participation.
- Where it exists, poverty was identified as a factor that, at the very least, exacerbated management performance and therefore, in these cases, the issue of poverty should be relevant to MPA managers.
- Five specific areas were identified as providing opportunities to address needs of poorer user groups, thereby improving management performance and ultimately the natural resource base itself. These areas were empowering poorer communities, leading ultimately to co-management, providing new alternatives or improving access to existing ones (in particular tourism), improving fishery related livelihoods, and improving the natural environment (recreation, health and safety).
- Results from case studies suggested that, whilst there were many successful initiatives from which lessons could be learned, there was still a lot to do to address the needs of poorer groups, and improvements needed to be made in all

areas and relationships that make up MPA management, i.e., relationships between the legal, policy and funding environment, the “service delivery” organisations, community based organisations and user groups.

- Five working groups looked at possible areas for improving MPA performance. Priority was given to areas that would do so by improving impacts on poorer user groups. These included co-management and community empowerment, ICZM and legal and policy arrangements for MPAs, funding options, providing alternatives and improving existing ones, and fisher livelihoods.

### **1.3 Important themes raised during working groups and discussion**

- The term “pro-poor” was not favoured and it was felt that it would not be useful in conveying project findings and Guidelines. Indeed, the extent to which poverty reduction should be an explicit objective of MPA management was questioned. Whilst there was agreement that sustainable livelihoods were a component of sustainable management, the emphasis on poverty was not a priority.
- Designing areas as Marine Protected Areas as opposed to Integrated Coastal and Marine Management Areas may be a significant design flaw and legal constraint.
- Co-management was seen as a route to addressing needs of poorer groups but that there was a need to realise that achieving co-management was only the beginning of an ongoing process. Co-management concepts and operationalisation also require more clarity.
- Management designs for learning-by-doing, including intra-regional exchanges, are inadequate and need to be promoted more by all stakeholders.
- Legislation could have a role in all areas of MPA management, from requiring that local communities have a voice in, and benefit from, MPA management, through to the implementation of international agreements.
- Funding was considered a major issue by all, and a significant constraint to MPA sustainability. New and innovative approaches to “selling the MPA product” were required.
- Tourism was thought to have substantial potential to provide alternatives and therefore compensate for loss of access to traditional resources. To do this, creative financing and capacity building were crucial. Sustainable livelihoods should switch from emphasis on single alternatives to suites of alternatives by building skills/capacities at the household level that encourage adaptation and flexibility to pursue several economic opportunities
- The main identified route to helping fishers was involving them at all stages. There was a need for improved communication, and for an understanding that fishers had the ability to solve their own problems if they were given the opportunity to do so.
- The Caribbean cannot sustain current overlaps and duplications in work of both external and internal agencies working with MPAs due to limited capacity in region.
- The project Guidelines should be developed collaboratively bringing in the experiences of the wide range of participants at the workshop.

## 2 SESSION 1: INTRODUCTION, OVERVIEW AND SETTING THE SCENE

### 2.1 Background

MPAs are seen as a prominent means of addressing coastal resource management in the Caribbean. Studies on the impacts of MPAs (which have tended to focus on ecological changes, particularly on abundance and size of fishes) have usually shown them to be positive for biodiversity (Dixon *et al.*, 1993) and fisheries management (Roberts and Polunin, 1993; Wantiez *et al.*, 1997). Amongst advocates of MPAs there has been a tendency to extol their potential value in socio-economic terms. In reality, the establishment of protected areas often generates deep resentment in communities that find themselves excluded from resources to which they have traditionally had access, undermining the viability of those protected areas (Horrell *et al.*, 1996). Over the last ten years, management of MPAs has evolved from being a preservation tool to integrating considerations of development, sustainable use of resources and stakeholder participation (Meffe *et al.*, 1997). With this focus, it is believed that they can play a key role in conserving natural ecosystems and contribute substantially to sustainable development (IUCN, 1997).

The purpose of the research project *Institutional arrangements for Caribbean MPAs and opportunities for pro-poor management* has been to identify current institutional constraints to, and development options for, successfully implementing MPAs in a way that leads to a sustained improvement in the livelihoods of poor people in the Caribbean. A key premise of this work is that successful implementation and beneficial stakeholder outcomes, including outcomes for the poor, are inextricably linked and priority has been given to understanding the dynamic relationship between processes and outcomes. Particular attention has been paid to systems that include community participation in decision-making to see what benefits this brings to the poorer groups and to understand the structures and processes needed to achieve it.

An initial review of institutional and ecosystem characteristics of 80 MPAs in the Central and Antillean biogeographic zones of the Caribbean took place mid 2001 (Geoghegan *et al.*, 2001) and was succeeded by an analysis of operational and non-operational MPA case studies in Belize, Jamaica, Turks & Caicos Islands and Dominica to investigate factors contributing to successful and unsuccessful outcomes of MPA management. Research at the operational MPA case studies involved evaluation of the impacts of successfully implemented MPA management on poor people's livelihoods and included PA (participatory appraisal) exercises to understand poorer groups' perceptions of MPA impacts. A series of biophysical and socio-economic studies were undertaken by Masters students at the University of the West Indies (UWI) to assess the ecological and socio-economic impact of MPAs. A legal and policy review was also conducted to understand how the external policy environment influences MPA management.

The information from these analyses and consultations will inform one of the key outputs of the project "**Guidelines**" promoting pro-poor management of MPAs, to be discussed at the workshop and published following conclusion of the research.

### 2.2 Introduction

This one-day workshop on institutional arrangements for Caribbean MPAs commenced with round-table introductions from participants and was officially opened with a prayer from Deacon Peter Espeut.

The workshop was hosted by MRAG Ltd in association with UWI, CANARI, and CCA at the 55<sup>th</sup> Annual Meeting of the Gulf and Caribbean Fisheries Institute (GCFI). The opening session introduced the day's schedule (see Annexe 2), workshop objectives and the research project *Institutional arrangements for Caribbean MPAs and opportunities for pro-poor management*. The workshop is a key activity of this 18-month research project (#R7976) that has been funded by the Natural Resources Systems Programme (NRSP) of the United Kingdom Department for International Development (DFID). The workshop was attended by 43 participants (see Annexe 2), the number being limited due to the nature of working group discussions and room space. The workshop was organised into four key sessions, as outlined below.

1. Introduction, overview and setting the scene
2. Identifying relevance of poverty to MPA management
3. Identifying pro-poor opportunities
4. Guidelines for pro-poor management

### **2.3 Workshop objectives**

The three specific workshop objectives (highlighted below) were explored in detail by Nicole Esteban during the opening presentation of the workshop (see annotated presentation in Annexe 3).

1. To disseminate research findings from the case study MPAs;
2. Verify that the research findings (in terms of what would enable "pro-poor" management of MPAs) are as complete and relevant as possible (through sharing of experience and checking that issues raised by our research are relevant to the wider Caribbean); and
3. Identify or verify that the means of dissemination and type of Guidelines are relevant and accessible.

### **2.4 Summary of MPA symposium at 54<sup>th</sup> GCFI and other CCA programmes**

Patrick McConney presented an overview of the recommendations arising from the special MPA workshop on human connectivity at the 54<sup>th</sup> GCFI meeting. The summary of his presentation is attached in Annexe 4. Many of the issues and recommendations raised during the MPA symposium in 2001 have been investigated during the current project (see Section 2.5) and findings of current research reflect conclusions of the human connectivity workshop. Specific linkages include learning from experiences of others, integration of community participation and inclusivity, potential of co-management, legal frameworks for leverage and learning by doing. Caroline Garaway reported on how certain MPAs have addressed some of the issues raised by Patrick with specific problems and constraints during Session 2 (see Section 3.1).

Patrick also outlined current CCA and UWI projects relevant to MPA management (Annexe 4).

### **2.5 Project overview**

Nicole Esteban presented an overview of project activities and progress in order to set the scene for the workshop activities. Participants were referred to handouts including the project summary and Briefs 1 and 2 (Cowan *et al.*, 2001a; 2001b). The presentation focused on project stages (summarised below) with key points highlighted from the characterisation review (Geoghegan *et al.*, 2001) and details about the selection of case study MPAs.

1. Characterisation of Caribbean MPAs – including biogeographic, legal, institutional, management and socio-economic characteristics<sup>1</sup>;
2. What leads to implementation of *operational*<sup>2</sup> MPAs – improved understanding of enabling/constraining factors leading to implementation of *operational* MPAs<sup>3</sup>;
3. What are the impacts of *operational* MPAs on poor people's livelihoods – increased understanding of impacts of *operational* MPAs and structures or processes leading to beneficial/harmful outcomes<sup>4</sup>; and
4. Guidelines for pro-poor methodology for MPA management<sup>5</sup>.

Case studies were selected in July 2001 following completion of the first phase of the project: the characterisation of Caribbean MPAs. Reasons for selection and details of research are described in Annexe 5. Case studies were selected in five countries (see below).

<b>MPA case studies</b>	
<i>Belize</i>	Hol Chan Marine Reserve (HCMR) Glover's Reef Marine Reserve (GRMR)
<i>Dominica</i>	Cabrits National Park (CNP) Soufriere-Scottshead Marine Reserve (SSMR)
<i>Jamaica</i>	Montego Bay Marine Park (MBMP) Negril Marine Park (NMP) Ocho Rios Marine Park (ORMP)
<i>St Lucia</i>	Soufriere Marine Management Association (SMMA)
<i>Turks and Caicos Islands</i>	Princess Alexandra Land & Sea National Park (PALSNP) Admiral Cockburn Land & Sea National Park (ACLSNP) Chalk Sound National Park (CSNP)

Discussion points raised following the presentation are summarised in Section 2.8. Corrections based on discussion are shown in the annotated presentation included in Annexe 5.

## 2.6 MPAs: legal and policy framework

An important contribution to this research has been a review of Caribbean legal and policy frameworks with inclusion of international and regional legislation and policy, together with national and local legislative and policy arrangements for the MPA case studies (Anderson, 2002). This work aims to improve the understanding of

<sup>1</sup> Completed in July 2001 with publication of the Characterisation of Caribbean Marine Protected Areas: an analysis of ecological, organisational and socio-economic factors (Geoghegan et al., 2001) and case study selection for further research.

<sup>2</sup> Based on the categorisation of four management types: none, low, medium and high (Geoghegan et al., 2001), we grouped no/low management MPAs as *Non-operational* and medium/high management MPAs as *Operational*.

<sup>3</sup> Completed in November 2002 and included the review of legal and policy frameworks (Anderson, 2002; Best, 2002; Richards, 2002) presented in Section 2.6 and summarised in Annexe 6.

<sup>4</sup> Completed in November 2002 and included assessment of impacts of MPAs on livelihoods (Francis, 2002), assessment of ecological impacts (Cummings, 2002; O'Sullivan, 2002) and investigation of impacts on poor people's livelihoods presented in Section 3 and summarised in Annexe 7 (Garaway and Esteban, 2002).

<sup>5</sup> The focus of Session 4 of this workshop and future activity.

enabling/constraining factors leading to implementation of *operational* MPAs. As outlined in Section 2.5, this work commenced with two UWI M.Sc. theses focusing on research at the MPA case studies in Belize and Jamaica (Richards, 2002) and Dominica and Turks and Caicos (Best, 2002). Findings from this research were then taken up and supplemented in a review of legal and policy frameworks for MPAs in the Caribbean by Dr Winston Anderson who presented this review, highlighting:

- Emergence and development of legal and policy frameworks
- Regulatory typologies
- Typologies and functionality
- Legal and policy frameworks - conclusion

Dr Anderson's report is currently in final draft form, to be finalised and posted on the MRAG web site by the end of January 2002. A summary of his paper is presented in Annexe 6.

## 2.7 Discussion about legal and policy review

The principal issue brought up during discussions following the presentation of the legal and policy frameworks was whether an area should always be designed as an integrated coastal and marine Protected Area rather than simply a Marine Protected Area. Other issues raised in the discussions can be grouped around the five variables identified in the presentation as having an important influence on the long-term success of MPA's. These are presented below and described in Section 12.1.2 of the summary paper.

- Development of systems to implement specific international obligations;
- Rationalisation and clarification of governance structures;
- The articulation and effective operation of area-specific policies to guide administrative action in respect of all activities impacting the protected area;
- Availability and effective deployment of human and material resources; and
- Meaningful community participation.

### 2.7.1 *Should MPA's be designed as integrated Coastal and Marine Protected Areas?*

- Can an MPA be said to fail by design? E.g., MBMR is urban but the MPA can have no influence on land-based pollution. Is there therefore a flaw in the concept of an MPA due to it being a *Marine* Protected Area that doesn't include any watershed area and only has influence on the sea? The case of Portland Bight was brought up as, in contrast to MBMR, this has been designed as a Protected Area, not an MPA, in order to address this design flaw. This means that the PA is able to address problems caused by land-based sources of pollution (99% of marine pollution due to land-based sources (LBS).
- This sentiment was picked up again when it was indicated that MPA management should not be restricted to the MPA alone and that there should be links with terrestrial management. An example quoted was NEPA where there were links between NEPT and NCRPS (two NGOs), the first managing the terrestrial area and the latter managing the marine area. This ensures that watershed issues and land-based sources of pollution will be considered. The point was also made that it makes no sense declaring PAs at all in areas that are badly degraded with an emphasis on continuing or expanding unsuitable activities. E.g. poorly designed mass tourism.

- The learning points from the early days of management of the SMMA in St Lucia were discussed. Here they had realised that it was important to incorporate management of terrestrial areas. This was recognised in further changes to design (from Authority to Association) and it was therefore thought that the SMMA was likely to succeed by design.
- At PALSNP in TCI, the design flaw is extremely apparent as the Park's boundary ends at the vegetation line near the High Water Level. The management authority has no say in development of hinterland. The problem is that the MPA was established 15 years ago when there was no political will to control land development. There is possibly political will to change the regulations now through work with the Planning Authority. As seen through this example, institutional linkage is important to provide the MPA management powers to influence development.
- In Trinidad and Tobago, the Marine Act covers the only legally established MPA in Tobago, Buccoo Reef Marine Park (est. 1973). This MPA has had a management plan since 1993 and its consistent (and increasing) problem has been with private effluents as major entrepreneurs have developed hotels. One possible design flaw is that MPAs should have use descriptions (planning guidelines) when they are established. In this case, this would have controlled construction of hotels around the MPA.
- The Ridge to Reef concept of area management was also raised as it is important to the operation of MPAs. However, the issue of land ownership was pertinent to this concept as it is often impossible to extend a protected area due to existing rights and use of privately owned land. One example where this has been addressed is in Grenada where the Planning Authority has delegated different development zones to limit land use, a common practice in the Caribbean. This also restricts construction.
- Legislation that attempts to address this suggested design flaw in MPAs includes the Coastal Zone Management Act (seen in Barbados and Belize). Also in Belize, threats outside the boundaries of MPAs were recognised early on so that they introduced a national ICZM programme to address these issues. It was also commented that even when MPAs are offshore (e.g., GRMR) they are affected by land based sources of pollution, e.g., GRMR is 35 miles offshore but plumes from the Rivers in Honduras can still be seen there.

### ***2.7.2 Development of systems to implement specific international obligations***

- Trans-boundary issues are considered important and the legal frameworks for the wider Caribbean should be considered, in particular the Cartagena Convention. This legislation recognises that, by nature of design, the watershed must be included in an MPA. UNEP has developed guidelines for designing and establishing MPAs that call for recognition of watershed issues. It was also believed that the regional conventions give sufficient guidance for appropriate legislation, and that not many MPAs had established a response to international treaties. There is scope for such improvement since legislation for MPAs is already in place.

### **2.7.3 Rationalisation and clarification of governance structures**

- The NRCA regulation (Jamaica) addresses the suggested design flaw in Jamaica and, whilst not so facilitative as the NRCA regulations, the National Parks Act in Jamaica doesn't preclude MPAs from obtaining delegation for their management.
- Another problem, specific to NGO management is that they have problems taking government to court. This was cited as being a problem in St Eustatius. This also applies to OECS countries although the NRCA Act in Jamaica does bind the Crown.
- The Dominican MPA, CNP was categorised as having no management by CANARI. However, it was felt that this didn't do justice to the management of its terrestrial sectors. Findings of research (Best, 2002) have shown that the marine portion has not been managed at all and there is also a disagreement between institutions about who should be managing it. Here then is a case where the marine environment has been linked with the terrestrial environment, creating the possibility of an integrated protected area, but in this case marine management has not materialised.
- Articulation and effective operation of area-specific policies to guide administrative actions
- The provision of a legal structure can provide a strong entity BUT people factors affect the way that it is used. It is therefore not always a problem of law but a human dimension issue. An example is Anguilla, where the original aim of establishing MPAs was to provide revenue-generating activities. Over the years, management plans have been put into place and there has been a change in focus towards conservation. This has initiated a legal framework that has since been put into place.

### **2.7.4 Availability and effective deployment of human and material resources**

- At the Dominican MPA, SSMR, there isn't a full time manager and the LAMA is supposed to have full representation. The composition of this body can determine the management level of the MPA. The question of who is on the LAMA, and their individual roles, will naturally and necessarily affect both the relationships between members and the effectiveness of actions of the LAMA.

### **2.7.5 Issues of stakeholder participation**

- The Dominican MPA, SSMR was thought to have potential to have high management by design. However, the management of the MPA was characterised as low in Geoghegan *et al.*, 2001 and the question of representation of stakeholders needs to be addressed within the Local Area Management Authority (LAMA) to achieve high management.
- Public awareness is also crucial to stakeholder participation so that stakeholders can understand the reasons for establishment of the MPA. In this way, they will not see the MPA solely as a tool to restrict their activities.
- As co-management is a clear contributor to MPA management, enabling legislation for co-management was discussed. It was found that there is inclusion

of co-management in legislation of OECS countries but that it should be incorporated in legislation of others.

## 2.8 Summary of session

Issues raised during discussions at various stages of this session (with the exception of the legal discussion reported above) are captured under three main headings:

- Extent to which poverty reduction, or addressing poverty, should be an explicit objective of MPA managers;
- Key terms; and
- Where this work has fitted in with previous work

### 2.8.1 *Extent to which poverty reduction, or addressing poverty, should be an explicit objective of MPA managers*

- The opening presentation finished on what is a key focus of the research project: ***'How might MPAs be managed successfully to address poverty in the Caribbean?'*** (Slide 4 in Annexe 3). This stimulated much discussion amongst participants.
- It was felt by some that there was a need to rephrase the question of how MPAs might be managed successfully to address poverty in the Caribbean. Some felt that poverty was not, and should not be, an objective of MPA management and so the achievements of MPA management should not be measured against how well they address poverty. Instead the question should be rephrased, e.g., *How can reducing poverty address or improve management?* However, other participants felt that addressing poverty would be an important part of an MPAs operation since it involved *sustainability* of MPA management in the long-term, the example being quoted was Portland Bight in Jamaica.

### 2.8.2 *Key terms*

#### **Definition of pro-poor?**

- A pro-poor approach should be one that explicitly addresses the needs of the poorer groups in a community.

#### **Successful management**

- Management that is in place and up and running in the manner in which it was designed. Success, as described here, is therefore meant in terms of the operationality of an MPA and is therefore not referring, in any way, to an evaluation of the OUTCOMES of management. Different degrees of operational success were identified by Geoghegan *et al.* (2001) based on the presence or absence of the following:
  - Management is by objectives;
  - Presence of management plan or operational plan;
  - Human and other resources available;
  - Levels of awareness of; and
  - Adherence to management rules.

### **2.8.3 *Where this work has fitted in with previous research***

Participants were concerned that this project was a repeat work of previous people. The focus of the current research on impacts of MPAs on poorer community groups had not been subject to research in the Caribbean. The research was also building on key recommendations of the 54<sup>th</sup> GCFI MPA symposium, in particular integration of community participation and inclusivity, looking at the potential of co-management and legal frameworks for leverage.

### **3 SESSION 2: IDENTIFYING RELEVANCE OF POVERTY TO MPA MANAGEMENT**

This session was facilitated by Dr Caroline Garaway and commenced with a detailed presentation identifying the relevance of poverty to MPA management. This presentation drew from elements of project research that had focused on impacts of MPAs on poorer stakeholders in, and adjacent to, four MPAs: Princess Alexandra Land and Sea National Park (PALSNP) in Turks and Caicos Islands (TCI), Negril Marine Park (NMP) in Jamaica, Hol Chan Marine Reserve (HCMR) and Glover's Reef Marine Reserve (GRMR) in Belize.

#### **3.1 Opportunities and constraints for successfully implementing 'pro-poor' MPAs**

A fully annotated copy of the presentation is presented in Annexe 7. Here, only a short description of the objectives of the talk, and some of the key themes within it are given.

The objective of the talk was to investigate some of the opportunities and constraints for successfully implementing 'pro-poor' MPAs. (i.e. MPAs that benefited, or at the very least did not negatively impact, on poorer communities living in or adjacent to, Marine Protected Areas). By highlighting some of the key findings of research conducted at four MPA case study sites by the MRAG Ltd research team, and presenting them as a series of ideas and issues, it was hoped that the presentation would stimulate thought, generate discussion and so set the scene for the rest of the day's activities.

The talk was split into five sections

- Why was it necessary to be pro-poor?
- Identifying the 'poor' and how they could be beneficiaries (or otherwise)
- Results from experience (the 4 case studies)
- Linking the impact of MPA management on poorer groups and MPA performance
- Summarising key opportunities and constraints

After the presentation there was an open floor discussion on points it had raised. Please see Annexe 7 for details (incorporating comments and corrections from the discussion) and results of the bulleted points above.

#### **3.2 Summary of Session 2**

The issues identified during research, and conclusions outlined in Caroline's presentation above, generated much discussion regarding the MPA case studies, and other examples from the wider Caribbean. The discussions also addressed the question of whether the issues raised during research were appropriate to the wider Caribbean. It was generally agreed that they were based on knowledge of other MPAs, both within the Caribbean and further afield. Discussion points can be grouped into four areas:

- Recognition of poorer communities' lack of interest in MPAs;
- Issues raised with respect to addressing poverty within MPA management;
- Need for less research; and
- Funding

### **3.2.1 Recognition of poorer communities' lack of interest in MPAs**

- It was felt that one dimension to the problem not covered in the presentation was the extent to which poorer groups perceived there was a need for MPA's or that they should be a priority. An example given was a project in Indonesia where an existing MPA was brought under active management with stakeholder participation and alternative livelihoods. However, the community was discontented – they had no education or medical facilities and strongly felt that there shouldn't be a concerted effort for conservation until these basic facilities were in place.
- Another problem identified in Tobago was that users perceive that the Speyside Area (a second MPA in Tobago) is being established for the rich and therefore it has been necessary to work with them (through a Public Awareness Programme) so that they find out why it is being established.
- Back to the flaw in design, the term MPA elicits emotions due to the word *Protection*. Surely *Management*, as in MMA would create a more realistic impression of the objectives of a lot of Parks. There is also a design flaw in the creation of an MPA without mechanisms for funding.

### **3.2.2 Issues raised with respect to addressing poverty within MPA management**

- To what extent should MPAs address poverty? If sustainability is the objective, then it was felt that management should state that sustainable *livelihoods* were a central goal, and therefore poverty would be an objective in order to promote sustainability. If the MPA were a no-take reserve, then it would naturally not be an objective.
- Some participants felt that it was asking too much for MPAs to eradicate poverty but it was emphasised that it was poverty alleviation, not eradication that was being discussed. Another important point was that what was being discussed was *local* poverty reduction as opposed to poverty alleviation in the national context.

### **3.2.3 Need for less research**

- A point made by one participant was that there is a need for less research and more action. The example quoted was that of the Tourism Board in Belize, where there has been five studies but they have focused on similar issues and have not led to any change. What is needed is to get money to the people who need it rather than doing studies. Also, noted by the same participant, it seemed that most people helped by the MPAs are not the poorest.

### **3.2.4 Funding**

- As a link between poverty and funding, and in agreement with the fact that MPAs cannot, or do not, focus on poverty, was the reminder that most MPAs do not have funds for their own problems, and so could hardly alleviate others. Some participants also felt that funding was an important area for discussion so it was introduced as an additional area for working group discussions in Session 3.

- The lack of funding creates a need for innovative ideas and to create partnerships with other sectors. Of course, investors have a vested interest in the reef, and MPA managers should figure out how to bring them on board as they would be long-term investors. In Tobago, they have recognised 21 people as dive operators and have requested them to give a % of their income, but they are mostly unwilling due to the fact that 70-80% are foreign-owned and have no concern for local needs. Therefore there is need for a legal recognition of Park financing.
- User fees were important as a lot of MPAs spend most of their time trying to “survive” rather than achieving management objectives and need to forge legal links to have funding. In Tobago, there is nothing in the law for user fees, so the MPA needs an annual government allocation of funds.
- A successful example of sustainable funding is SMMA in St Lucia, which is essentially self-financing with statutory Articles of Association that allow revenue generation. In SSMR in Dominica, there are regulations in place and the LAMA has the right to charge user fees.

#### 4 SESSION 3: OPPORTUNITIES AND CONSTRAINTS FOR PRO-POOR MANAGEMENT OF MPAS

The afternoon commenced with a session focussing on opportunities and constraints for pro-poor management of MPAs. Based on questionnaires completed by participants, the group divided into working groups to discuss five priority issues raised during research and in discussions during the morning:

- Co-management and community empowerment
- ICZM, legal and policy arrangements for MPAs
- Funding options
- Providing alternatives and improving existing ones
- Fisher livelihoods

The working groups were asked to consider opportunities and constraints in all of these areas for pro-poor management of MPAs. Discussions of each working group were then reported back at a plenary session that took place at the end of Session 3 and the beginning of Session 4. Many of the issues raised in the morning's presentations were documented in examples given by different Working Groups.

##### 4.1 Co-management and community empowerment

This group focused on the potential of co-management and community empowerment to provide a means for MPAs to improve impacts on the poor. Tara Goetze reported for the group.

<p><b>Co-management &amp; community empowerment</b></p> <p><b>Opportunities:</b></p> <ol style="list-style-type: none"> <li>1. Funding</li> <li>2. Regional declarations &amp; policies to support co-management</li> <li>3. Wider acceptance of co-management approach</li> <li>4. Exchanges between users</li> <li>5. Learning by doing!!</li> </ol> <p><b>Constraints:</b></p> <ol style="list-style-type: none"> <li>1. Need for continuous animation</li> <li>2. Limited info re "poverty types"</li> <li>3. Co-management is an "active noun" (perspectives → design)</li> <li>4. Cost-benefits approach <ul style="list-style-type: none"> <li>• → Benefits need to be <u>greater</u></li> </ul> </li> <li>5. Donor focus on conservation that ↑ poverty</li> </ol>
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- A major opportunity is that co-management is a focus of international donors and so may attract funding.
- Regional declarations and policies also support co-management and there is a developing and wider acceptance of the approach.
- Exchanges between users would broaden understanding and provide examples of positive co-management approaches.
- It was felt that there has been a lot of research and a need to recognise research and translate it into action. The group took the view that co-management is for the benefit of humanity (as opposed to ecology) so that it necessarily addresses poverty.
- Constraints included the need to sustain continuous animation and dialogue with a changing user group.
- The term co-management is an active noun and there was a need to change the perception that achieving co-management was an end in itself when, in fact, it was only the beginning of a continuous process.

- A cost-benefits approach is vital to try to ensure that the benefits of actions are greater than in-action.

- Finally, donors' focus on conservation sometimes ignores the human angle, which can have negative consequences for attempts at poverty reduction.

#### 4.2 ICZM and legal and policy arrangements for MPAs

This working group focused on opportunities and constraints for ICZM and legal and policy arrangements for MPAs. Emphasis was placed on alternative livelihoods, community awareness, inter-sectoral coordination, ICAM and international agreements. Opportunities and constraints are highlighted in the box with discussion around various points detailed below. Leah Bunce reported for the group.

##### **ICZM, legal & policy arrangements for MPAs**

###### **Opportunities:**

1. Provide alternative livelihoods & income opportunities in legislation
2. Ensure community awareness from the beginning which will lead to support & involvement/participation
3. Establish interagency/inter-sectoral coordination
  - As part of legislation & organisational structure
  - Include organisations with connections to poorer communities
  - Include private sector, e.g. tourism & fisheries
4. Establish principles of ICAM into MPA design (e.g., watershed issues)
5. Establish ties to international agreements (e.g., fishing agreements with neighbours)

###### **Constraints:**

1. Too much power in the executive with respect to decision-making (centralisation)
2. Lack of monitoring and evaluation of project implementation & benefits; failure to spend time to assess community needs
3. Lack of technical expertise
  - Legislative drafting
4. Lack of harmonisation of legislation at present, increasing turf wars among different agencies
5. Failure to link funding to legislation (e.g., for enforcement)

- Provision of alternative livelihoods and income opportunities (and compensation) should be a legal requirement.
- Inter-agency and sectoral coordination was vital within legislation and including organisations connected to poorer groups and the private sector.
- MPAs should also look at international agreements to facilitate management.
- Constraints included the fact that there was often too much power in the executive.
- A lack of monitoring and evaluation of socio-economic impacts was seen through a failure to spend time to assess community needs.
- A call was made for technical assistance through legislative drafting, although it was later argued that legislative drafting had been carried out but that previous examples of legislative drafting in the Caribbean hadn't been taken up or adapted successfully. The problem wasn't drafting but a lack of instruction, i.e., what the legislation is required for. However, regional drafting of legislation by OECS had proved useful, and the legislation had been applied in different states (e.g., St Lucia, St Vincent and

Grenadines). Examples of this include the drafting of toxic chemical and hazardous waste legislation. Another case is that in Belize, where an

organisation has been helping with drafting of legislation. The conclusion was that this area needed to be developed with advisors, consultants and guidelines.

- The lack of harmonisation of legislation caused inter-sectoral problems and lack of cohesive action among different agencies.

Finally, as seen in examples in the morning, there was a failure to link funding of MPAs to legislation (i.e. to provide for funding of MPAs at time of legislation).

### 4.3 Funding options

Opportunities and constraints for funding of MPAs were subject to discussion and a variety of examples given for innovative funding options. These were reported upon by Hazel Oxenford.

- It was felt that there were good examples of investments by and partnerships with the private sector and MPAs, but that they had not been widely used.
- Lots of organisations were not plugging into international funding and could make use of partnerships to access funds.
- SMMA was a good example of an MPA that had used in-kind contributions through research assistance from universities to achieve their management programme. Research fees could also be charged. There are other examples where MPAs have run volunteer programmes very successfully to minimise the cost of running the park (e.g., St Eustatius).

#### **\$ FUNDING OPTIONS \$**

##### ***Opportunities:***

1. Private sector
  - Investments & partnerships
2. International funding/partnerships
3. In kind contributions
  - Research assistance
  - Equipment
  - Volunteers
4. Endowment / trust funds
5. User fees
6. Sales
7. Budgetary investment in marine environment

##### ***Constraints:***

1. Credibility & capability of management
  - Fund-raising skills
  - Autonomy
  - Transparency
  - Corporate image / business plan / marketing
2. Political will
  - Creation of an enabling environment
3. Lack of revenue generation
4. Conflict of interest – arbitration
5. Information flow

- Donations of gear and equipment could also be sought on an individual basis.
- Endowment or Trust funds could be used to avoid paying taxes (e.g., if registered in the US). These could be used to provide grants for small initiatives.
- User fees were also not used to the extent that they could be (e.g., Bonaire, SMMA, HCMR).
- Sales by the MPA (through a shop or indirectly through dive shops) were an additional underused means of acquiring funding, e.g., Videos, postcards, raffle tickets.
- Good examples of using funding to benefit stakeholders had been in Belize (Friends of Nature) where a proportion of user fees had been paid directly into scholarship funds to provide educational scholarships for talented children from poorer communities previously restricted due to costs. Trust funds could also provide grants for small initiatives.
- Another example was a conservation tax, such as in Turks & Caicos, where 1% of accommodation tax for hotels and villas went towards a conservation fund. This represents a budgetary investment in the marine environment.

- The largest constraint to funding opportunities was the credibility of the Manager and the capability of management in terms of fund-raising skills, autonomy, transparency and external image of the MPA. Autonomy is an important factor affecting which funds were accessible and which donors were prepared to offer funding.
- It was important to present the MPA as an asset or investment as opposed to a philanthropic act. Changes in terms of presentation would often help revenue generation.
- Conflicts of interest often constrained private sector partnerships and it was necessary to provide opportunities for addressing conflict.
- Improved information flow could provide more opportunity for funding if people were better informed – both the financiers and the MPA management seeking funding. MPAs were often not aware of opportunities and networking was essential.

#### 4.4 Providing alternatives and improving existing ones

This group focused on developing tourism capacity through provision of alternatives and improving existing ones. Jack Nightingale reported for the group.



- Firstly, capacity building required a lot of time for the process of orientation and providing appropriate training and skills. The example of Sian Ka'an Biosphere Reserve was given for training guides. It was felt that community exchange would benefit learning and inter-village communication, with free access to tourism activities allowing appreciation of scope for alternative livelihoods.
- Creative financing would be needed and the emphasis should be placed on money coming in so that it was important to get funders involved in sales. National or local festivals could be a natural way of improving sales.
- Use of natural and cultural resources through eco-tourism would provide a source of funds (e.g. higher boat fees for

tourists to visit basking sharks in southern Belize were mentioned).

- Legislation could provide provision for alternative livelihoods and refer to specific stakeholders, e.g., exclusive access for businesses, grants, physical access.
- Finally, infrastructure improvements would enable tourism development and would be likely to result in livelihood improvements such as provision of water treatment, docking facilities and roads.

A query was raised regarding the emphasis on sales as this would mean that the MPA would be competing with the private sector.

#### 4.5 Fisher livelihoods

This group discussed how to improve fisher livelihoods through MPA management and focused on positive actions. Richard Appeldoorn reported for the group.

##### **FISHER LIVELIHOODS**

1. Fishermen – bring into the process
2. Communication most important
  - Talk with fishermen, not at fishermen
  - Respect local knowledge
  - Can solve problems if given information & mandate
3. Process is key
  - Must allow communication & representation to happen in a controlled environment
  - Open process
4. Facilitate
  - Venue – convenient to fishermen, location, type
  - Compensation for travel to attend
5. Enforcement
  - Also critical to be fair
  - Must be by independent agency (not other fishermen)
6. Aim at sustainability
  - Then maybe can build in future

- The starting point was that fishers could solve problems if they have the information and mandate. It was important to respect local knowledge and to bring fishers into the process through communication, but not to expect overnight results, as long-term dialogue was necessary. Contributions by fishermen had been a key requirement of successful establishment of MPAs such as sectors of the Florida Keys Marine Sanctuary.
- The process of establishment and management of the MPA is key and this must allow communication and representation in a controlled yet transparent environment. An example of this was the Working Group of 25 stakeholders who determined goals for the establishment and management of two additional protected areas (Southern Zone (Riley's Hump, North end of Tortugas Bank) and Northern Zone) to the Florida Keys Marine Sanctuary in 2000 (reported

by Peter Gladding).

- Facilitating factors for inclusion of fishers include an appropriate venue and compensation for travel.
- Enforcement is a levelling mechanism for everyone and so regulations should be fair and enforced. Equally, enforcement capability must be independent of fisher groups who will not pass information to controlling agency.
- What should management be aimed at? Let's make our aim to maintain what we have now. Then, if this is achieved, we can then think about making improvements.
- When designing an MPA, information to fishermen is critical and so it should be disseminated in a way that is effective. Films have powerful visual impacts and were very effective for the MPA in Discovery Bay – this is also an educational process.
- When stakeholders are meeting to discuss establishment/management of an MPA, it is important to stay on a subject till everyone has agreed – this establishes trust and protects the group. The addition of the Tortugas protected areas to Florida Keys Marine Sanctuary was done in a very participatory manner with 25 people (fishers, environmental agencies, scientists, etc) and all of the

types of stakeholders were needed for it to go ahead. These stakeholders then took their plans to the State bodies to get the MPA legislated.

## 5 SESSION 4: GUIDELINES FOR PRO-POOR MANAGEMENT OF MPAS

The session commenced with a presentation of a draft Table of Contents (ToC) for the Guidelines for pro-poor management. These Guidelines are the final output of this project and due for completion at the end of December. A possible suggested ToC is set out in the next Section. Workshop participants were asked to select the five priority sections that they were interested in and the total tally is shown next to each suggested section. Additional suggestions for sections are shown below (other thoughts).

### 5.1 Table of Contents for Guidelines

#### 1. Introduction

- Why be pro poor?
- Who are the poor (characteristics & identification)
- Why have a specific pro-poor strategy?
- What are major routes for improving benefits to poorer groups (13)?
- When should poverty be a priority?

#### 2. Opportunities & constraints to addressing poverty by

- Improving fisher livelihoods (18)
- Increasing access to tourism (2)
- Providing alternatives (15)
- Empowering communities (22)
- Co-management (15)

(Insights from our case studies and other Caribbean case studies)

#### 3. Methodologies

- Identifying the poor
- Accessing poorer groups (1)
- Stakeholder analysis (4)
- Working with poorer groups (2)
- Participatory decision-making (16)
- Consensus building & conflict reduction (9)

#### 4. Constraints & opportunities in other areas affecting management performance (ultimately impacting on poorer users)

- Funding (18)
- Lack of devolution (2)
- Personnel
- Linkages with other sectors (2)
- Legislation and policy surrounding MPA establishment (13)

#### Other thoughts

- Institutional analysis/capacity building - Partnerships and building alliances to take on poverty related work
- Confidence building
- Micro finance

### 5.2 Summary of Session 4

This process has facilitated the development of a prioritised ToC for the Guidelines and further work on the Guidelines will be continued after the workshop. Participants

called for Guidelines to be developed collaboratively and would like to receive draft Guidelines and be able to comment. There was also much discussion over the title of these Guidelines and, in particular, concern over usage of the term 'pro-poor', which was not recognised terminology in the Caribbean.

### **5.3 Close of workshop**

The organisers thanked the participants for their active participation and contribution of their own experiences during the workshop. These experiences were documented for inclusion as case studies within the Guidelines. The demand for collaborative development of the Guidelines was noted and organisers will seek for extension of the project so that this might be possible.

Finally, the organisers would like to acknowledge, and thank, the GCFI programme committee for their help and support in hosting the workshop as a concurrent session at the 55<sup>th</sup> GCFI meeting.

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## 7 ANNEXE 1

### 7.1 Schedule for MPA session, 55<sup>th</sup> GCFI – 12/11/02

SESSION	TIME	SUBJECT	PRESENTER
Session 1 09:00 – 11:00	8:30– 9:00	Registration	
<b>INTRODUCTION, OVERVIEW &amp; SETTING THE SCENE</b>	9:00- 9:20	Presentation: Introductions Overview of Day	Nicole Esteban
	9:25- 9:50	Presentation: Overview of 54 <sup>th</sup> GCFI session on human system connectivity Relevant CCA programmes Questions	Patrick McConney
	10:00– 10:25	Presentation: DFID project - Institutional opportunities & constraints to implementing pro-poor MPAs. An overview Questions	Nicole Esteban
	10:30– 11:00	Presentation Legal & policy frameworks impacting on MPA management Questions	Winston Anderson
Session 2 11:20 – 1:00	11:20– 12:20	Presentation Implementing a pro-poor approach to MPA management. Why & How? Questions	Caroline Garaway
<b>IDENTIFYING RELEVANCE OF POVERTY TO MPA MANAGEMENT</b>	12:00- 1:00	Discussion To what extent, and in what sense, are problems of MPAs poverty related in other cases. Participant experiences.	Plenary discussion
	Session 3 2:00 – 3:45	2:00– 3:15	Short presentation (10mins) Working groups – opportunities and constraints to identified pro-poor strategies (1 strategy per group)
<b>IDENTIFYING PRO POOR OPPORTUNITIES</b>	3:15– 3:45	Start of feedback by Working Groups	Rapporteurs from groups
	Session 4 4:00 – 5:00	4:00– 4:20	Feedback of session 3
<b>GUIDELINES FOR PRO-POOR MANAGEMENT</b>	4:20– 4:30	Presentation of possible Guidelines' Table Of Contents (TOC)	Caroline Garaway Nicole Esteban
	4:30– 5:00	Discussion Evaluation & prioritization of TOC	Plenary discussion

## 8 ANNEXE 2

### 8.1 Workshop participants and contact details<sup>6</sup>

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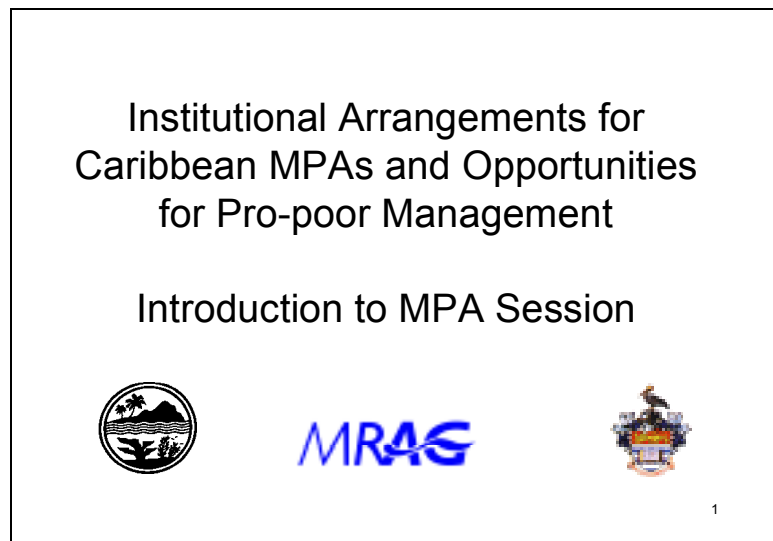
<sup>6</sup> Table sorted alphabetically by country then by first name

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## 9 ANNEXE 3

### 9.1 Presentation by Nicole Esteban: Introduction to MPA Special Session

Slide 1



Welcome to the workshop which focuses on research findings and guidelines for a DFID funded project *Institutional arrangements of Caribbean MPAs and opportunities for pro-poor management*. It is a research project through the NRSP-LWI programme of DFID. This project started in March 2001 and is due for completion at end of this year. For your information, we have included details about the project (Briefs 1 & 2) and different research, as well as a report of the 54<sup>th</sup> GCFI MPA session in the packs that we have handed to you.

- Opening Prayer by Deacon Peter Espeut.
- Round table introductions by all participants.

This research is managed by MRAG (Caroline Garaway & Nicole Esteban) in partnership with the University of the West Indies through the Natural Resources Management Programme, in particular Hazel Oxenford and also the Faculty of Law, Winston Anderson. A key collaborator is CANARI who unfortunately couldn't be here today due to other commitments. They completed the first stage of the project *Characterisation of Caribbean Marine Protected Areas: an analysis of ecological, organisational and socio-economic factors*. Further collaborators are the different MPAs in Belize, Dominica, Jamaica, St Lucia and Turks and Caicos where our research has been conducted and we are happy to have representation of many of them today.

Unfortunately we were unable to have a Spanish interpreter and we cannot speak Spanish so all presentations will be in English. We will try to put Spanish speakers in the same working group for discussion purposes. We were also very unfortunately limited by room space and had to restrict the number to a maximum of 30. We have now reached 37 and have had to close our doors so please share discussions with your colleagues. The workshop report will also be posted on the GCFI web site.

Slide 2

## Objectives of workshop

1. Share and discuss research findings
2. Explore relevance of issues to the wider Caribbean
3. Develop guidelines for pro-poor management of MPAs

2

There are three broad objectives to this workshop which comes towards the end of our research project.

Firstly, we would like to share some of our research findings and issues raised in relation to poverty with MPA managers and policymakers and this will be through presentations here, and additionally publications, notification of web sites, etc.

Secondly, we tried to have workshop participants from a wide range of Caribbean countries to verify results and are happy to have people involved in our research at the case study MPAs and from a number of MPAs in the wider Caribbean, including from Mexico, Belize, Puerto Rico, Dominican Republic, Jamaica, Bahamas, USA, Antigua, Grenada and Netherlands Antilles, as well as from regional institutions such as UNEP, CCA, NOAA, The Nature Conservancy and OECS.

The final objective of this workshop will aim to develop guidelines for pro-poor management of MPAs and we would like to discuss a Table of Contents for these Guidelines with you.

## Slide 3

Workshop Schedule		
1	9.00-11.00	Introduction, overview & setting the scene –CCA: 54 <sup>th</sup> GCFI MPA session & other initiatives –Project overview –Legal & policy framework review
2	11.20-13.00	Identifying relevance of poverty to MPA management –Implementing a pro-poor approach to MPA's – why & how
3	14.00-15.45	Identifying pro-poor opportunities –Working groups
4	16.00-17.45	Guidelines for pro-poor management –Discussion

A copy of the workshop schedule is in your information pack and the day has been divided into 4 sessions.

Session 1 is an introduction, overview and setting the scene in relation to today's workshop and our research. The next presentation by Patrick McConney concerns the Special MPA session at the 54<sup>th</sup> GCFI and other initiatives. This will be followed by a presentation about our research progress. The final presentation by Winston Anderson concerns a Legal and Policy Framework Review for Caribbean MPAs which draws on findings by two MSc students with us today, Rohan Richards and Mechelle Best.

The second session concentrates on identification of the relevance of poverty to MPA management, in particular implementing a pro-poor approach to MPAs – the why and how. This will start with a presentation by Caroline Garaway on issues raised during our own fieldwork at each case study MPA early this year, and we hope to continue with discussion of opportunities and constraints involved with addressing poverty through MPA management.

Session 3 focuses on identifying pro-poor opportunities and this will be a working group session with several subject areas for each group. We have distributed a questionnaire for you to complete and division into groups will be based on the questionnaire.

The final session aims to discuss the final project output, which is the development of guidelines for pro-poor management. We hope to present a table of contents to stimulate discussion.

## Project Overview

How might MPA's be managed  
successfully to address **POVERTY**  
in the Caribbean?

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Finally, a provoking question for discussion: a focus of our research has been to investigate how Caribbean MPAs might be managed successfully to address poverty in and adjacent to their boundaries. Many MPAs have been established as a tool for management of coastal resources and primary aims are usually ecological. Little attention has been paid to poorer sectors of the community relying on the resource base protected by the MPA – and impacts to the poor may explain some of the problems with implementation and compliance. In essence, the purpose of our research has been to identify institutional constraints to, and development options for, successfully implementing MPAs and integrating them into Coastal Zone Management in a way that leads to sustained improvement in livelihoods of coastal communities.

## **10 ANNEXE 4**

### **10.1 Presentation by Patrick McConney: Summary of MPA symposium at 54<sup>th</sup> GCFI meeting & other related projects**

Report of the workshop on human system connectivity: a need for MPA management effectiveness. Practical Approaches to Achieve Economic and Conservation Goals  
a special event at the  
54<sup>th</sup> Annual Meeting of the Gulf and Caribbean Fisheries Institute (GCFI),  
Providenciales, Turks and Caicos Islands, 12-17 November 2001

#### **10.1.1 Introduction**

Near the conclusion of the GCFI meeting and its special MPA symposium a workshop was convened to address the topic of *Human system connectivity: a need for MPA management effectiveness*. The title was inspired by the marine science sessions that examined facets of ecosystem connectivity. The social scientists, MPA managers, and marine ecologists present thought that our understanding of MPAs would be enhanced by a session in which the human system and its connectivity, both to the marine system and within itself, was prominent. This workshop was loosely linked to presentations in the session on *Capacity Building and Community Involvement in MPA Implementation and Operation* that was concerned mainly with the socio-economic aspects of MPAs.

The workshop was managed by Patrick McConney (Caribbean Conservation Association), Leah Bunce (National Oceanic and Atmospheric Administration) and Georgina Bustamante (The Nature Conservancy). About 25 participants with a wide range of backgrounds contributed to the outputs of the workshop. With a human system perspective, the questions and areas of concern addressed were:

- ◆ Positive MPA experiences, and how to enhance or build upon them
- ◆ Negative MPA experiences, and how to avoid repeating them in the future
- ◆ Gaps (e.g. in knowledge, capacity) to be addressed, and how to fill them

#### **10.1.2 Positive MPA experiences (good lessons to be learned)**

Participants discussed areas in which MPA experiences had been positive in terms of improved management, benefits for the beneficiaries and contribution to knowledge.

1. Learning from others' experiences: sharing the do's and the don'ts of MPAs
2. Integrating community participation into MPA planning and management
3. Recognising co-management has potential for success in many MPA situations
4. Having legal frameworks early in the process of establishing MPAs, regardless of differences in area habitats and uses
5. Benefiting the community at large from multiplier effects of community participation
6. Networking through GFCI, CaMPAM, etc. based on common interests in MPAs
7. Collective learning through task-oriented types of cooperation opportunities
8. Improving the authorities' involvement of fishers and other users in management
9. Recognising that fishers need tangible livelihood benefits from MPAs, and seeing evidence of managers paying attention to this demand
10. Learning to respect other MPA stakeholders (e.g. their values, knowledge, inputs)
11. Using psychology to learn about, and to change, people's attitudes towards resource use within MPAs

12. Creating successful strategic alliances with economic sectors and stakeholders to establish and manage MPAs
13. Linking MPA managers to broader contexts of integrated coastal management
14. Realizing the need for flexibility in thinking and decisions, so systems can adapt to unplanned events and surprises (e.g. natural disasters, environmental changes)

### **10.1.3 Negative MPA experiences (challenges for the future)**

A similar exercise was undertaken to identify MPA challenges for the future.

1. Overcoming the difficulty in maintaining involvement of users, and the use of inappropriate communication mechanisms that might alienate stakeholders
2. Obtaining sustainable funding at planning stages, since donors do not recognize that changing peoples' attitudes takes time and longer funding periods are needed
3. Eliminating situations where authorities and others enter participatory processes with pre-conceived ideas about the outcomes of these planning processes
4. Broadening alternative livelihoods for displaced fishers that still typically focus too narrowly on tourism
5. Prolonging government commitment (which can change with elections) that is now seldom available long enough for the MPA community
6. Improving on situations where, by not delivering promptly, managers do not meet local communities' expectations, or expectations of communities are so high that governments do not meet them
7. Correcting the lack of recognition and respect for users' (fishermen, others) knowledge that still persists in some quarters
8. Widening the focus that continues mainly on restricting fishing rather than a full range of MPA uses
9. Addressing the lack of recognition of the important role of governments in decision-making (e.g. governors, ministers, politicians) that presently constrains flows of information to key people

### **10.1.4 Gaps to be addressed, and how to fill them**

Participants turned their attention to the gaps that presented opportunities for building on positive experiences or reducing negative factors. The group identified, as priority, the following general aims and specific actions.

1. Provide innovative economic incentives and opportunities for resource users:
  - ◆ Identify market niches for new product development
  - ◆ Use an eco-enterprise fund for starting new businesses to generate income for the MPA, and for alternative livelihoods based on local experiences and skills
  - ◆ Develop eco-labeling system for marine products (fish and lobster "sustainably" harvested from the MPA)
2. Strategize MPA issue awareness programs in a pro-active manner:
  - ◆ Develop a regional database of managers and decision-makers (recurrent suggestion)
  - ◆ Invite decision makers to special events to get them personally involved
  - ◆ Develop basic education materials targeted for specific audiences like fishers, divers, developers; and others targeted at policy makers (educate at top levels)

- ◆ Get more funding linked to provision of community participation activities
3. Improve managers' communication skills:
    - ◆ Train managers in communication skills, business operations, and management of conflicts (workshops, training courses by UNEP, UWI, etc.)
  4. Enrich managers' knowledge of methods and tools for coordination and participation:
    - ◆ Provide training in facilitation and community mobilization, especially for those with natural science backgrounds (workshops, training courses by UNEP, UWI, etc.)
  5. Build up stakeholder analysis skills:
    - ◆ Understand stakeholders needs via improved stakeholder assessments
    - ◆ Train managers in how to conduct stakeholder analyses themselves
  6. Provide the incentives for the representatives of communities participating in the planning process to report back to their constituencies:
    - ◆ Clarify representatives' responsibilities and publicize their identities
    - ◆ Select the best representatives by having clear criteria for selection and a transparent selection process based on understood roles and responsibilities
    - ◆ Build capacity of representatives (e.g. how to conduct meetings) and provide them with the necessary tools, equipment and rewards
  7. Engage more fishermen and other resource users in the research and monitoring programs to foster their interest in conservation:
    - ◆ Publicize research results in the best way to reach the widest audience in the particular situation e.g. radio programs to disseminate research findings
    - ◆ Employ resource users as data collectors and analysts wherever feasible
    - ◆ Allow users to design their own data collection programs within guidelines
  8. Enhance communication between natural and social scientists:
    - ◆ Educate natural scientists on the need to link and work with social scientists
    - ◆ Promote interdisciplinary work and hold interdisciplinary workshops and conferences to share information, with attendance as a funding or permit clause
    - ◆ Require both natural and social scientists to meet together with the community in the beginning in order to understand their needs and share perspectives
  9. Improve practical experience exchanges for MPA managers and resource users:
    - ◆ Clarify the goals of experience exchanges and study four projects
    - ◆ Show benefits of exchanges based on experiences that worked and compile testimonials of success for future proposals
    - ◆ Work with stakeholders to develop exchange proposals (site managers and conservation NGOs are not taking advantage of funding opportunities where major NGOs can help prepare successful proposals)
    - ◆ Overcome incorrect perceptions of what is easy and difficult in experience exchanges, and that might be misleading the developers of guidelines for proposal writing
  10. Expand coordination and communication among sites using different mechanisms and vehicles (national and international – e.g. GCFI, CaMPAM, OECS, WCPA-Marine, etc.):

- ◆ Focus on a few networks to improve coordination rather than start new ones
- ◆ Establish region-wide planning for site selection to ensure better coordination
- ◆ Use multiple avenues for communications simultaneously
- ◆ Use SPAW protocols and other instruments for governments to establish national and regional systems of MPAs

### **10.1.5 Conclusion**

The workshop provided an excellent opportunity for a wider cross-section of MPA managers, researchers, users and other interested parties than is usually found at typical technical and scientific meetings to frankly and informally share information on the human aspects of MPA operations. Exchange of information is one of the main objectives of GCFI, and through such communication the GCFI assists in advancing marine science and management in the Gulf and Caribbean region. This workshop report is to be published in the 54<sup>th</sup> GCFI Proceedings, placed on the GCFI web site, made available for press releases or newsletters, and distributed to other media for exchanging information. The GCFI also wishes to promote the sharing of Wider Caribbean knowledge and experiences at the World Parks Congress in 2003. This workshop was a small step in this direction. Feedback on the report, and information on initiatives relevant to filling the gaps identified, in the ways listed above or by alternative means, is very welcome. This connectivity shall continue at GCFI 2002 and beyond.

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Contact: Patrick McConney ([patrickm@caribsurf.com](mailto:patrickm@caribsurf.com))  
or the Gulf and Caribbean Fisheries Institute (GCFI).  
Visit our web site at [www.gcfi.org](http://www.gcfi.org) or mail to GCFINet.

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### **10.2 Related CCA projects (taken from presentation)**

Slide 17

**Related initiatives  
now in progress**

- **Project on Socio-economic Monitoring  
for Caribbean Coastal Management**
- **Caribbean Coastal Co-management  
Guidelines Project**

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Slide 18

### Project on Socio-economic Monitoring for Caribbean Coastal Management

- The World Commission on Protected Areas – Marine (WCPA-Marine)
- U.S. National Oceanic and Atmospheric Administration (NOAA)
- University of the West Indies (UWI) Natural Resource Management Programme (NRM)
  - ◆ Global Coral Reef Monitoring Network
  - ◆ “Socioeconomic Manual for Coral Reef Management “ (request copy on the sign-up list)

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Slide 19

### Major outputs of the project

- Develop concise socio-economic monitoring guidelines for coastal management programs in the Caribbean, building on existing socio-economic monitoring practices in the region
- Conduct a workshop at UWI to train about 15 coastal managers from the region in how to develop and implement socio-economic monitoring programs based on the guidelines
- Establish Caribbean socio-economic monitoring programs for coastal management through collaborating coastal programs and projects, with the UWI providing support training and serving as a focal point for information sharing among participants to ensure sustainability

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Slide 20

### Project communications

If you ...

- are interested in finding out more about this project as it progresses
- know of other people who may be interested in this project
- can provide information on socio-economic monitoring being used now
- want to be a participant in training opportunities that may arise
- are involved in a project that includes coastal socio-economic research
- consider any interaction with this project to be potentially useful

- Contact here at GCFI:
  - ◆ Patrick McConney
  - ◆ Leah Bunce
  - ◆ Elizabeth Ban

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Slide 21

### **Caribbean Coastal Co-management Guidelines Project**

- **By:** CCA, NRM of UWI, MRAG Ltd.
- **Goal:** Improved resource-use strategies in coastal zone production systems (beyond April 2002 to June 2003)
- **Purpose:** Develop and promote mechanisms for implementation of integrated pro-poor natural resource (and pollution prevention) management in coastal zones through understanding the requirements for establishing successful co-management institutions for coastal resources under various conditions in the Caribbean

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Slide 22

### **Outputs based on 6 case studies (Barbados, Belize and Grenada)**

- Co-management analysis research framework
- Ecological and environmental assessments of the natural resource systems and their utilisation
- Institutional, socio-economic, cultural, political and other human dimension assessments
- Compare how the natural resource and human factors assessed above favour or constrain the establishment of successful, pro-poor and integrated co-management
- Regionally applicable guidelines on successful, pro-poor and integrated co-management in the wider Caribbean
- Capacity of target institutions and beneficiaries to improve co-management developed through participatory processes

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Slide 23

### **Assessments in the project**

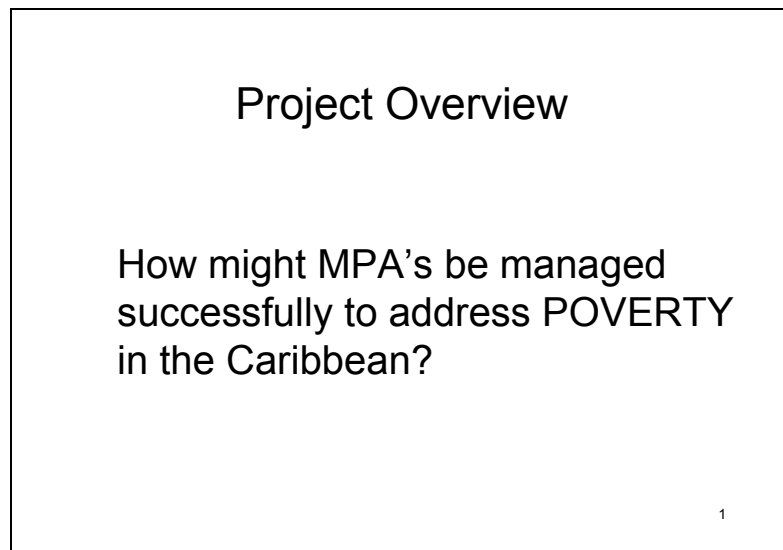
- Environmental and ecological systems
- Fishery and other resource uses
- Local and national marketing, other economic linkages
- Property rights systems and trends
- Household livelihood strategies and options
- Collective action, group cohesion, conflict management
- Representation and decision-making in groups
- Policy, legislation, practices impacting management
- Institutions for local and national resource management
- Capacities and linkages that impact upon livelihoods

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## 11 ANNEXE 5

### 11.1 Annotated Presentation by Nicole Esteban: Project overview

Slide 1



This presentation aims to give you an outline of activities undertaken during this research project, and to set the scene for today's discussions which, we hope, will come back repeatedly to our project focus *How might MPAs be managed successfully to address POVERTY in the Caribbean*. Caroline's presentation at the beginning of Session 2 will start with linking MPA management issues together with poverty and discusses issues raised during our research with poorer stakeholder groups at four MPAs in January – March 2002.

**NB.** The question of whether MPAs should be managed to address poverty was raised (see main text). It was concluded that this question should be rephrased to: ***How can reducing poverty address or improve management of MPAs?***

Slide 2

## Project Stages

1. Characterisation of Caribbean MPAs
2. A) What leads to implementation of *operational MPAs*?  
B) Impacts of *operational MPAs* on poor people's livelihoods and what leads to +/- outcomes?
3. Guidelines for pro-poor methodology for MPA management

2

There are three stages to our project research.

1: Increased understanding of the key institutional, social and biophysical characteristics of Caribbean MPAs in the Caribbean region. This formed a study by CANARI (Geoghegan, Smith and Thacker, 2001). Some key results are outlined in the next slide.

2: Concentrates on what leads to implementation of *operational MPAs* and positive/negative outcomes on poor people's livelihoods. This stage is now complete, and may be divided into two:

2A: Improved understanding of the enabling/constraining factors leading to *operational MPAs*. This included two UWI MSc theses on legal and policy frameworks for MPAs and a legal/policy review of all case studies selected – to be presented next.

2B: An Increased understanding of the impacts of *operational* implemented MPAs on poor people's livelihoods and the structures/processes leading to beneficial/harmful outcomes. Outputs from this are four UWI MSc theses on socio-economic and ecological impacts of operational MPAs. (Caroline's presentation)

3: Defining the means to improve benefits to livelihoods of the poor, and developing pro-poor methodology for MPA management (GCFI session – want to share results, verify that findings are appropriate to countries in wider Caribbean, discuss findings and develop guidelines).

Slide 3

## 1. Review and characterisation of Caribbean MPA's

- CANARI completed characterisation review in June 2001
- 75 MPA's from 17 countries included in report
- Final report and datasheets have been announced and posted on MRAG's web site.
- Database developed by MRAG and will be integrated into PA database by WCMC

3

The first stage of the project was a Review and Characterisation of Existing MPAs in the Region, Including Degree of Integration With Wider CZM from literature and primary data collection.

CANARI conducted a survey of 80 MPAs and completed the characterisation review in June 2001. It was published as a CANARI Technical Report in July 2001. The report provides a summary of the biogeographic, legal, institutional, management and socio-economic characteristics of MPA sites based on survey forms from MPAs.

The review was based on all MPAs in two biogeographic zones of the Caribbean: the Central Caribbean Region (including Belize as the only anglophone continental country of this zone) and the Lesser Antilles. The Turks and Caicos were also included as they are just outside the Central Caribbean Region. Although information about 80 MPAs from 18 countries was compiled from published and grey literature (and now entered in our database), CANARI based the report on 75 MPAs that were verified by questionnaire survey (MPAs from the Bahamas only feature in our database).

Final report and datasheets have been posted on MRAG's web site. We then took the datasheets and coded information into a Microsoft Access database. We have discussed the data with UNEP's World Conservation Monitoring Centre and they are integrated the data into their Protected Area database. The 1995 CaMPAM database is also currently being revised to integrate data collected during this project.

Some of the key results and ideas coming out of this report are shown in the next slide.

## Slide 4

### Key ideas from characterisation review

- >50% of the MPAs have low/no management; 25% have no management
- Management plans focus wider than conservation
- Trend in the types of management from single govt agency to complex consortia
- > 50% of MPAs have active or formal consultation mechanisms
- Many MPAs border areas of significant poverty
- A few MPAs actively address the impacts of management on their poorer neighbours

4

#### Key results/ideas from the characterisation review

A number of key results from the characterisation review are detailed in the 2<sup>nd</sup> project brief that we handed to you. There were Important results in terms of the pro-poor focus of our research:

- Of the 75 MPAs included in the CANARI report, more than half have low or no management; 25% have no management at all.
- While 'conservation' is emphasised in objectives/mission statements it is clear that management programmes do draw on a wider range of purposes. Namely enhancement of tourism, conservation and sustainable and equitable use of coastal resources.
- An associated trend is noted in the types of management arrangements in place for MPAs: sites established for more than 20 years are generally managed by a single government agency or national trust, while more recent arrangements are more complex involving government partnerships with NGO's, consortia etc.
- In addition, stakeholders engage 'to some degree' in most MPAs – with more than half including active or formal consultation mechanisms.
- With respect to the links between MPAs and poverty, a key focus of this research, it is clear that many MPAs border areas of significant poverty, while others are close to pockets of at-risk populations. So while the links are between poor people and MPAs are often not yet clearly established, potential for MPAs to benefit the poor exist.
- A few MPAs actively address the impacts of management on their poorer neighbours, including Soufriere/Scotts Head in Dominica, Negril and Montego Bay in Jamaica, and the SMMA, through programmes aimed at enhancing the livelihoods of, or mitigating the negative impacts of management on, disadvantaged stakeholders, particularly fishers. The impact of these programmes on livelihoods and poverty is not known, but there appears to be evidence that they have the effect of increasing the interest and involvement of the targeted user groups in the MPAs' management.

## Slide 5

Selection process for case studies	
Criteria	Justification
MPA management aims	Management aims include sustainable development and not solely biological conservation
Operational for 5 years	To enable investigation of the <i>impact</i> of MPA's
Reef dominated coastal systems	These are seen as the most vulnerable type of coastal system. Threats include over-fishing, coastal development, deforestation, agriculture

5

Decision-making process was an iterative process taking into account the following decisions:

- Used the characterisation review by CANARI based on 75 MPAs in 2 biogeographical zones - central caribbean and Antilles
- Excluded countries that could be considered 'wealthy' and so difficult for a poverty focus e.g. Cayman Islands, Bahamas
- Excluded MPAs that had management aims purely for biological conservation. Also kept in MPAs with significant populations within or adjacent to boundaries.
- Excluded MPAs that have been established for less than 5 years as this wouldn't enable us to see impact.
- Excluded Spanish speaking continental countries due to language barrier for research.
- CANARI had used two levels of categorisation – active or non-active management. Then for each MPA with active management the level of management was assigned low/moderate/high – sliding scale according to existence of management plan, is it operational, does MPA have sufficient capacity (staff/funding) to action the plan is there awareness of and adherence to rules. We needed a mix of operational and non-operational sites in each country.
- At country level, selected mix of geographical characteristics, i.e. small island, large island and continental – reached Jamaica (central Caribbean), Belize (central) and TCI (adjacent to central).

## Slide 6

MPA case studies				
Type	Country	MPA	Students	PA work
Large Island	Jamaica	<ul style="list-style-type: none"> <li>• Negril</li> <li>• Montego Bay</li> <li>• Ocho Rios</li> </ul>	<ul style="list-style-type: none"> <li>▪ Legal, ecology, livelihood</li> <li>▪ Legal</li> <li>▪ Legal</li> </ul>	X
Continent	Belize	<ul style="list-style-type: none"> <li>• Hol Chan</li> <li>• Glover's Reef</li> </ul>	<ul style="list-style-type: none"> <li>▪ Legal, ecology, livelihood</li> <li>▪ Legal, ecology, livelihood</li> </ul>	X X
Small Island	TCI	<ul style="list-style-type: none"> <li>• Princess Alexandra</li> <li>• Admiral Cockburn</li> <li>• Chalk Sound</li> </ul>	<ul style="list-style-type: none"> <li>▪ Legal, ecology, livelihood</li> <li>▪ Legal</li> <li>▪ Legal</li> </ul>	X
Small Island	Dominica	<ul style="list-style-type: none"> <li>• Soufriere/Scott's Head</li> <li>• Cabrits</li> </ul>	<ul style="list-style-type: none"> <li>▪ Legal</li> <li>▪ Legal</li> </ul>	

6

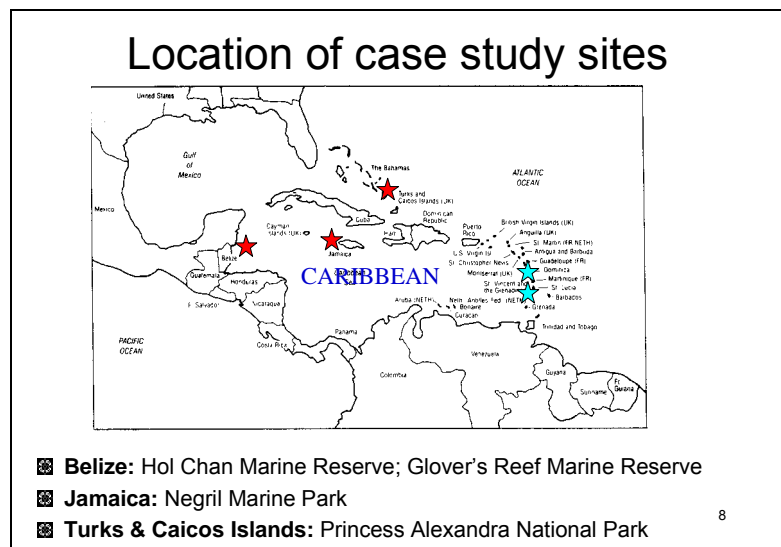
- CANARI categorised MPAs into 4 different management types: none, low, medium and high. We grouped the no/low management MPAs to be NON-OPERATIONAL and moderate/high to be OPERATIONAL in order to make our selection.
- In collaboration with our partners, we completed selection in July 2001 and the selected case studies are detailed in the above table, categorised per type of geographic zone (large island, continental, SIDS) and then shown for each country. The type of fieldwork at each site is also shown on the table.
- We selected four key sites for research during the second stage of the project and intensive participatory work was done in January - March. These sites are all considered to be OPERATIONAL – in that each MPA has rules that are laid down in some form (management plan etc.) and that are broadly followed. These are: Negril, Hol Chan, Glover's Reef and Princess Alexandra.
- At these sites, all 3 types of student project have taken place to provide baseline information about the MPAs.
- We also selected 7 NON-OPERATIONAL sites for legal and institutional fieldwork which feeds into the review of legal and policy frameworks for MPAs.
- An additional MPA that is not included in this table is the SMMA in St Lucia. We selected this MPA as a 5<sup>th</sup> OPERATIONAL site. No field work will be done on the basis of extensive research that has already taken place there but it has been included in the legal review

## Slide 7

Operational MPA case studies				
Name	Country	Management Agency	Main use of Park (prioritised)	Stakeholder involvement in establishment
Hol Chan	Belize	Quasi - independent	Tourism Fishing (less)	High
Glover's Reef	Belize	Government	Fishing Tourism (less)	Moderate
Princess Alexandra	TCI	Government	Tourism Fishing (less)	Low
Negril	Jamaica	NGO	Fishing & Tourism (equal)	High
7				

- Operational MPA case studies (operational was defined by CANARI characterisation review to have medium to high management).
- More information about the characteristics of the four case study MPAs are shown in this slide in terms of management agency, main use of the MPA and stakeholder involvement in establishment.

## Slide 8



- The location of case study MPAs are shown here. The red stars indicate those MPAs that were investigated for ecological and socio-economic impacts on stakeholders. These are operational MPAs.
- Legal and policy frameworks were studied at all case studies (red and blue stars).

## Slide 9

## 2a. What leads to implementation of *operational* MPA's?

- Improved understanding of the enabling/constraining factors leading to implementation of *operational* MPA's
  - Review of legislation, policy & institutional arrangements assisting/constraining MPAs in Belize, Jamaica (Richards, 2002), TCI & Dominica (Best, 2002)
  - Review of legal and policy frameworks for Caribbean MPAs (Anderson, 2002)

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- Underlying the question of what leads to implementation of operational MPAs is a need for improved understanding of the enabling/constraining factors leading to implementation.
- One of the enabling/constraining factors that has been a focus of our research is that of legislative and policy frameworks underpinning establishment and management of an MPA.
- In order to review legislation and policy frameworks of Caribbean MPAs, there have been two MSc theses (Richards, 2002; Best, 2002) on MPAs in Belize, Jamaica, Turks & Caicos and Dominica.
- Dr Anderson has completed this work with a review drawing on international and regional legislation and also bringing in the case study of SMMA in St Lucia and will present next on the review of legal and policy frameworks.

## Slide 10

## 2b. What are the impacts of *operational* MPAs on poor people's livelihoods?

- Increased understanding of impacts of *operational* MPAs & structures or processes leading to beneficial/harmful outcomes
  - Assessment of impacts of MPAs on livelihoods of stakeholders in Belize, Jamaica (Francis, 2002) and TCI (Francis, 2002)
  - Assessment of ecological impacts of MPAs in Belize (Cummings, 2002), Jamaica (O'Sullivan, 2002) & TCI (O'Sullivan, 2002)
  - Case study fieldwork

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- Outputs from this are 4 UWI MSc theses on socio-economic and ecological impacts of the four *operational* MPA case studies (one MSc incomplete).
- Additionally, intensive participatory fieldwork took place with MPA staff to identify poorer stakeholders, and improve understanding of the impacts of the MPA on their livelihoods. Caroline's presentation will focus on results of this fieldwork.

### 3. Guidelines for pro-poor methodology for MPA management

- Dissemination of research findings (Project briefs, ISRS, GCFI)
- Check that issues raised in research are similar to the wider Caribbean
- Develop guidelines promoting pro-poor management of MPAs

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Defining the means to improve benefits to livelihoods of the poor, and developing pro-poor methodology for MPA management (GCFI session – want to share results, verify that findings are appropriate to countries in wider Caribbean, discuss findings and develop guidelines.

## 12 ANNEXE 6

### 12.1 Presentation by Dr Winston Anderson: Summary of legal and policy framework paper

#### 12.1.1 *Emergence and Development*

A critical step in protecting biological communities is the establishment of legally designated and policy supported protected areas. Legislative, institutional and policy arrangements may not by themselves be sufficient to ensure protection but they are often a necessary starting point in the process.

In the Caribbean, regulatory protection of terrestrial ecosystems dates back to at least the 18<sup>th</sup> century and these protected areas have become the established recipients of internationally funded project activities. By contrast, marine protected areas (MPAs) have proliferated throughout the region only within the past two decades or so. The reasons for this belated regulatory interest are not entirely clear. Some rationale may be found in the mistaken belief, which persisted until recently, that the assimilative capacity of the oceans was infinite, thus foreclosing upon the necessity for paternal intervention. A second possible explanation relates to the general reluctance of common law systems to regard marine resources and ecosystems as capable of ownership.

What is clear is that the international movement for the protection of the environment has generated a number of global and regional multilateral environmental agreements of direct relevance to marine protection areas. Participation in these agreements should be, and in many cases, has been a primary catalyst for the development of sound legal and policy frameworks governing marine protected areas.

#### 12.1.2 *Regulatory Typologies*

There are presently over 200 MPAs existing throughout the wider Caribbean region and there is clearly a correlation between their functionality<sup>7</sup> and the existence and use of regulatory institutions and policy instruments. Three basic typologies may be identified. Reliance may be placed upon traditional resource conservation laws; *ad hoc* legislation relating to the creation and operation of specific marine protection areas; and generic regulations providing a framework for the designation of such areas whilst injecting some degree of flexibility into the management arrangements applicable to specific marine protection areas.

As a rule, dependence upon the incidental relevance of legislation provides neither a coherent nor an effective means of regulating usage of marine spaces. Legislation specific to marine protection areas tends to better protection on the whole, particularly where there is a requirement for establishment and operation of a management plan. At the same time there are systemic problems of inconsistent application of standards and procedures across the entire range of marine protection areas located within the country.

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<sup>7</sup> When reference is made to functionality, the authors intend to convey two separate but related ideas. First the degree of existence of a coherent regulatory framework, which would typically include appropriate legislative and policy initiatives. Secondly, the degree to which the framework is being used to effectuate the objectives for which the marine protected area was established. Whilst these concepts may be rated separately, it is the qualitative assessment of their combined effect that gives the MPA a final rating. This rating may be low, low-moderate, moderate, moderate-high, or high.

As a conceptual proposition, general legislation setting up the regime for a system of protected areas, including marine protection areas, whilst allowing for flexibility in the individual operation of specific areas, provides the most sophisticated regulatory and policy approach. Flexibility may be attained for example, through, idiosyncratic management plans, and/or the devolution of management to locally based individuals and groups, whilst maintaining central policy directives.

However, the correlation is not linear. Research demonstrates that numerous variables, not directly apparent from the legal and policy typologies, may affect and even determine the long-term success of the MPA. These variables include development of systems to implement specific international obligations, rationalization and clarification of governance structures, the articulation and effective operation of area-specific policies to guide administrative action in respect of all activities impacting the protected area, availability and effective deployment of human and material resources, and meaningful community participation.

### **12.1.3 Typologies and Functionality**

The notion of ‘traditional conservation laws’ is used to describe legislation that provides for the protection or conservation of specific environmental components but which does not expressly include marine protected areas. Typically, these statutes would have been enacted before the modern proliferation of marine protected areas, although subsequent amendments may make some provisions for protection of such areas. Legislation covering beach protection or control, town and country planning, traditional fisheries management, and national parks, often falls into this category.

Much of this legislation lacks adequate environmental and institutional focus. It follows that marine protected areas established pursuant to these kinds of laws tend to have fragmented institutional structures and regulations and are therefore likely to have low or non-operational management, unless other factors are at work to enhance the functionality of such areas.

The Soufriere-Scottshead Marine Reserve (SSMR) and the Cabrits National Park (CNP) in **Dominica** operate under traditional conservation laws. However, whilst the CNP is clearly non-operational, research classifies the SSMR as having low to moderate management.

A second and more modern approach is MPA designation established on a network of small MPAs so that separate regulations govern each. In formal terms this is undoubtedly an advance over the traditional conservation laws, but it lacks the facility to provide for consistency in standards applicable to marine protection areas across the country, let alone the region. It is also difficult to integrate marine protection areas into a more general system of national parks protection. As a rule, therefore, the management level expected of parks established under *ad hoc* marine protection legislation may, *prima facie*, be expected to be **moderate**, but the variables to which reference has already been made, could enhance or reduce this status.

The route of ad hoc legislative regulation is taken in **Belize** where the Hol Chan Marine Reserve (HCMR) and the Glover's Reef Marine Reserve (GRMR) were established under the Fisheries Act but operate under quite separate regulatory and institutional frameworks. Whilst the GRMR retains the a priori classification of having moderate functionality, the HCMR is designated as being operational at a high level.

From a conceptual viewpoint the most satisfactory approach is the use of a generic regulatory framework for the creation and management of marine parks. This allows for consistency of standard setting whilst permitting some flexibility in local management arrangements. A comprehensive regulatory base has the distinctive advantage of facilitating integration of marine protected areas into a national parks system for all types of ecosystem protection. For similar reasons, application of uniform international standards is more easily achieved. Accordingly, the initial expectation is that marine protection areas regulated in this way may be classified as having **high** management levels.

Use of generic legislation is the tool of choice in **Jamaica**, where a single legislative framework applies to Negril Marine Park (NMP), Montego Bay Marine Park (MBMP), and Ocho Rios Marine Park (ORMP). Again, taking account of applicability of the variables mentioned earlier, the following is the classification of their functionality:

NMP	-	high
MBMP	-	moderate-high
ORMP	-	non-operational

This is also the approach adopted in the **Turks and Caicos Islands** in which the Princess Alexandra Land and Sea National Park (PALSNP), Admiral Cockburn Land and Sea National Park (ACLSNP), and Chalk Sound National Park (CSNP) are located. They are classified as having, respectively, moderate-high, low-moderate, and low functionality.

**St. Lucia** is a special case in that although generic legislation exists for marine park creation and operation, the Soufriere Marine Management Area (SMMA) was established and is regulated under what may be regarded as traditional conservation laws. At all events, this marine protected area is generally regarded as having a high degree of functionality.

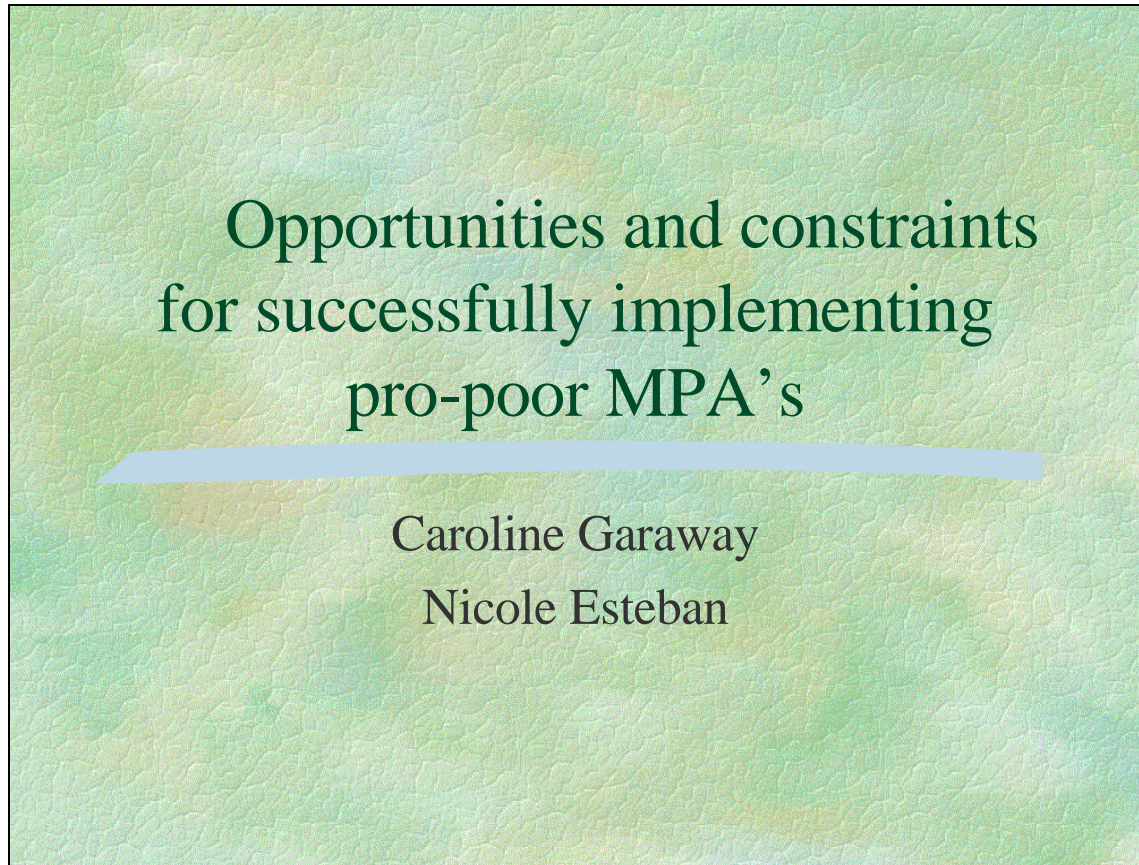
#### **12.1.4 CONCLUSION**

In sum, the legal and policy framework is of critical importance in determining the ultimate success of MPAs. There are preferred regulatory regimes but there is no necessary correlation between the regulatory typologies and functionality. In every case, governance structures specific to the marine protected area in question must be supplemented by appropriate measures in order to ensure MPA functionality and viability.

**13 ANNEXE 7**

**13.1 Presentation by Dr Caroline Garaway: Identifying the relevance of poverty to MPA management**

Slide 1



Objective of talk – To present a series of ideas arising from research carried out in 4 case studies in early 2002, and in so doing to stimulate thought & provoke discussion.

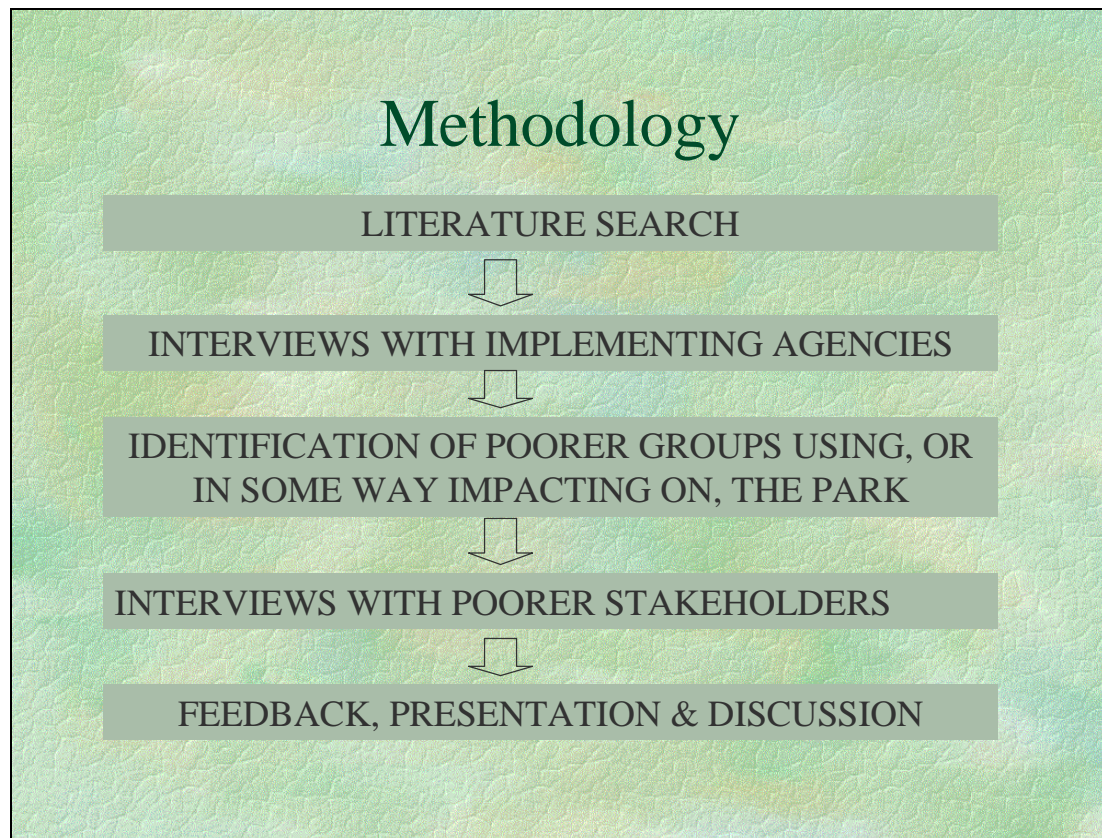
Corrections made to factual content, arising from discussion at the end of the talk, have been added to the annotations.

## Slide 2

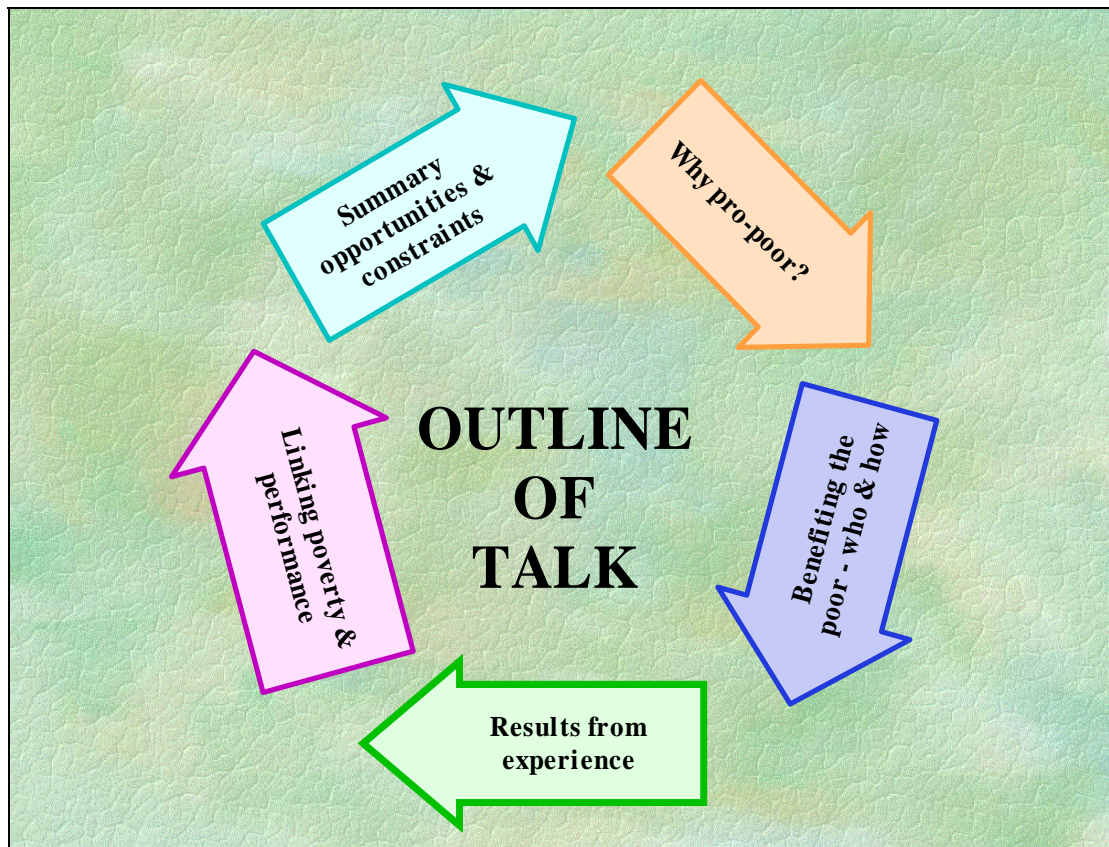


Sites that were chosen for the exploratory survey on the impacts of MPA's on poorer 'communities' living in, or adjacent to, marine parks.



There were several criteria for selection (the sample from which sites were selected came from the characterisation review of Caribbean MPA's by CANARI (Geoghan *et al* (2001)). To be included sites had to have the following: Located in areas where poverty was an issue; more than a low level of active management; staff; objective led management plan; level of user awareness of rules ie. 'working' rules; operation more than 5 years. After this initial selection, these sites above were chosen on the basis of variation between them in their institutional set up.




Methodology at each case study site. Implementing agencies were asked about their principle activities and what they perceived to be their main operational constraints and opportunities. Stakeholders were identified through literature and group discussion with MPA and outreach staff. Interviews with stakeholders covered; their use of the Park, their perceptions of the impact of the Park on the natural resource base and on themselves; their opinions of the Park; the major constraints and opportunities for them improving their livelihoods. Feedback was given, where desired, to the park staff and multi stakeholder advisory committees. For more details of methodology see Appendix 1 in Garaway & Esteban (2002), Report on the impact of MPA's on poorer communities living in and around MPA's: Institutional opportunities & constraints. DfID Project R7976, MRAG Ltd, UK.



## Hurdles to MPA implementation

- ❧ Can't get management programmes in place or sustain them 
- ❧ Up and running but undermined by non-compliance, bad practice, non-co-operation 
- ❧ Up and running, complied with but ecological objectives not achieved



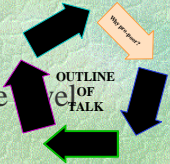
The types of hurdles that can affect successful MPA implementation are split here into three major types. This classification came from a result of bringing together all the constraints cited by those involved in MPA management during the case study research. In this talk, problems under the first major hurdle have been termed 'supply' problems in that they are problems that are preventing the MPA from supplying their proposed management programmes in the first instance, or sustaining them once they are up and running. Examples of the types of supply problems encountered during this research are presented in slide 26. Problems classified under the second major hurdle have been termed 'demand' problems, in that the park has been able to supply management but it is being undermined by users or those affected by it. Examples of the types of demand problems encountered during this research are presented in slide 27. This is the major hurdle that this talk addresses. The third hurdle, relating to the ecological effectiveness of management is not considered here. It is felt by the research team that by addressing problem 2, some of the constraints of hurdle 1 (for example monitoring & enforcement) may become less problematic.

## Is compliance/conflict an issue in Caribbean MPA's generally?

- **Extent of conflict**
  - Of those who gave an answer (n=49), 84% expressed conflict of some kind
  - 28 % between park & traditional users (fishers)
  - 32% between local user groups (divers & fishers)
- **Extent of non - compliance**
  - 30% volunteered information regarding non-compliance (poaching, illegal dumping)

Geoghan et al (2001)

- In 4 case study sites being researched here, 100% had some of non-compliance

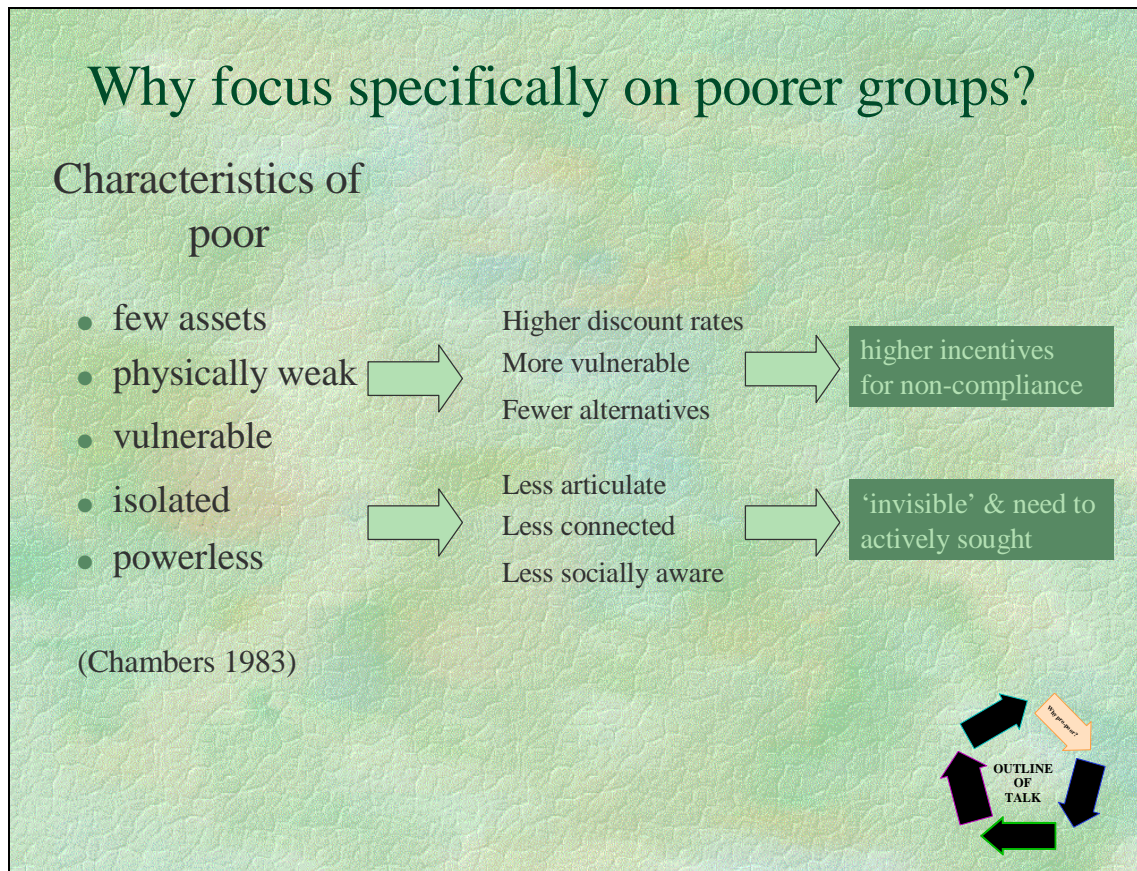


Our research suggested that non-compliance and/or lack of co-operation and/or bad practice were significant problems in the sites visited. Results of this slide come from the data used to compile the CANARI Characterisation Review (Geoghan *et al* 2001). These results suggest that these 'demand' problems are significant in other Caribbean MPA's too and therefore that the problem is more widespread.

## Slide 7



Presented here is a very simplified explanation of what encourages user compliance of, and commitment to, rules regarding natural resource management as suggested by Ostrom (1990). On the left hand side are the underlying principles, and on the right features of institutional design that will facilitate their realisation. These design features have been studied and/or applied in a wide variety of different resource systems throughout the world, most relevantly here by Mascia (2000) who scrutinised them with respect to management performance of MPA's at selected sites in the Caribbean. They have been found, in many instances to be robust and correlate positively with management performance. For more detailed information regarding the principles see Ostrom 1990. The first three principles will help to ensure that benefits accrue to a defined set of people, are perceived to provide benefits and be legitimate. The chances of people free-riding on others' efforts is ever present without adequate enforcement and the next 4 principles deal with this.



The issue of compliance is not one specific to poorer groups so why is there a need to focus specifically on this group? In this slide the dimensions of poverty as described by Chambers (1983) are presented as they show why this group require special attention.


Firstly, the first three criteria put poorer groups in a situation where they have higher incentives to non-comply. Will fewer alternatives, less capacity to cope with non-advantageous change and a need for short-termism, educational efforts (i.e. being told that their practices are unsustainable) will not necessarily be enough.

Secondly, the second two characteristics can mean that normal outreach activities are not reaching these groups. Poorer people may be isolated (either geographically or in their access to information and services). They are also often powerless (due to for example, lack of connections, or weak bargaining position) and so such people will not normally be leaders of groups, or in positions where their views are heard. To address this, special attempts must be made, firstly to identify these groups and, secondly, to work with them. This second point is especially important as it may require skills above and beyond those needed for dealing with other stakeholder groups.

Addressing these issues can have significant benefits including: Increased chance of compliance; increased chance of interest & involvement in resource management; reduced costs of monitoring and enforcing; the use of local knowledge to improve management effectiveness.

## Why Marine Parks should focus on the poor ?

- Improve management performance
- Increase chances of funding
- Increase chances of political support



'Demand' problems (non-compliance, non-cooperation, bad practice) can undermine management performance and demand problems of the poor are an important component of this when there are poorer groups using and living in areas, adjacent to, or within, Park boundaries. Addressing their concerns may go some way to reducing these problems and hence improving management performance.

However there are also other reasons for Park management to address poverty related issues. These include the facts that poverty reduction is increasingly an explicit concern of donors, whose support is crucial for non-self financing parks, and that such attempts could encourage political support for the other objectives of Park management.

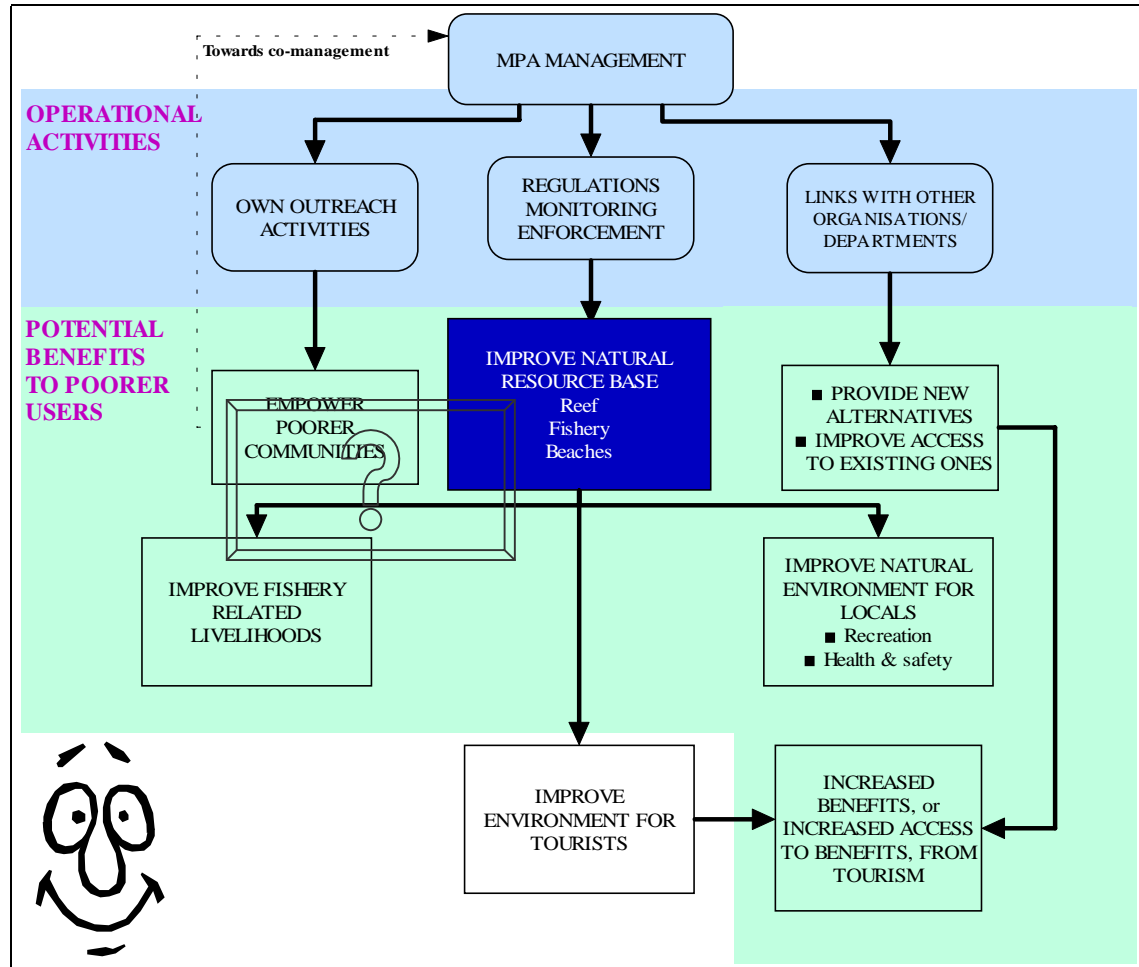
## Poorer stakeholders identified in this research

	Livelihood (direct/ <i>indirect</i> )	Subsistence	Recreation	Other
Princess Alexandra	<ul style="list-style-type: none"> <li>• Fishermen</li> <li>• Beach Vendors</li> <li>• <i>Hotel Staff</i></li> <li>• <i>Construction workers</i></li> </ul>	<ul style="list-style-type: none"> <li>• Hotel Staff</li> <li>• Construction workers</li> <li>• Local immigrant community</li> </ul>	<ul style="list-style-type: none"> <li>• Hotel staff</li> <li>• Construction workers</li> <li>• Local immigrant community</li> </ul>	-
Hol Chan	<ul style="list-style-type: none"> <li>• Fishermen</li> <li>• <i>Wood carvers/</i></li> <li>• <i>Beach vendors</i></li> <li>• <i>Hotel staff</i></li> <li>• <i>Construction workers</i></li> </ul>	-	<ul style="list-style-type: none"> <li>• Local community</li> </ul>	-
Glovers Reef	Fishermen	Fishermen	-	-
Negril Marine Park	<ul style="list-style-type: none"> <li>• Fishermen</li> <li>• Craft vendors</li> <li>• Small watersport operators</li> </ul>	<ul style="list-style-type: none"> <li>• Local community, including unemployed</li> </ul>	<ul style="list-style-type: none"> <li>• Hotel Staff</li> <li>• Construction workers</li> </ul>	Small farmers



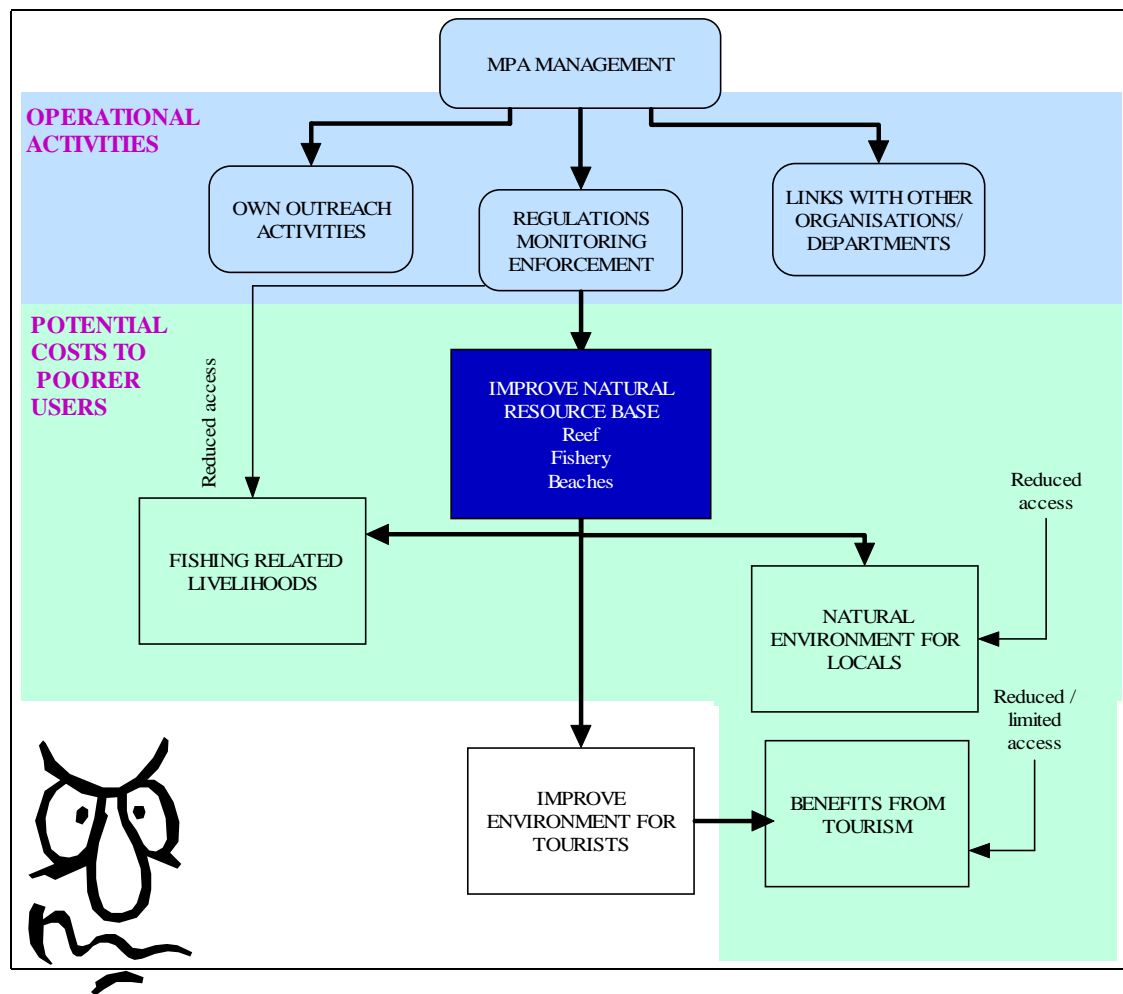
For details of how these groups were identified see Garaway & Esteban (2002). As can be seen, those identified included those who relied indirectly on the Park, through tourism, and those who used it for recreational purposes as well as those who relied directly on the Park for their livelihoods. It also included, in the case of Negril Park, small farmers who, whilst they did not use the Park themselves, impacted on it.

## Slide 11



This slide shows a hypothetical example of a 'pro-poor' MPA i.e. one that specifically, through its existing programs, addresses the needs of poorer groups. Five areas have been identified as ones where there is the potential to address poorer person's needs. What is meant by 'community empowerment' is elaborated on in slide 25. Community empowerment, at its best, could lead to co-management of the MPA, a situation more likely to ensure that rules were adapted well to local socio-economic conditions. MPA's could potentially improve poorer livelihoods directly (through their own outreach activities or through linkages with outreach activities of others) or indirectly through improving the natural resource base. It is suggested that improving the environment for tourism, and hence benefiting the tourist industry would not necessarily or automatically provide benefits for poorer groups. Special attention may be required to improve access to this industry for poorer groups.

## Slide 12



This slide shows the same MPA management, the difference being that it does not address the needs of poorer groups. For example whilst it has outreach activities, and links with organisations, these are not used to address the needs of poorer groups. At the same time, whilst the MPA may be doing a good job at improving the natural resource base, rules regarding access to the fishery may be adversely affecting fishers. Reduced access may also be an issue with regards the other benefits of MPA's. This might not be caused directly by rules set up by Park management, but nonetheless may impact on the extent to which poorer stakeholders are willing to co-operate with MPA management.

Results on following slides are all based on individual's *perceptions* of impacts. A point was made in the discussion after that perceptions varied with age and gender and had this been taken into consideration. In answer, whilst differences hadn't been analysed, attempts were made to get opinions from as diverse a population as possible.

## Slide 13

## Community empowerment

Initiatives	PALNSP	HCMR	GRMR	NEGRIL
1. Information, education services, consciousness raising	✓	Not much now		✓
2. Participation in decision-making	✓ But only recently	✓ Not so much now	✓	✓
Business enterprise & management skills or other similar training	RETURN TO LATER			
3. Encouraging involvement in operational activities/ creating sense of ownership		(✓)		✓
4. Reducing conflict		✓		✓

But have they reached the poor or addressed needs of the poor?



The following 6 slides report actual results of the case study sites, looking at the 5 areas where there could be potential benefits (discussed in the previous slides).

Definition of community empowerment is given on slide 25. ✓ indicate that a Park has a programme or activities to address these aspects of empowerment. (✓) indicates that they had in the past. This slide shows existence and not success of activities.


PALNSP – Princess Alexandra Land and Sea National Park  
 HCMR – Hol Chan Marine Reserve  
 GRMR – Glover’s Reef Marine Reserve  
 Negril – Negril Marine Park

## Slide 14

Initiatives	PALNSP	HCMR	GRMR	NEGRIL
1.Information, education services, consciousness raising	Not yet	Most well aware	Less aware	Yes
2.Participation in decision-making	Not yet	Past -Yes Now – not felt	Not felt	Partially
3.Encouraging involvement in operational activities/ creating sense of ownership	Loss of sense of ownership	Now –reduced sense of ownership	Loss of sense of ownership	Partially
4. Reducing conflict		Partially	Still exists	Partially

Facilitating factors

1. Access to poorer groups through community networks
2. Strong & recognised local CBO's to work with – also good links to 'members'
3. Prolonged & intense discussion in appropriate fora
4. Strong skills of outreach staff
5. Motivation/commitment of MPA manager
6. Trust, mutual respect established (past performance/ community ties / prolonged relationship)
7. Inclusive schools' education programme



Shaded areas are where initiatives exist (see previous slide). Non-shaded areas are where no activities are currently being carried out, by the Park, in this area. Information *in* the squares relates to the extent to which the Park's action (or inaction) has reached the poor or addressed the needs of the poor.

Generally, success has only been partial. However, where no action has been undertaken, results are generally worse. The facilitating factors underneath the table have been identified as a result of comparative analysis of successful versus unsuccessful cases.

1. Significant opportunity in Negril – (constraint in PALNSP where staff also 'outsiders')
2. Advantage in Hol Chan – strong fisher's co-operative in contrast to that in Negril
3. Facilitating factors in both Negril & Hol Chan
4. Particularly obvious in Negril
5. A factor very clearly important here. In particular, whilst mechanisms for participation in decision-making existed in all cases, extent to which realised very dependant on commitment of Managers (especially in start up phase)
6. Lack of this a significant constraint at PALNSP, and, to a certain extent, Glovers Reef.
7. Existed in Negril but in PALNSP education at few places +, importantly, not at schools where largely poor immigrant population went

## Providing new alternatives

Case study	Initiatives	Status	Reaching poor?
Princess Alexandra	Micro-business projects (not specific to MPA's)	Started 2001	Not Yet
Hol Chan	(Alternatives presented themselves)		
Glovers Reef	COMPACT (not specific to Glovers)	Started 2002	Unknown
Negril	Organic farming River trips for fishers Sea moss farming		Partially successful Not successful

### Constraining factors

1. **Poorer groups not actively sought & advertising not reaching them**
2. **Poorer groups not having skills/contacts to develop proposals**
3. **Lack of, or lack of links with, community development organisations to help in this**
4. **Weak CBO's or other collaborating organisations**



This slide shows examples of initiatives that Parks or organisations associated with them have undertaken in their areas. More details of the specific initiatives can be found in Garaway & Esteban (2002), Report on the impact of MPA's on poorer communities living in and around MPA's: Institutional opportunities & constraints. DfID Project R7976, MRAG Ltd, UK. The initiatives associated with Princess Alexandra & Glovers are similar in that they are funds that local people can apply for, for conservation or livelihood enhancing activities in their 'communities'. In Princess Alexandra it relates to country-wide community projects with, for example, attempts to revive traditional skills. In Negril, NEPT and NCRPS staff are working directly with individuals/communities in the area on various projects. In Hol Chan the advent of tourism provided many new opportunities for those leaving the declining fishing industry. Whilst initiatives are fairly recent and therefore their impact cannot yet be adequately assessed, some factors that were constraining the extent to which they were likely to benefit or had benefited poorer groups were identified.

1), 2) & 3) were considered specific constraints in PA. In Negril, 4) was thought to be a significant factor in preventing the success of fishers becoming river guides.

## Benefits to fishery-related livelihoods

MPA name	Regulation type	Type of fisher	Dependance on MPA area for this activity	Their perception of impact		
				-ve	Zero	+ve
Princess Alexandra, TCI	No extractive activities	Commercial	Low	*	*	
Princess Alexandra, TCI	No extractive activities	Subsistence	High	**		
Glover's Reef, Belize	Zoned uses	Commercial	Medium	***		(**) (spillover)
Negril, Jamaica	Zoned uses	Commercial	High	* (***)		* (nursery zones only)
Negril, Jamaica	Zoned uses	Subsistence	High	(***)	*	
Hol Chan, Belize	Zoned	Commercial	Medium	*		* (spillover)
Hol Chan, Belize	Zoned	Subsistence	Low		*	* (spillover)

Compliance

Moderate

Low

Low

Moderate/v. high in some areas

?

High

High

- Perceived benefits generally low
- In at least two sites perception that benefits don't compensate costs.
- These sites also associated with low compliance
- Presence of negative impacts does not preclude compliance



Details of these results can be found in Garaway & Esteban (2002), Report on the impact of MPA's on poorer communities living in and around MPA's: Institutional opportunities & constraints. DfID Project R7976, MRAG Ltd, UK.

\* extent of impact of majority of stakeholders

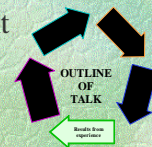
( ) - perception of future impact

In general, dependence of the fishers on the Park area was mixed, negative perceptions outweighed positives and perceived benefits generally low. In at least two sites there was a perception that benefits didn't compensate costs and in these sites there was also a perception (of both users and MPA staff) that compliance was not good. Hol Chan is an important example as it was an exception to these general trends, and also shows that compliance can be achieved even with presence of negative impacts. The next slide looks at the possible facilitating factors in achieving positive impacts and/or compliance.

## Facilitating factors in fishers' agreement

Case Study	Zoning	Fishers involved in making regulations/ legitimacy	Strong <i>local</i> organisations representing fisher interests	Alternative options (a) or fishing areas b)	Continuous dialogue & education	
HCMR	✓	✓	✓	✓ a,b	✓ (originally)	H
NMP	✓	✓	x	x	✓	M
PALNSP	x	x	x	✓ b	x	L/M
GRMR	✓	x?	x	✓ b	x	L/ M

- Zoning/ alternative fishing areas not enough
- Fishers involvement in rules (or not) appeared to make significant difference to perceptions



Letters on the right side represent perceptions of the effectiveness of enforcement (fishers & MPA staff): H (high); M (moderate); L (low).


Results show that the most common management measure to address fishers' needs (zoning) is not necessarily enough. Whilst this occurred at three sites, only at one (Hol Chan) did the fishers have a high level of acceptance for the regulations. Having alternative and equally good fishing areas outside the Park (such as at PALNSP) was also not enough to achieve full acceptance. What did appear to make a significant difference to fisher's perceptions (seen at Hol Chan and in certain areas of the Negril Marine Park (nursing areas)) was fishers' involvement in crafting the regulations. This appeared to greatly increase the perceived *legitimacy* of regulations, whilst absence of fisher involvement had the opposite effect. Perceived legitimacy of regulations appeared to be an issue for the fishers alongside whether the regulations would have beneficial impacts.

Finally, fisher's levels of acceptance were positively correlated, unsurprisingly, with perceived effectiveness of enforcement. In the case of nursing areas in the Negril Marine Park, fishers were involved in monitoring and enforcing regulations themselves, greatly decreasing the number of rule infractions.

## Benefits from tourism

	Benefits to tourist industry	Any constraints?		
		Employment in tourism sector & 2 <sup>o</sup> industry	Market for goods	Self employment
PALNSP	YES	Eligibility Low wages In-migration Language	?	<b>All-inclusive hotels</b> Permits (eligibility) License fees
NMP	YES	In-migration	Little market for fish Market for organic produce not established	Permit fees & license fees
HCMR	YES	Lack experience Language	X	Licenses Examination (tour guide)

- Beyond control of MPA management & lack of mandate
- Lack of integrated policy from higher levels



All those interviewed believed that the presence of the Park was, or in the future would be, a benefit to tourism (first column) though the extent to which this was the case varied. At one extreme (e.g. Hol Chan) the reserve was one of the principal tourist attractions of the area, bringing the tourists to it. At the other end (NMP, PALNSP) the tourists came anyway but having the Park would enhance the area for tourism (keep beaches clean, maintain reef status).

Constraints for poorer groups entering or benefiting from the tourism industry were quite diverse including access to credit, a market for goods or a market for services. All inclusive hotels, were a particular problem and, in PALNSP, where these hotels were all that existed and were generally run by expatriates, the problem for local communities, poor or otherwise to significantly benefit from tourism was huge. In migration was also a serious problem here as it was in Negril. One study conducted in Negril found that in 7 hotels in the Environmental Protection Area, only 3% of employees were locals, CARECO (2001).

No MPA case study site was actively addressing these problems and many, anyway, were beyond their control/mandate. It was in this area more than others so far mentioned that the absence of integrated coastal zone management (or at least initiatives requiring action from a higher policy level) were seen as fundamental constraints. There may however be opportunities on a smaller, more informal scale (through links with many hoteliers/water sports industry, links with community development organisations and others, credit schemes, improving marketing skills).

## Improved environment

- No data on health & safety
- Glovers & Hol Chan off-shore. (limited recreation)
- Recreational use hampered in PALNSP
  - Regulations banning cook outs
  - Hotel ‘take over’ of beaches
    - Regulations without consultation
    - Lack of communication & enforcement of regulations
    - Policy of elite tourism

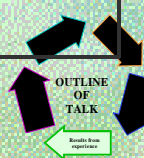


Given lack of data on health and safety impacts, and lack of time, this subject was not investigated in much detail. Regarding recreation activities of the poorer groups (and in both Parks with beaches these were considered important to poorer groups), in PALNSP regulations and attitudes of hoteliers were hampering the activities of local communities who felt they had lost ownership of their beaches. This did cause an additional level of resentment.

A comment made in the discussion was that many Haitians (whom the talk suggested had been displaced) had not been in the country that long and therefore could not have been displaced (as they would never have had these rights). It is felt that this might be true for some, but by no means all. Firstly there are many Haitians who had been there prior to the Parks formation (early 1990's). Secondly, active management hadn't really started until 1998, and therefore even those who had been in the country 4-5 years would have seen an impact in their traditional use.

## Summary. How well poverty addressed?

	Community Empowerment	Alternative options	Fishing based	Tourism based	Natural environment
Princess Alexandra	☹️	☹️		☹️	☹️
Hol Chan	😊 ☹️		😊	😊	
Glovers Reef	☹️	☹️	☹️		
Negril	😊		😊 ☹️	☹️	



OUTLINE OF TALK  
Benefits from experience

This slide shows a (simplified) overview of the Parks progress in impacting beneficially on poorer groups living in, or adjacent to, the Park. This summarises ideas presented in the last few slides.

Regarding the key – no face indicates that there was neither a positive nor negative impact. Two contradictory faces means that there were different views, either ‘now’ compared to the ‘past’ or just different views now. Smaller faces indicate a lesser overall impact. In some cases, the *lack* of action on the part of the Park has led to the negative impacts portrayed here.

Generally, there is still much room for improvement in all areas, and in all Parks.

## Linkages to performance

	Smiles ☺ Frowns ☹	Ecological Status	Users' perception	Management (Anderson)
HCMR	40 % ? 10%	Fishery – positive Reef - positive	Fishery -Positive though localised / not substantial	High
NMP	30% 30%	Fishery – positive in some areas Reef – Mixed. Some evidence that inside no different than outside	Fishery – positive in nursing areas, negative elsewhere Reef - mixed	High
GRMR	0% 63%	Evidence very mixed	Fishery – increased in conservation zone Mixed elsewhere	Moderate
PALNSP	0% 80%	Fishery – unknown Reef – some evidence worse inside than outside	Unknown	Moderate/ High

Management category in final column is as defined by Anderson *et al* 2002. With the exception of Hol Chan where all evidence appears positive, the scientific evidence for ecological status is quite mixed and therefore is not done full justice here. See Garaway & Esteban (2002) for a short review of current evidence, including that by O'Sullivan (2002) and Cummings (2002), two studies partly funded by this project (DfID R7976).

No causal links are posited here (as it is recognised that there are many potential causal factors influencing performance). However there may be an argument to show that level of benefits, and user actions (e.g. levels of compliance etc) presented here have played a role in ecological impact and this is being investigated further.

It was commented on in discussions after, that in the case of Princess Alexandra, displaying information in this way didn't allow for the very different circumstances that the Park was in now – (rapidly increasing population due to tourism and decrease in fishing effort) – that could also explain ecological changes.

## Recap on potential strategies

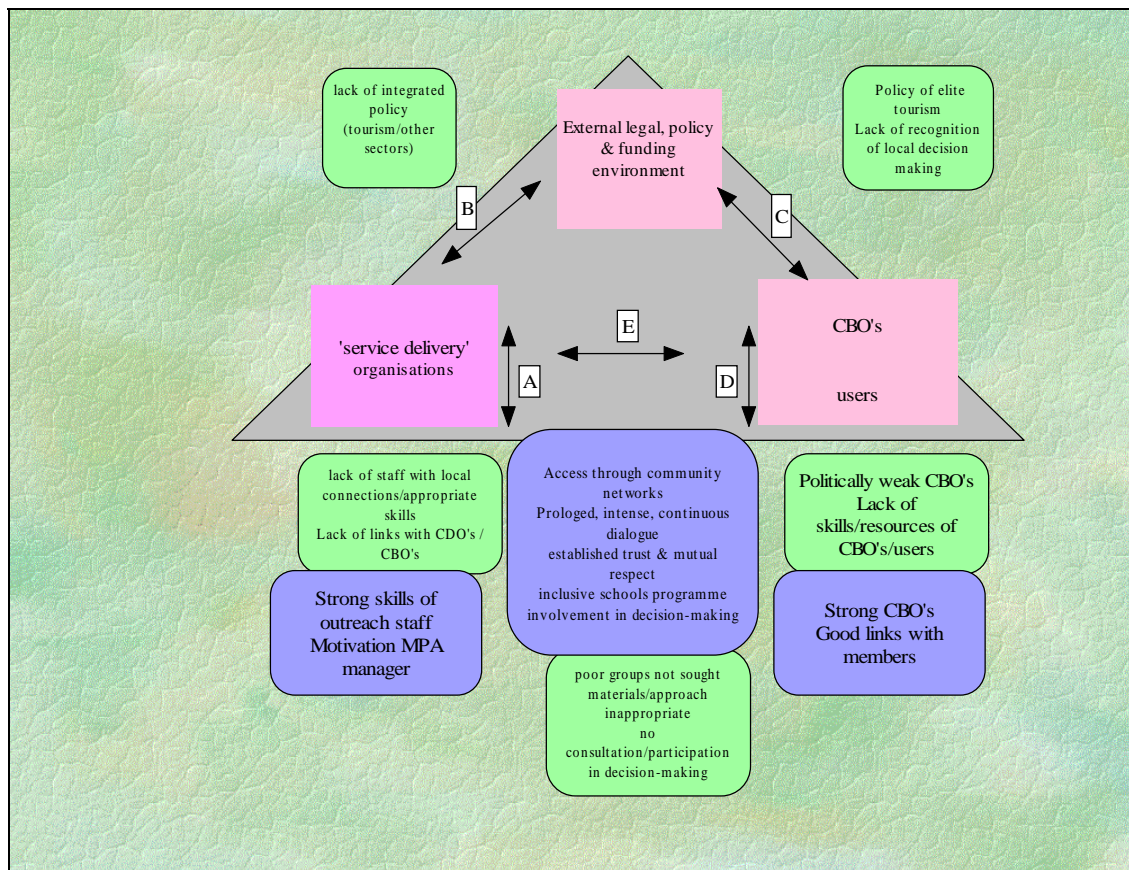
- Community empowerment
- Co-management
- Providing alternatives in cases where change is required
- Increasing access to existing opportunities, particularly tourism



In these case studies, first two strategies, whilst problematic, have been more successful than the latter two so far.

Having said this, co-management may be an important step forward but given characteristics of these groups can lead to them being 'invisible' the needs of poor can still be missed even when management involves local communities.

## Slide 23



This slide shows where current constraints and opportunities lie in improving the livelihoods of the poor through the strategies mentioned in the previous slide.

The triangle represents the key 'bodies' or 'areas' and relationships between them that effect the delivery and impact of MPA management on local communities (in this case the poorest). % relationships have been identified. Those:

- Within MPA 'service delivery' organisations (e.g. between senior managers and front line staff)
- Between the policy, legal & funding environment and MPA 'service delivery' organisations
- Between the wider policy & legal environment and local users (both organisations & individuals)
- Between individuals and the CBO's that are supposed to represent them
- Between the MPA service delivery organisations and community based organisations.

This representation is based on a diagram presented in a draft version of Hobley 2001.

The blue squares represent opportunities in those relationships, identified through this case study research. The green squares represent constraints in those relationships, identified through this case study research. As can be seen there are opportunities and constraints in all areas and relationships.

Poverty a factor that, at very least, exacerbates management performance

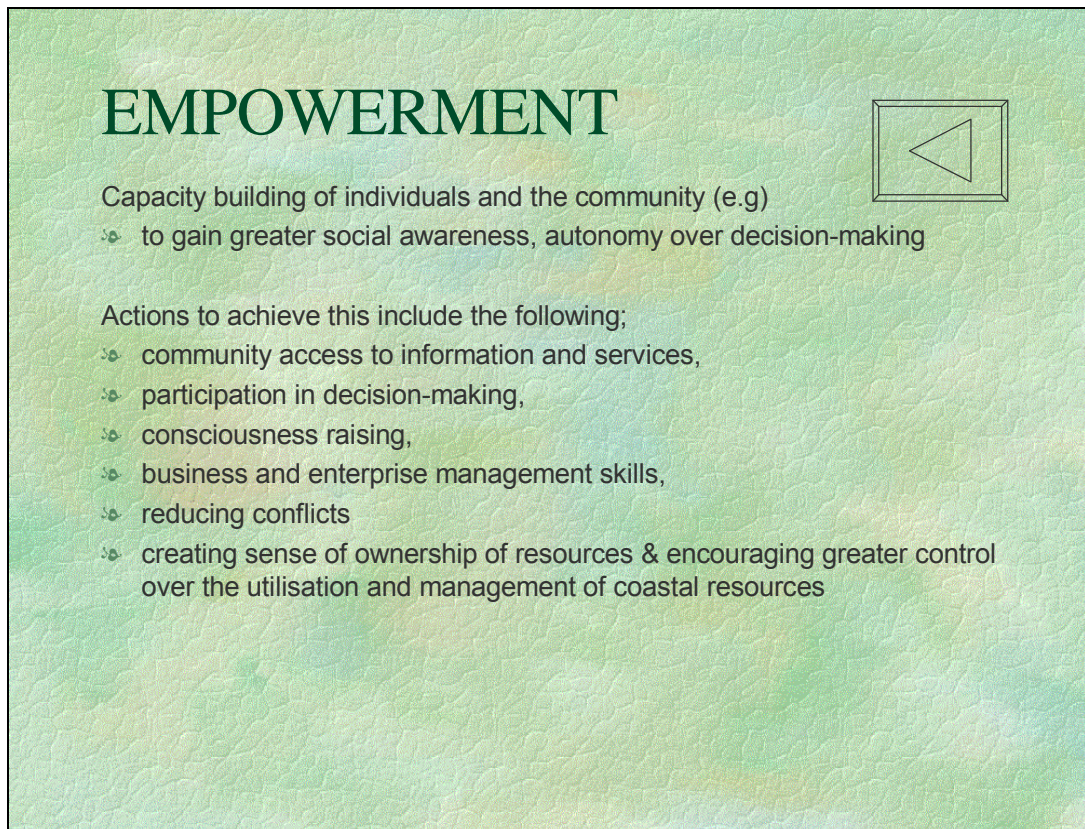
Still a lot to do to address needs of poorer groups

Areas for improvement in all areas and relationships that make up MPA management

- a role for all involved in MPA management

THE END !

Slide 25



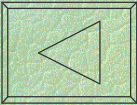
# EMPOWERMENT

Capacity building of individuals and the community (e.g)

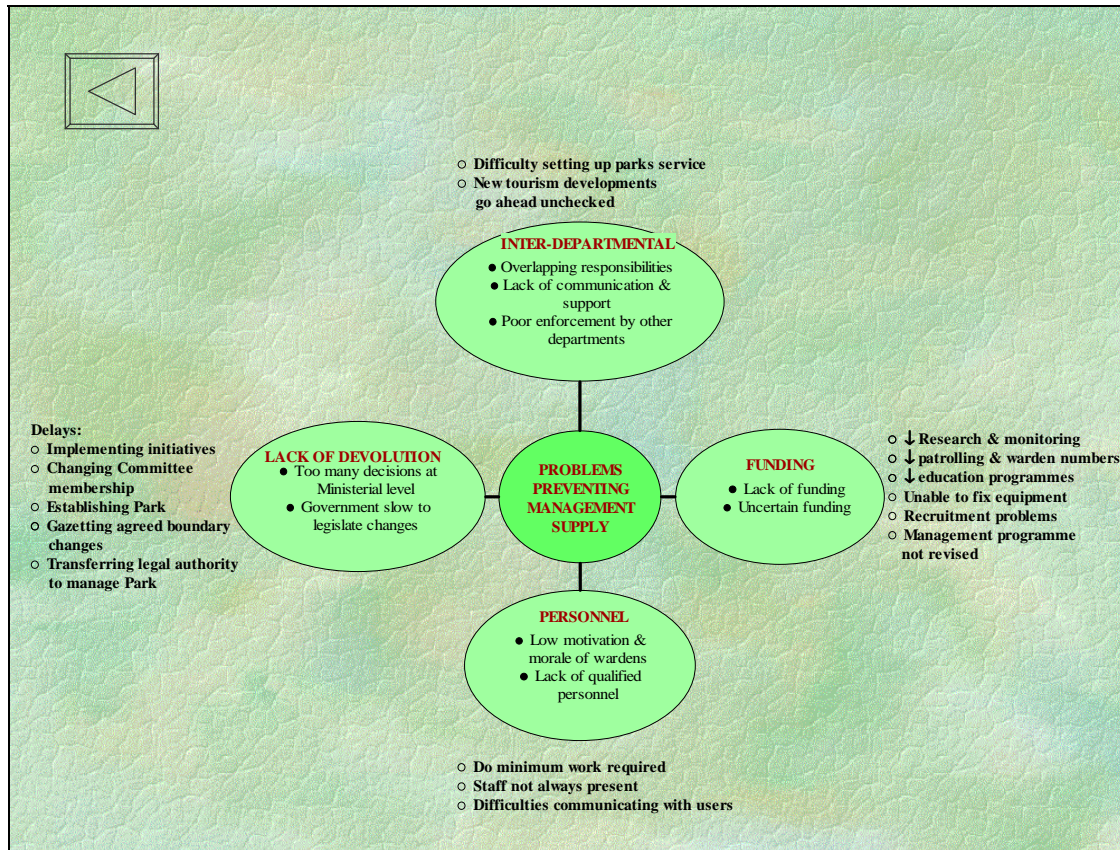
- to gain greater social awareness, autonomy over decision-making

Actions to achieve this include the following;

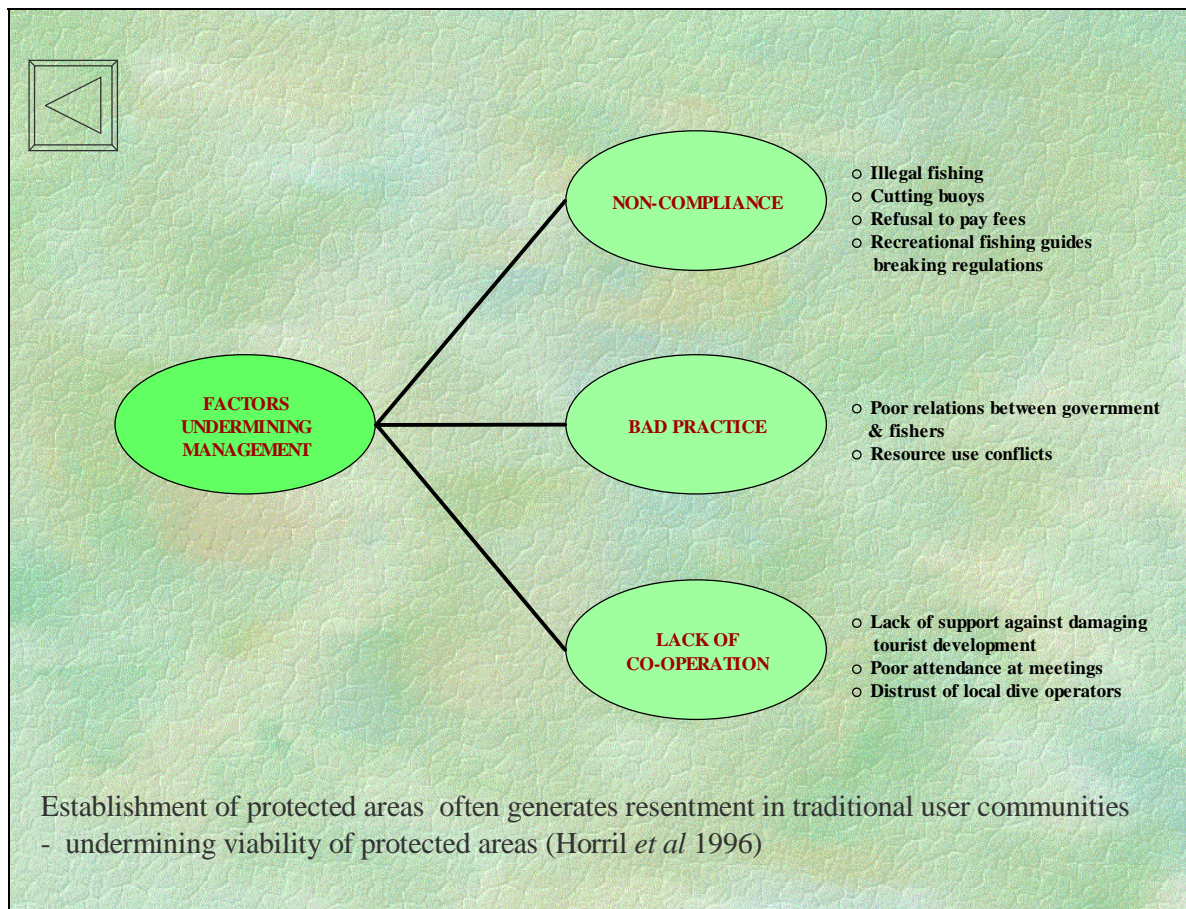
- community access to information and services,
- participation in decision-making,
- consciousness raising,
- business and enterprise management skills,
- reducing conflicts
- creating sense of ownership of resources & encouraging greater control over the utilisation and management of coastal resources



An explanation of what is meant by 'empowerment' in this presentation.



The constraints in the green circles and their consequences (written outside the circles) were obtained from interviews with MPA staff and any other organisations involved in the management of the case study MPA's.



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