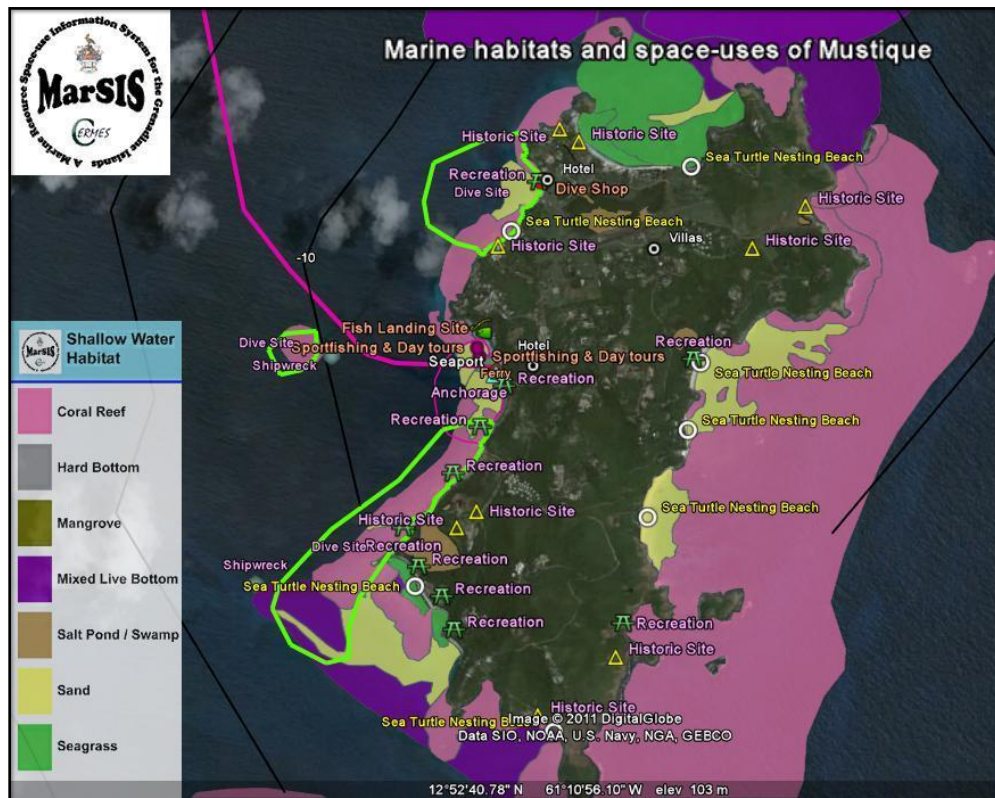


**Report of session on *Marine spatial planning in small islands and other developing States: practices and prospects* held on 16 May 2011 at the 2nd International Marine Conservation Congress, Victoria, British Columbia, Canada**

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## **1 BACKGROUND**

Marine spatial planning (MSP) has emerged as a highly promoted approach to implementing integrated management of coastal and ocean areas. It is linked to ecosystem-based management (EBM), the ecosystem approach to fisheries (EAF), geographic information systems (GIS), marine protected areas (MPAs) and more. Although MSP has gained global attention, its use appears to be less prominent in small island developing states (SIDS) and other developing countries than in developed countries.

There could be several reasons for this, ranging from serious problems that constrain MSP, to less sharing of MSP experiences in tropical locations. Whatever the reason, if we wish to make MSP matter in SIDS and other developing countries, and to know whether MSP really does provide a new window of opportunity, then more information must be exchanged amongst interested parties on practices, problems and prospects of MSP. The 2nd International Marine Conservation Congress (IMCC2) held 14-18 May 2011 in Victoria, British Columbia, Canada, offered an occasion for examining these aspects of MSP and more with a diverse set of international presenters and participants.

## **2 ORGANISATION**

The session on *Marine spatial planning in small islands and other developing States: practices and prospects* was held at lunch time on 16 May 2011 at IMCC2. The session conveners were Patrick McConney and Ratana Chuenpagdee. They sought to assemble a group of speakers who could share MSP experience from practical to policy levels drawing upon several regions of the world. Together with audience participants they would be able to assess the practices, problems and prospects in SIDS and other developing countries. The session programme with information on the topics and speakers is summarized in the session flyer reproduced in Appendix 1.

Some speakers had hands on experience of establishing MSP systems from scratch in situations of limited data and local capacity. Others had advised developing countries on marine policy and are involved in building capacity to use marine science. Their places of work ranged from Asia-Pacific to the Caribbean, and many places in between, providing opportunity for comparison and contrast. The ultimate aim of the session was to learn lessons from experience that could enrich interdisciplinary understanding of MSP and the practical aspects of its application in SIDS and other developing countries.

The next section contains extended abstracts of the presentations followed by brief sections on discussion and references. Appendices contain the session programme and slide presentations.

## **3 PRESENTATIONS**

### **3.1 Welcome and introductions -- P. McConney and R. Chuenpagdee**

With just under two hours allocated to the session, the co-organisers provided only a very brief welcome and introduction to the topic as outlined in McConney's opening slides (Appendix 2). Invited speakers were asked to introduce themselves as they rose to deliver their presentations. Members of the audience of about twenty participants were invited to identify themselves as they made interventions following presentations and during the general discussion at the end. About five minutes for questions were available after talks of about ten minutes each and fifteen at the

end of all for general discussion. An electronic summary of proceedings freely available on the internet was the main product of the session along with possible networking opportunities.

### **3.2 Concepts and concerns in marine spatial planning -- Patrick McConney**

Marine spatial planning (MSP) is the public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic, and social objectives that are usually specified through a political process (Ehler and Douvère 2006). It is also seen as a practical, operational approach to implement rather vague notions of marine ecosystem-based management (Ehler and Douvère 2010). These authors also provide a step-by-step approach to the development and implementation of MSP that recognizes the need for non-linear participatory processes as key elements of planning (Ehler and Douvère 2009).

Agardy and others (2011) suggest five elements of MSP in the context of MPAs and regional ocean zoning. Indeed MSP is so often associated with MPAs and zoning such that distinguishing the differences becomes difficult unless clear and precise concepts and language are used. Other groups (e.g. The Nature Conservancy 2009) have offered ‘best practices’ for MSP. Since the TNC advice is rather specific to that organisation’s approach to MSP one wonders the extent to which it is applicable to a wide range of situations and levels of development, availability of data, stakeholder capacities and other key variables. A larger question is whether MSP is yet sufficiently developed as to be talking of best practices compared to more modest guidelines.

1. authoritative
2. participatory
3. ecosystem-based
4. integrated
5. future-oriented
6. adaptive

(Ehler and Douvère 2010)

There is also a recent publication on the characteristics of effective MSP, but based mainly upon experiences in developed countries (Ehler and Douvère 2010). Can this set of six characteristics be accepted without further investigation? Are the characteristics the same in SIDS and other developing countries? If different, what are the differences, and consequences of those differences for practice? There has been insufficient debate in the literature about what makes MSP successful in different places under different circumstances.

Although there have been significant advances in thinking about MSP and its relationships with other approaches, there still exist a host of issues and concerns about the practical aspects of its application especially in SIDS and other developing countries.

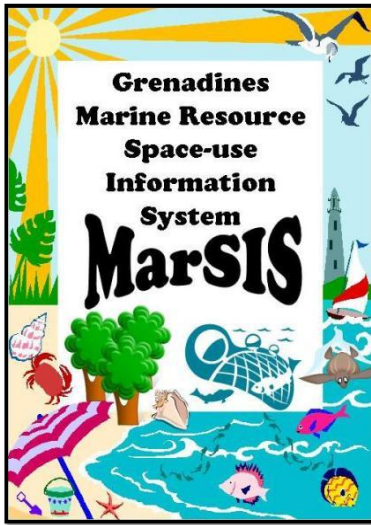
### **3.3 Developing a participatory geospatial framework to support transboundary marine spatial planning for the Grenadine Islands -- Kimberly Baldwin**

Recently marine spatial planning and management (MSPM) has emerged as a framework which may improve decision making as it has the potential to deliver an ecosystem-based approach to managing human activities in the marine environment. The recognition of the need to integrate, analyse and spatially understand a variety of types of information relating to the marine environment and the interactions among them, has increased reliance on the use of geographic information systems (GIS) within MSPM.

A further tenet of MSPM is that participation is central to the process, as it can improve stakeholder understanding and involvement in decision-making by providing a transparent framework within which to accommodate a wide diversity of multi-disciplinary information in a coordinated fashion. Moreover the application of more inclusive inquiry using multiple sources

of information is recognised as a need within marine resource management to contend with complex socio-ecological problems.

Small island developing states (SIDS) face a number of challenges which may hinder the application of MSPM. These include limited: finances, technology and human capacity; appropriately scaled baseline information; integrated management amongst sectors, nations and knowledge systems; as well as stakeholder legitimacy to participate in interactive governance initiatives. A participatory geographical information system (PGIS) approach was tested as a mechanism to help overcome some of the challenges faced by many SIDS.



To this end, PGIS was employed as a conceptual framework to integrate conventional biophysical and management information together with information derived from the practical knowledge of marine resource users to aid an ecosystem approach to transboundary MSPM decision-making in the Grenadines Islands. Stakeholders were engaged in the development of the Grenadines *Marine Resource and Space-use Information System* (MarSIS) in terms of both the research approach (process) and the final geodatabase (product). Participatory processes were utilised to: (a) obtain and include the best available information from all possible sources; (b) promote stakeholder ownership and use of the information produced; and (c) increase inter- and intra-stakeholder understanding of interdisciplinary marine resource information.

The application of this approach was found to allow for the production of locally appropriate and functional information as well as be a practical mechanism to aid dimensions of interactive governance such as partnership, inclusiveness, appropriateness, ownership, equitable access and transparency within a marine spatial planning context. Recently a local NGO, Sustainable Grenadines Inc. (SusGren) has been awarded funding from the National Ocean and Atmospheric Administration (NOAA), the Global Environment Facility Small Grants Programme (GEF SGP) and The Nature Conservancy (TNC) to use the MarSIS to carry out a marine spatial planning project on the transboundary Grenada Bank, entitled *Developing a framework for a comprehensive marine multi-use zoning plan for the Grenadine Islands*.

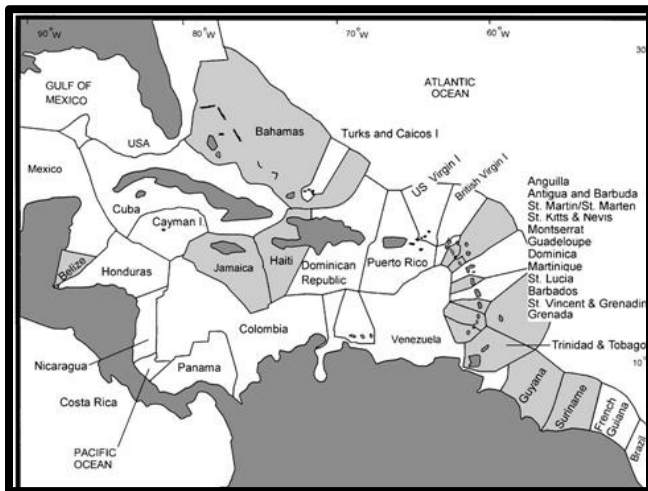
Despite the initial successes of the MarSIS, many questions relevant to SIDS remain. These include: who is driving the MSPM process; is transboundary cooperation and management feasible; how will the range of stakeholders be involved in the MSP and zoning plan process; and ultimately will this NGO-driven MSPM process result in the implementation of a transboundary zoning plan?

### **3.4 The challenges of MSP in the governance of living marine resources in the Caribbean -- Milton Haughton and Erin Mutrie**

The protection, conservation and sustainable use of the living marine resources of the Caribbean are becoming increasingly important not only to improve the quality of life of key stakeholders but also to achieve peace, prosperity, security and social and economic stability. In their quest for sustainable development and effective conservation and management of the living marine

resources of the Caribbean Sea, Caribbean States are increasingly embracing ecosystem-based management approaches. Associated with this is a growing interest in the utilization of spatial information in the planning and decision-making arising from advances in technologies such as geographic information systems. This presentation considers the application of marine spatial planning (MSP) as a tool for more effective conservation and management and long-term sustainability of the living marine resources of the Caribbean Sea.

The attractiveness of MSP as a tool to facilitate the achievement of long-term sustainable use and conservation of the living marine resources of the Caribbean Sea is demonstrated in the recent writings of scholars in coastal and marine resource management and related disciplines. It has been described variously as: a mechanism for strategic and integrated plan-based approach for marine management (Douvere 2008); a promising method of ecosystem-based management and sustainable development (Ogden 2010); a framework to improve coordination, reduce sectoral fragmentation, reconcile competing interests, and address policy duplication (Ritchie and Ellis 2010); a tool to resolve actual or potential conflict, achieve ecosystem-based management and facilitate sustainable management (Maes 2008); and a tool that produces maps to track ocean use and document existing habitat and natural resources (Spalding 2011).



Whatever its virtue, successful implementation of MSP in the Caribbean is likely to encounter numerous challenges. Much more work is needed to promote its application and test its suitability in the region. The major challenges may not be intrinsic to MSP as a tool per se, but rather the complex ecological and geo-political characteristics of the region and lack of political will. There are also limitations in the existing governance frameworks and limitation in basic data and information needed to apply MSP. The levels of interest and perceptions of stakeholders regarding

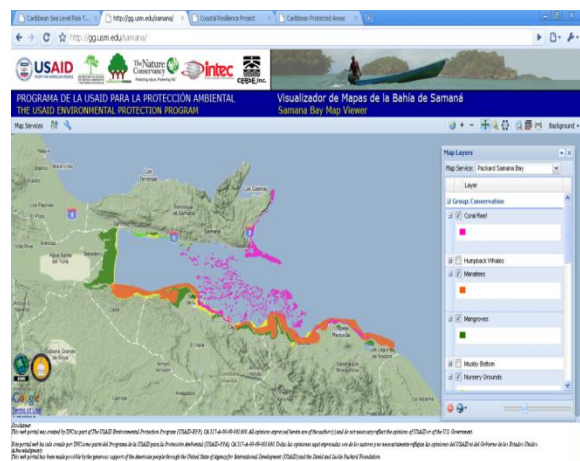
conservation and resource management generally and the usefulness of MSP in particular, are linked to limitations in the human, institutional and financial resources needed to develop and sustain its application.

The best approach may be a gradual introduction through pilot projects to adapt MSP to local circumstances and demonstrate its practical benefits to policy-makers and other stakeholders at various scales. At the same time efforts should be made to engage stakeholders in a dialogue on conservation of the living marine resources of the Caribbean Sea, strengthen the policy and legal frameworks, and human and institutional capacity for management and conservation of the living marine resources.

### 3.5 Marine zoning in the water: lessons from the field -- Vera Agostini

Marine zoning is quickly gaining visibility as a tool to help integrate management of different activities and support sustainable use of ocean resources. The recent priority that governments are placing on marine spatial planning (MSP) is providing a spotlight on marine zoning as well as a fair bit of confusion as terminology is used interchangeably. Marine spatial planning and

ocean zoning have been the focus of a number of recent meetings, with reports and publications outlining best principles being produced. Work documenting implementation in the water remains limited and arguably necessary as we try and reconcile theory with practice, share lessons learned and provide guidance for future zoning processes to come.



Here I refer to marine zoning as one of the possible outcomes of an MSP process. I outline experiences and lessons learned at three tropical sites: Raja Ampat (Indonesia), Samana Bay (Dominican Republic, Indonesia) and Saint Kitts and Nevis (Caribbean). While the scale of implementation and cultural context were different, a number of common threads emerged. All sites required a significant focus on integrating a diverse set of information; doing so in “data poor” systems required application of innovative tools with a strong focus on participatory approaches. Providing effective

decision support that would ultimately help lead to sustainable ocean management was a central theme of all these efforts. A variety of approaches was used to engage stakeholders and build in-country capacity. Finally links between science and policy were prioritized and addressed at each site.

A number of common challenges were identified. These include: collecting and integrating information that truly addresses multiple objectives; maintaining a dynamic information base; representing future growth (and climate change); addressing scale issues (e.g. coastal versus offshore, biodiversity versus use information); facilitating stakeholder participation in a multi-use world; implementing functional governance mechanisms. As with a number of other marine zoning efforts around the world the remaining challenge is moving beyond the planning phase to the implementation phase. All of the efforts outlined during this presentation have provided a solid platform for sustainable ocean management, but it will take a concerted effort on the part of government, user groups, NGOs, and the international community to support future implementation of marine zoning at these sites.

### **3.6 Marine spatial planning in Asia: implications for application -- Robert S. Pomeroy**

The oceans of Asia are among the most productive and biologically diverse in the world. As a consequence, they are both critical for economic and food security and as a global conservation priority. Over the past decades, the demand for ocean space for multiple uses has increased greatly through expansion of traditional uses (i.e. fisheries, marine transportation) and new uses (i.e. energy development, aquaculture). The ecological transition facing the region’s ocean resources is happening rapidly, and the effects are far-reaching. The resources; the people who use and consume them; production practices; management institutions; the environment that supports them; and the local, national and international legal instruments governing their ownership and use will all be affected. The transition in ocean environments is especially apparent in developing countries in Asia where low-income people will be hardest hit when their fragile purchasing power and often tenuous access to the means and technology for production are further challenged.

Competition and conflict for space and resources characterizes the oceans of Asia. Because of some of the highest rates of population growth and increasing food and development needs, these waters are now experiencing increased levels of conflict and social unrest as a result of differing and uneven levels of economic development, resource use, and technological change between urban and rural areas within a country. Economic and technological changes in the last 15 years have caused serious discrepancies in access to ocean resources in the region.

Increased activity in the ocean environment has led to two important types of conflict in the region: (1) conflicts among human uses (user-user conflicts); and (2) conflicts between human uses and the marine environment (user-environment conflicts). These conflicts weaken the ability of the ocean to provide the necessary ecosystem services upon which humans and all other life depend.

### A Range of Paradigms

#### Challenges

- Capacity to implement is lacking
- Resources to implement over other paradigms
- Must meet a clearly defined need and purpose
- Issue of scale and appropriateness of response
- Costs
- Simple versus complex plan
- Inconsistencies or lack of local and national policies and laws to support MSP
- Institutional mechanisms

A number of ocean and coastal management paradigms have been proposed and utilized in the region through the decades to address this increasing competition and conflict including conventional fisheries management, ecosystem approach to fisheries management (EAFM), integrated coastal management (ICM), marine protected areas (MPAs), regional ocean governance, integrated ocean and coastal management, and ecosystem-based management, to name a few. These paradigms have had mixed results, in many cases due to single sector management approaches.

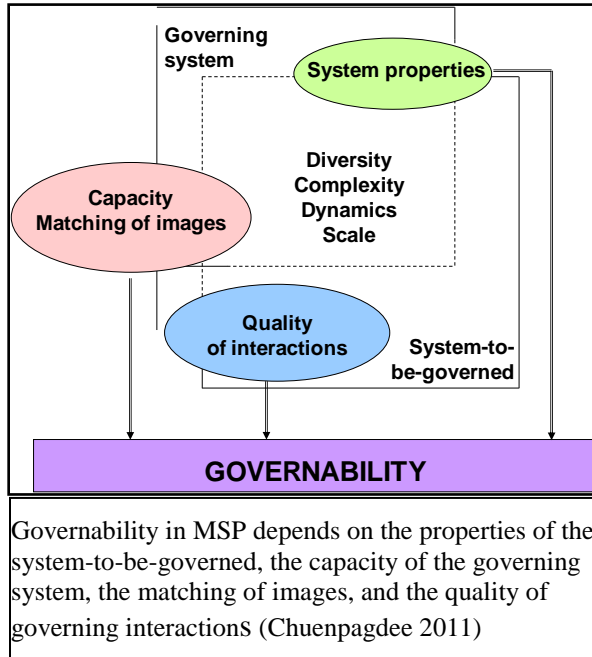
Recently a new paradigm has been introduced to influence the location of human activities in space and time, marine spatial planning (MSP). A number of countries within the Asian region have begun to organize uses of the ocean in order to make them more compatible, or at least to reduce the impact on one another.

The purpose of this paper is to discuss the implications and practical application of marine spatial planning as an ocean resource management paradigm in Asia. Where will MSP fit in the range of management paradigms? Where and how can it be best utilized? How will it be implemented? Examples of use of MSP and marine zoning will be presented and discussed.

### 3.7 Back to basics in marine governance -- Ratana Chuenpagdee

The acronyms representing various approaches related to marine governance may sound like an alphabet soup to people unfamiliar with the discourse. MSY, ICM, EBM, ITQs, CBM and MPAs have all been promoted, and heavily debated. A shift in focus from fisheries-based management to integrative and system-based approaches to management results in the popularization of concepts like integrated coastal management (ICM) and ecosystem-based management (EBM), over the traditional ones like maximum sustainable yield (MSY). Others like individual transferable quotas (ITQs), community-based management (CBM), and marine protected areas (MPAs), are continuously debated for their utility, practicality, efficiency and contribution to sustainability.





The emergence of marine spatial planning (MSP) brings renewed interests in place-based ocean zoning tools. But before we jump onto the MSP bandwagon, we may want to ask some critical questions about whether it differs, or is better, than the current approaches, and whether it is practical and implementable.

I argue for an examination of MSP from the interactive governance perspective (Kooiman *et al.*, 2005), which suggests that there are certain characteristics of the marine ecosystems and the capability of the governing system that may inhibit or foster the MSP process. The quality of interactions between the system-to-be-governed and the governing system also determines MSP ‘governability’ (Chuenpagdee 2011).

We further add that the governability of MSP depends on the images that stakeholders have

about what it is and what it does, and the degree to which these images are compatible among stakeholders. Finally, we posit that an examination of MSP images is required at the ‘step zero,’ i.e., either before or very early on in the planning process.

In addition to images, the interactive governance refers to other basic elements such as principles and values as part of the meta-order governance. They need to be properly understood and formulated to guide the MSP process. Here, we theorize that the underlying values and principles that people hold about marine ecosystems and about the governing system provide the foundation for image formation about MSP. To understand images, we raise some questions related to the system-to-be-governed, the governing system and the governing interactions as follows.

Stakeholders’ images about the system-to-be-governed:

- *Ecosystem*: What do stakeholders think about the marine environment?
- *Livelihoods*: What do stakeholders think about livelihoods opportunities and social wellbeing?
- *Power*: What do stakeholders think about power relations and sharing?

Stakeholders’ images about the governing system:

- *Values*: What do stakeholders think about the significance of MSP on conservation, resource use, access and other stated goals?
- *Norms*: What do stakeholders think about the rules and regulations associated with MSP?
- *Principles*: What do stakeholders think about the underlying considerations in the design and the process of MSP?

Stakeholders' images about the governing interactions:

- *Relevance*: What do stakeholders think about the meaning of MSP (is it worth doing)?
- *Effectiveness*: What do stakeholders think about the contribution of MSP (is it going to work)?
- *Equity*: What do stakeholders think about the distribution of impacts of MSP (who is going to benefit from it)?

Like MPAs and other tools, MSP is not a fix-all, is not applicable to all, and is not without governability problems. Once images are explicit, it may suggest that MSP is not going to help improve the situation but may fuel more stakeholder conflict. This knowledge will be useful if the decision is to go ahead with MSP. At the minimum, it will serve warnings to help avoid major road blocks. In conclusion, knowing what stakeholders think about MSP, encouraging interactions among stakeholders in determining values, norms and principles underlying MSP processes, and recognizing that MSP is not only about solving problems, but also about creating opportunities are the basics for marine governance.

#### 4 DISCUSSION



At various times during the lunch time session some 15 to 20 participants were present. Each speaker was given a few minutes for questions. The general wrap-up discussion followed directly after Ratana Chuenpagdee who led this discussion, taking over from Patrick McConney who had chaired the presentations and audience interaction after each one. This section summarises all discussion.

There were no questions after the introductory presentation, but after Kim Baldwin there was concern about who was driving the MSP process in the Grenadines. Although an NGO, SusGren, is nominally leading the process, the governments of Grenada and St Vincent and the Grenadines play major supporting roles, separately. A concern is that the governments do not collaborate much despite sharing the small archipelago. Much more transboundary cooperation is needed, as well as more grassroots input to build the process from the ground up and thus address the lack of legitimacy of the current process that is perceived by some.

However, another question is if the governments did not support it, would MarSIS have taken off? The audience seemed to think that waiting for governments to take action is often futile. Governments have to be involved in a MSP process (particularly in the implementation phase) but they do not need to lead the initiative. Implementation can also be done by an entity that is perceived as being neutral, like a university, if its capacity fits the scope of the MSP process.

An intervener remarked that globally there are more initiatives to integrate science with local knowledge. She wondered whether science was presented to the stakeholders in MarSIS and, if so, what was the reaction/response? Kim replied that little science was available except aspects such as turtle nesting sites. However, what was available was presented. More important, also presented to stakeholders, from resource user to policy level, were the MarSIS data and PGIS results. It was realised that stakeholders have considerable local knowledge and can build social capital through social learning opportunities such as PGIS afforded.

Another question was on the composition of the SusGren NGO. Kim explained SusGren's origin and current structure. Stakeholders are genuinely engaged through the NGO and are not co-opted or coerced. A participant observed that putting PGIS results into use, within or without a MSP framework, usually requires engaging key individuals or change agents and there was concern as to whether the NGO could or was playing multiple roles. Kim pointed out that in the Grenadines the wearing of multiple hats is normal, as in most SIDS, and that the Grenadines people like the mix of stakeholders currently involved. Another observation was that implementation should be built into the marine spatial planning process itself rather than await a second phase to begin.

After Milton Haughton, a participant posed the question: "given the challenges in the Caribbean, what is a realistic time frame for implementing MSP at the regional level there?" Milton pointed out that the MSP process is iterative. He expected it to take several years since much ground work is still required and learning by doing is the preferred approach. He also thought that there will be more and faster progress at national and local levels than at the much more complex regional level.

The audience also wanted to know what the role of the Caribbean Regional Fisheries Mechanism (CRFM) was in advancing MSP. A major CRFM recent development, the CARICOM Common Fisheries Policy, was said to contain a commitment in treaty form to EBM/EAF and be the main guiding instrument for the role of the CRFM in assisting Member States. There is agreement by technical advisers that should encourage policy makers to also agree on the role of the CRFM.

After Vera spoke there were questions on the practical aspects of MSP such as: "after the Marxan with zones phase were the outputs compared to local knowledge mapping?" Vera replied that in St Kitts and Nevis the Marxan outputs were compared with local knowledge mapping. In Indonesia, Marxan was run again with local stakeholder input to meet their needs.



A participant asked whether the local knowledge variables should be included at the start of the Marxan process and was told not necessarily since the software is only a tool and the outputs always need to be tuned by local knowledge. This got into the realm of the compatibility and use of diverse data types in MSP, and the special challenges of blending or integrating science and local knowledge in an appropriate manner as various stages of the planning process.

Another participant asked about considering multiple objectives that are usually "underground"? By this she meant those involving thorny issues of governance that may not even be part of free and open discussion due to their sensitivity. It was clarified that the projects usually established governance institutions for their delivery in attempts to bring issues and competing or conflicting stakeholder objectives into the open. This prompted the follow-up query of whether there has been a review of the governance arrangements afterwards? In the projects presented there has been no formal measurement of post-project governance structures and performance. Indeed the projects involving zoning have been lucky to include governance given their natural science focus and limited resources.

It was pointed out that when MSP is implemented as a project, there may be serious limitations to sustainability due to lack of capacity to continue even if there is the political will and interest.

After Bob Pomeroy spoke the technical flavour of questioning resumed, including clarification of the difference between “real MSP” and zoning. Bob noted that the planning process in MSP goes beyond the technical planning most often associated with zoning alone. People also asked how different MSP was from the previous paradigms he had mentioned were introduced in Asia.

He explained that MSP is a planning process more than the implementation of a plan which is what ICZM is. ICZM is more geographically coastal and focused on coastal governance than MSP, but everywhere there is need more marine/coastal integration.

Part of the confusion is that different people have different working definitions of MSP and all of the other paradigms as well. Nomenclature changes are partly due to funders who insist on their preferred terminology even if a similar process with another name has been underway for some time. This adds to the confusion and multiple meanings that stakeholders find difficult.

A participant asked: “does the name really matter?” The opinion in the room was that it can matter, and there is need to consider local “translation” so the names and meanings of methods can be understood in local terms and reduce stakeholder confusion. It is also important to try harder to develop common approaches rather than make fine distinctions that emphasise trivial differences. But different people have different definitions, so it may not matter much at the end.

In the open discussion at the end, participants debated how we should approach MSP when there is often no effective land planning in SIDS and developing countries despite decades of projects and programmes? It was pointed out that marine resource dependency is often higher than terrestrial dependency in most SIDS and many coastal areas in all countries, so there should be incentives to plan for coastal and marine areas that outweigh the motivation for land use plans.

The statement was made that we cannot readily separate the land from the sea since the coast integrates, but policy makers are often unaware of the connectedness and linkages between land and sea. MSP assists good governance by increasing accountability and transparency such as concern decisions made in relation to the above linkages. This responsibility can rapidly improve political awareness of relationships and lead to better decision-making in MSP.

It was noted that many years of work have gone into MPAs in SIDS: should MSP build on this legacy or start afresh? Participants thought that it depended on the place and the stage that the planning is at. The answer was situation specific. However, since it was possible to connect stakeholders and resource users with MSP via MPAs one should not throw away MPA progress even if the plan was to broaden into more comprehensive MSP. MSP brings more stakeholders to the table than MPAs. Participants pointed out that there is often need for legal systems to support MSP, unlike MPAs for which legal provisions usually already exist.

The final and fundamental question was whether there are ‘best practices’ guides applicable to SIDS situations? Participants thought that best practices differed by location and situation, and that it was not possible at this time to offer such that adequately encompassed all SIDS and other developing countries. Several practical questions remained to be answered about MSP, and MSP approaches tested through learning by doing, before best practice guidelines could be issued with confidence. The problems of MSP are similar to several other approaches and its prospects are still to be determined.

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## 6 APPENDICES

### Appendix 1: Session programme

***Marine spatial planning in small islands and other developing States: practices and prospects  
Lunchtime (1215-1400) on Mon 16 May 2011***

**2<sup>nd</sup> International Marine Conservation Congress,  
14-18 May 2011, Victoria, British Columbia, Canada**

Time	Topics	Talkers
1215	<b>Welcome and introductions.</b> This session contributes to knowledge on the practical application of MSP in developing States, with special attention to SIDS. Presenters and other participants will talk on how to overcome MSP challenges and take full advantage of opportunities from an interdisciplinary perspective.	P. McConney and R. Chuenpagdee Co-conveners of this IMCC2 event. <i>See contact information below. We welcome queries and pre-listing of participants due to limit of 30 people.</i>
1220	<b>Concepts and concerns in marine spatial planning.</b> MSP is an old concept in a new package. It seems benign, but perhaps SIDS should be a little concerned about its application and outcomes. We explore some thoughts here that are developed further in this session's four case studies. The last talk provides some additional perspectives.	Patrick McConney, PhD Senior Lecturer Centre for Resource Management and Environmental Studies (CERMES) University of the West Indies (UWI) Cave Hill Campus, Barbados <a href="mailto:patrick.mcconney@cavehill.uwi.edu">patrick.mcconney@cavehill.uwi.edu</a>
1230	<b>Developing a participatory geospatial framework to support transboundary marine spatial planning for the Grenadine Islands.</b> This session will explore how the application of a PGIS approach can be of relevance for implementing an EBM approach and MSP, particularly in data-poor situations common to many SIDS.	Kimberly Baldwin PhD Candidate, MarSIS Project Centre for Resource Management and Environmental Studies (CERMES) University of the West Indies (UWI) Cave Hill Campus, Barbados <a href="mailto:baldwin.kimberly@gmail.com">baldwin.kimberly@gmail.com</a>
1245	<b>The challenges of MSP in the governance of living marine resources in the Caribbean.</b> In their quest for sustainable development and effective conservation and management of the living marine resources of the Caribbean Sea, states are increasingly embracing ecosystem based management. Associated with this is growing interest in using spatial information in planning and decision-making arising from advances in technologies such as GIS. This presentation critically considers the application of MSP as a tool for effective conservation and management of the living marine resources of the Caribbean Sea.	Milton Houghton Deputy Executive Director Caribbean Regional Fisheries Mechanism (CRFM) Secretariat Princess Margaret Drive Belize City, Belize, Central America <a href="mailto:miltonhaughton@hotmail.com">miltonhaughton@hotmail.com</a>

Time	Topics	Talkers
1300	<p><b>Marine zoning in the water: lessons from the field.</b></p> <p>This presentation will bring together key examples from projects focused on marine zoning that The Nature Conservancy has been implementing around the world. Important aspects of marine zoning processes ranging from decision support tools to participatory approaches will be discussed by way of examples mainly from the Caribbean and Indonesia.</p>	<p>Vera Agostini, PhD Senior Scientist Global Marine Initiative The Nature Conservancy 255 Alhambra Circle, Ste 312 Coral Gables, FL 33134 <a href="mailto:vagostini@tnc.org">vagostini@tnc.org</a></p>
1315	<p><b>Marine spatial planning in Asia: implications for application.</b> Many different marine resource management paradigms have been introduced and are being utilized in Asia from community-based management to integrated coastal management to ecosystem based fisheries management. These different paradigms are often confusing to resource managers. This paper will examine the implications and practical application of MSP in Asia. Where will MSP fit in this range of different management paradigms? How will it be implemented? How will it complement other existing paradigms?</p>	<p>Robert S. Pomeroy, PhD Professor Agricultural and Resource Economics Room 380, Marine Science Building University of Connecticut-Avery Point Groton, Connecticut, USA <a href="mailto:robert.pomeroy@uconn.edu">robert.pomeroy@uconn.edu</a></p>
1330	<p><b>Back to Basics in Marine Governance.</b> The various acronyms used in marine governance may sound like an alphabet soup to people unfamiliar with the discourse. MSY, ITQs, MPAs, CBM have all been promoted, and heavily debated. MSC now joins the rank, with MSP on its toe. Rather than trying to learn about these alphabets, we argue for going 'back to basics', i.e., examining what matters.</p>	<p>Ratana Chuenpagdee, PhD Canada Research Chair in Natural Resource Sustainability and Community Development, Department of Geography Memorial University of Newfoundland St. John's, Newfoundland, Canada <a href="mailto:ratanac@mun.ca">ratanac@mun.ca</a></p>
1345	<p>Questions to presenters and closing discussion on:</p> <ul style="list-style-type: none"> <li>• Does MSP present constraints and opportunities to SIDS that are different from other locations?</li> <li>• What has been the practical experience with developing and using MSP in these locations?</li> <li>• What are the likely prospects for MSP and why?</li> <li>• Where and what should MSP researchers and practitioners prioritise over the next 5 years?</li> </ul>	<p>All presenters and audience participants</p>

### Format

Presenters will speak for no more than 10 minutes with up to 5 minutes for presentation-specific questions. At the end they will form a panel and engage the audience in discussion to synthesise the main findings and lessons learned in terms of the three theme areas: practices, problems and prospects. The session output will be a CERMES Technical Report of proceedings published electronically and freely accessible on the CERMES, University of the West Indies Cave Hill Campus web site. Please join us.

## Appendix 2: Patrick McConney

### Marine spatial planning in small islands and other developing States: practices and prospects

#### Why are we here?

- MSP has gained global attention, but it appears to be less prominent in small island states developing states (SIDS), and other developing countries, than in many developed countries.
- Whatever the reason, if we wish to make MSP matter in SIDS and other developing countries, and to know whether MSP provides a new window of opportunity, then more information must be exchanged amongst interested parties on MSP practices, problems and prospects.

Topics	Talkers
Welcome and introductions	P. McConney and R. Chuenpagdee
Concepts and concerns in marine spatial planning	Patrick McConney
Developing a participatory geospatial framework to support transboundary marine spatial planning for the Grenadine Islands	Kimberly Baldwin
The challenges of MSP in the governance of living marine resources in the Caribbean	Milton Houghton
Marine zoning in the water: lessons from the field	Vera Agostini
Marine spatial planning in Asia: implications for application	Robert S. Pomeroy
Back to basics in marine governance	Retana Chuenpagdee
Closing discussion	All present

### Concepts and concerns in marine spatial planning

Patrick McConney

#### What are we talking about?

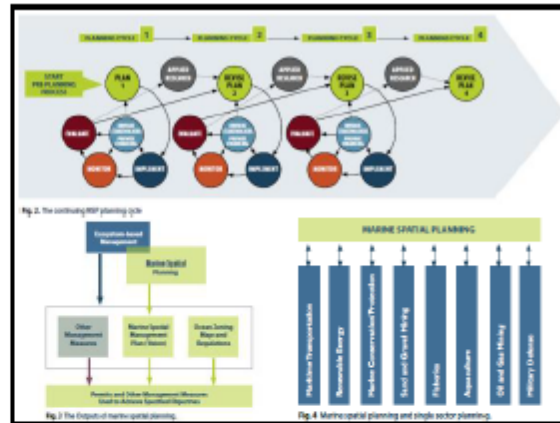
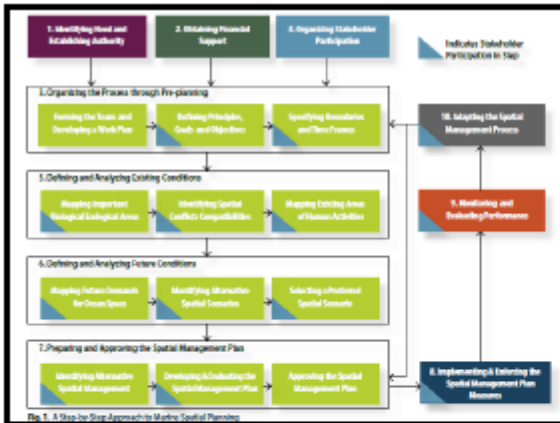
- Marine spatial planning (MSP) is the public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic, and social objectives that are usually specified through a political process (Ehler and Douvère 2006)
- A practical, operational approach to implement rather vague notions of marine ecosystem-based management (Ehler and Douvère 2010)

#### Step-by-step development and implementation of MSP

- (1) Identifying need and establishing authority
  - (2) Obtaining financial support
  - (3) Organizing the process through pre-planning
  - (4) Organizing stakeholder participation
  - (5) Defining and analyzing existing conditions
  - (6) Defining and analyzing future conditions
  - (7) Preparing and approving the spatial management plan
  - (8) Implementing and enforcing the spatial management plan
  - (9) Monitoring and evaluating performance
  - (10) Adapting the marine spatial management process
- (Ehler and Douvère 2009, step-by-step approach)

Not as linear  
as they look.  
Iterations and  
feedback rule.





### Five elements MSP should include?

1. identification of priority areas based on existing information
2. development of scenarios to help decision-makers weigh trade-offs
3. analysis and evaluation of legal-institutional frameworks and governance structures
4. creation of regional ocean zoning plans based on existing management, knowledge and marine uses
5. regional ocean zoning that links and strengthens all levels of management

(Agardy et al 2011, in the context of MPAs)

MSP is more than zoning, but closely connected. How is zoning practiced in SIDS or elsewhere?

### MSP practical best practices?

1. geographic planning boundaries
  2. planning scale and resolution
  3. data collection and management
  4. multi-objective planning including aims and outcomes
  5. interactive decision support
- (TNC 2009, areas of advice on key issues)

Are areas of focus for best practices the same in SIDS and all other developing countries?

### Characteristics of effective MSP?

1. authoritative
2. participatory
3. ecosystem-based
4. integrated
5. future-oriented
6. adaptive

(Ehler and Douvère 2010)

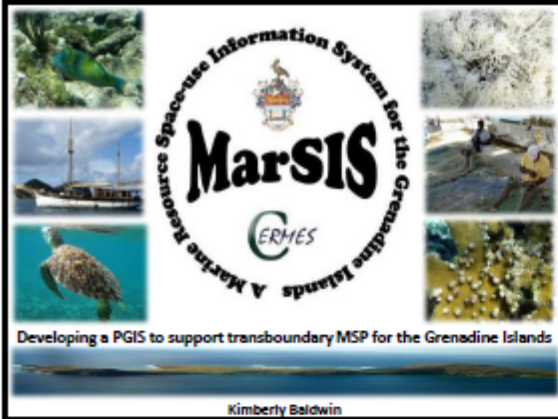
Based mainly on MSP in developed countries. Is the situation different in developing countries?

If different, what are the differences, and the consequences of those differences for practice?

### References

- Agardy, T., G. Notarbartolo di Sciara, P. Christie. 2011. *Mind the gap: Addressing the shortcomings of marine protected areas through large scale marine spatial planning*. *Marine Policy* 35:226-232
- Ehler, C. and F. Douvère. 2006. *Visions for a Sea Change*. Paris, France: UNESCO, Intergovernmental Oceanographic Commission
- Ehler, C. and F. Douvère. 2009. *Marine Spatial Planning: A step-by-step approach toward ecosystem-based management*. Paris, France: UNESCO, Intergovernmental Oceanographic Commission.
- Ehler, C. and F. Douvère. 2010. *An International Perspective on Marine Spatial Planning Initiatives*. *Environments* 37:9-20
- The Nature Conservancy. 2009. *Best Practices for Marine Spatial Planning. Advice from a workshop organized by The Nature Conservancy's Global Marine Team*. Unpublished manuscript.

## Appendix 3: Kimberly Baldwin



### Challenges faced by SIDS

- Financial
- Technological
- Human capacity
- Baseline information
- Locally relevant information
- Sectoral approach to management
- Lack of transboundary management
- Legitimacy for 'interactive governance'



### Planning & management of Grenada Bank marine resources is complex

Transboundary island chain

Large diversity of users

Information not integrated between :

- Countries
- Government Agencies
- Knowledge Systems



### In order to manage resources

Good information that is integrated between

- Sources (social, biological, economic, local knowledge)
- Sectors (tourism, fisheries, planning)
- Countries
- Islands

Understandable and accessible to all stakeholders

- Government
- NGOs
- Communities

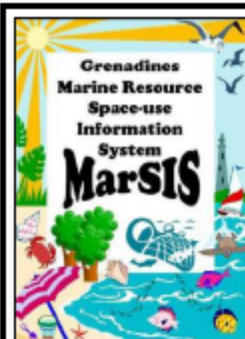
### Participatory GIS (PGIS)

#### Demand-driven & user-centered GIS

- Based on action research (PLA & PRA)
- Spatially merges local knowledge & socio-economic information with conventional scientific
- Validation, control & access by stakeholders

Can provide for:

- More holistic, functional & transparent framework
- Support for usefulness of local knowledge
- Strengthen stakeholder education, capacity & legitimacy
- Increase acceptance for management



## A Transboundary Marine Resource & Space-use Information System

To facilitate MSP & sustainable development

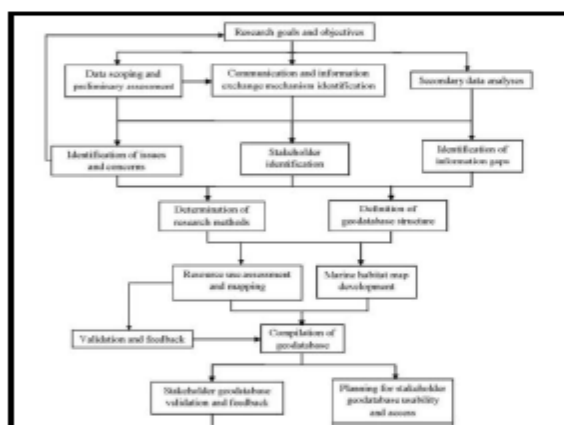
– *By integrating scientific information & local knowledge*

In a transparent & participatory fashion involving a variety of stakeholders

## Wide stakeholder participation was essential



- **Government Agencies**
    - Fisheries, Planning, Forestry, Tourism, Environment, Coast Guard, Port Authority, Statistics, Maritime Administration
  - **Marine Resource Users**
    - Fishers, Divers, Yachters, Water-taxis, Day Tour Operators, Ferries, Ships & Recreation
  - **NGOs**
    - Local, Regional, International
- & Community groups/schools



## Validation, Feedback & Evaluation



Sharing, verification of information produced & feedback

For learning in methods



Increases understanding & ownership for information generated

Foster a transparent participatory & adaptive management environment

## MarSIS has information on...

### Marine habitats\*

- reefs, mangroves, seagrass beds, beaches, rocky shores

### Infrastructure

- seaports, marinas, jetties, roads, hotels, desalination plants

### Marine resource users\*

- Dive shops, tourism facilities, fish landing sites, communities, etc.

### Marine space-use\*

- anchorages, dive sites, fishing grounds, shipping lanes, recreation areas

### Sensitive biological & heritage areas\*

- sea turtle nesting beaches, seabird nesting sites, marine protected areas, nursery grounds, historical sites, shipwrecks

### Areas of threat\*

- sand-mining, beach erosion, dumping, land-based sources of marine pollution, mangrove cutting

## MarSIS Marine Habitat Types



• Sand



• Seagrass

• Coral Reef

• Mixed Live-bottom

• Hard-bottom

• Mangrove

• Salt pond / swamp





### PGIS framework was found to:

- Improve an ecosystem approach
  - Take advantage of the diversity of information stakeholders have to offer
- Support interactive governance
  - Building partnership, capacity, ownership & legitimacy
  - Collaborative learning & adaptive management
- Be cost effective (yet time consuming)
- Allow for the production of appropriate & functional information

### The development of a marine multi-use zoning plan for the Grenadine Islands

*Jan 2011- March 2012*

The project is being facilitated by SusGren with funding provided by:

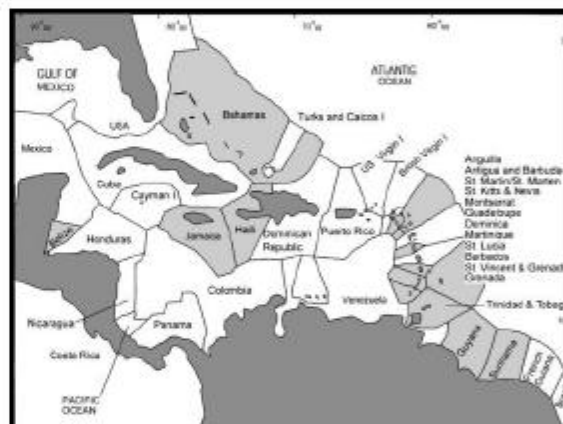
- The US National Oceanic and Atmospheric Administration (NOAA) - Coral Reef Conservation Program
- The Global Environment Facility (GEF) Small Grants Program
- The Nature Conservancy

### Questions

- Who is driving MSP process?
- Transboundary cooperation & management?
- Stakeholder involvement in MSP process?
- Implementation?

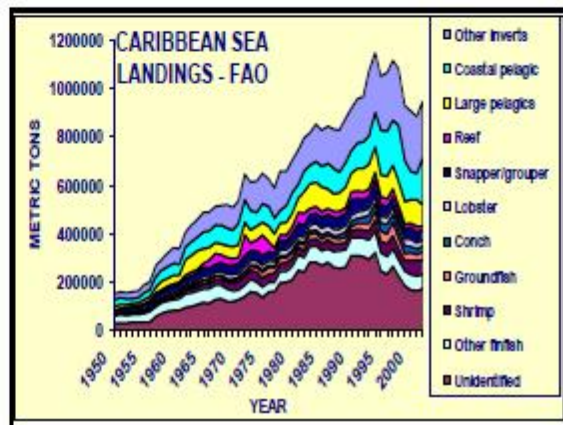


## Appendix 4: Milton Haughton and Erin Mutrie



### Key Characteristics

1. Semi-enclosed sea with complex & variable features
2. 26 independent States + 19 dependent territories
3. Interconnected, interdependent ecosystems
4. Highly migratory, straddling & shared fish stocks
5. Valuable coastal & marine systems
6. High Investments in coastal & marine resources
7. Transformation, stress, degraded natural systems
8. Disparate national & regional governance systems
9. Fragmentation in management & regulation
10. Numerous challenges for long-term sustainability
  - Climate change, sea level rise, pollution, over-fishing, population growth,
  - Threats to economic wellbeing of coastal communities



## What do we want?

- Long-term optimum sustainable use of the living marine resources:
  - improve quality of life of key stakeholders
  - achieve peace, prosperity, security and social and economic stability
- States embracing EBM approaches
  - Common Fisheries Policy
  - Growing interest in use of spatial information in planning and decision-making
- Can MSP assist us?

## What's the attraction?

- Mechanism for strategic & integrated plan-based approach for marine management (*Douwere, 08*)
- Promising method of EBM & sustainable development (*Ogden, 10*)
- Framework to improve coordination, reduce sectoral fragmentation, reconcile competing interests, address policy duplication (*Richie & Ellis, 10*)
- Tool to resolve actual or potential conflict, achieve EBM & facilitate sustainable management (*Mees, 08*)
- Tool that produces maps to track ocean use & document existing habitat & natural resources (*Spalding, 11*)

## CHALLENGES

### Complexity of region (political, geographic):

- Size & political complexity - sub-regional approach
- Unsettled jurisdictional boundaries
- Resources extending beyond national jurisdiction

### Ecosystem vs national boundaries:

- MSP plans should follow ecosystem boundaries & range of fish stocks

## CHALLENGES

### • Political will and Leadership:

- Political will to effectively manage and conserve & apply MSP
- Leadership

### • No one size fits all solution:

- Useful to use examples from other regions, but Caribbean has its unique characteristics
- Must adapt to ecological, political, social and institutional realities

## CHALLENGES

### Governance Frameworks

#### • Policy and legal Instruments:

- Several Regional instruments (Cartagena Convention, ACS, CARICOM, OECS, CRFM, SICA...)
- National policy, legislation

#### • Institutional Capacity & Financing:

- Requires skilled human expertise, specialized equipment & adequate organisational arrangements to coordinate at different scales - regional, national, local
- Securing funding

## CHALLENGES

### • Stakeholder participation:

- Achieving genuine participation
- Generating interest and commitment
- Finding workable models –avoid gridlock

### • Agreeing objectives/measures:

- Setting objectives and agreeing approaches at various levels (local, national, sub-regional, regional)

### • Data & information:

- access to good quality data and information

## Conclusions

1. Useful tool  
- should be promoted & tested
2. Problem – not with MSP per se

Future Activities:

1. Engage stakeholders in discourse
2. Build human & institutional capacity
3. Review & strengthen policy & legal frameworks
4. Case studies to test & adapt to local situation
5. Plan showing marine ecosystems across region?



## Appendix 5: Vera Agostini

**The Nature Conservancy**  
Protecting nature. Preserving life.

*Marine Zoning: stories from the field*  
Dr. Vera Agostini, The Nature Conservancy  
vagostini@tnc.org

**The Nature Conservancy**  
Protecting nature. Preserving life.

Thematic sites  
Protected areas

\* Does not include US geography

**The Nature Conservancy**  
Protecting nature. Preserving life.

### Field sites

- Raja Ampat, Indonesia
- Saint Kitts and Nevis
- Samana Bay, Dominican Rep

**The Nature Conservancy**  
Protecting nature. Preserving life.

### Common themes

- Integrating a diverse set of information
- Providing decision support
- Engaging stakeholders and building capacity
- Linking science and policy

**The Nature Conservancy**  
Protecting nature. Preserving life.

### Integrating information

- Field based surveys
- Expert mapping
- Multi-objective databases

**The Nature Conservancy**  
Protecting nature. Preserving life.

### Engaging stakeholders

- Facilitating governance
- Conducting participatory surveys
- Conducting workshops



The Nature Conservancy  
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## Engaging stakeholders



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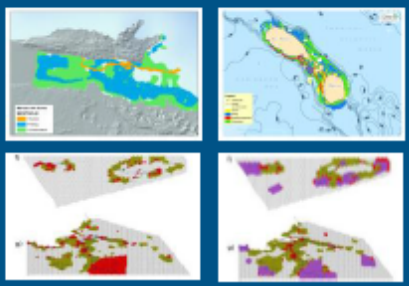
## Providing decision support



Interactive map viewers

The Nature Conservancy  
Protecting nature. Preserving life.

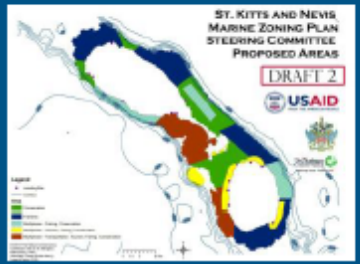
## Providing decision support



Systematic prioritization tools

The Nature Conservancy  
Protecting nature. Preserving life.

## Providing decision support A zoning map!!



ST. KITTS AND NEVIS  
MARINE ZONING PLAN  
STEERING COMMITTEE  
PROPOSED AREAS  
DRAFT 2  
USAID

The Nature Conservancy  
Protecting nature. Preserving life.

## Linking science and policy

- Relationships with governments (local, regional, global)
- Policy and legal reviews

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Protecting nature. Preserving life.

## Challenges

- Collecting and integrating info that truly addresses multiple objectives
- Maintaining dynamic information base
- Representing future growth (and climate change)
- Addressing scale issues (coastal vs offshore, biodiversity vs use information)
- Facilitating stakeholder participation in a multi-use world
- Implementing functional governance mechanisms

The Nature Conservancy  
Protecting nature. Preserving life.

## Challenges

Planning → Implementation

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## Acknowledgments

- Shawn Margles
- Steve Schill
- John Knowles
- Elianny Dominguez
- Hedley Grantham
- Ruth Blyther
- Jo Wilson
- Sangeeta Mangubhai
- Robbie Bovino
- Mike Beck
- Field teams
- Partners

## Appendix 6: Robert S. Pomeroy

### Marine Spatial Planning in Asia: Application and Implications

Robert S. Pomeroy  
University of Connecticut-Avery Point

#### Introduction

- Competition and conflict for space and resources characterizes the oceans of Asia.
- These conflicts weaken the ability of the ocean to provide the necessary ecosystem services upon which humans and all other life depend.

#### Introduction

- A number of ocean and coastal management paradigms have been proposed and utilized in the region through the decades to address this increasing competition and conflict.
- These paradigms have had mixed results, in many cases due to single sector management approaches.
- Recently a new paradigm has been introduced to influence the location of human activities in space and time, marine spatial planning (MSP).

#### Introduction

- Where will MSP fit in the range of management paradigms?
- Where and how can it be best utilized?
- How will it be implemented?

#### A Range of Paradigms

- Probably more than any other region of the world, a range of coastal, fisheries and ocean resources management paradigms have been introduced in Asia.

#### A Range of Paradigms

- Single species fisheries management was introduced in the 1960s
- Multi-species tropical fisheries management was introduced in the 1980s
- Ecosystem approach to fisheries was introduced in the 2000s

### A Range of Paradigms

- Ecosystem based management (EBM) was introduced in the 2000s
- Ecosystem-based fisheries management, the application of EBM in fisheries management, was introduced in the 2000s.

### A Range of Paradigms

- Integrated coastal management (ICM) was introduced to the region in the late 1980s.
- Integrated Coastal and Marine Resource Management (ICMRM), introduced in the 2000s.
- Integrated Watershed Management and Integrated River Basin Management in the 1990s

### A Range of Paradigms

- Marine managed area and locally managed marine managed area in the 2000s.
- Land use and regional planning of terrestrial areas has been utilized in the region since the 1970s.
- Land use zoning has been used to implement the land use plans.

### A Range of Paradigms

- Large marine ecosystems (LMEs) - Gulf of Thailand, South China Sea, Sulu-Celebes Sea, and Indonesian Sea
- Regional Ocean Governance was introduced in the 1970s in the South China Sea

### A Range of Paradigms

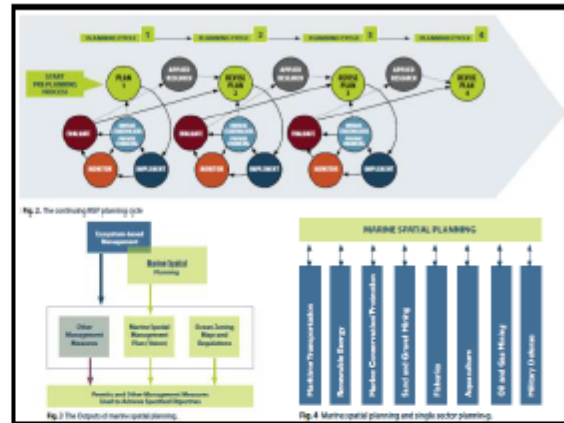
- Governance restructuring and decentralization beginning in the 1990s
- Community-based management and co-management in the late 1980s
- Marine protected areas (MPAs) and networks of MPAs

### A Range of Paradigms

- All of these approaches, developed by different disciplines/sectors, are said to be strategies to achieve Sustainable Development.
- Multi-sectoral approaches, such as EBM and ICM
- Sectoral approaches, such as EAFM

## A Range of Paradigms

- Where does Marine Spatial Planning fit in?
- Most coastal nations already allocate ocean space among different uses.
- The problem is that this allocation is most usually done on a single sector basis with no plan or policies for addressing conflict or compatibility and not necessarily addressing ecological considerations.



## Application of MSP in Asia

### FISH Project in the Philippines

- The project encouraged LGUs to work together in sorting out common resource uses and conflicts in their municipal waters through fisheries zoning.
- Zoning primarily involved marine spatial planning focused on fishery resource use within defined ecosystems shared by the different LGUs in the focal areas.

## Application of MSP in Asia

### Xiamen, China

- Strategic Management Plan for Marine Pollution Prevention and Management
- The integrated coastal management (ICM) initiative precipitated the development of a marine environmental management regulation and a sea area use regulation
- The objective of the marine functional zonation scheme was to reduce use conflicts, optimize use benefits, and improve sustainability of use.

## Application of MSP in Asia

### Bataan, Philippines

- A spatial planning and zoning plan was prepared to address major problems and conflicts in the area
- The Coastal Land- and Sea-use Zoning Plan (CLSUZP) was developed to define the uses of the different zones in the Bataan Coastal Area and municipal waters and to help in resolving resource-use conflicts in the province

## Application of MSP in Asia

### Wakatobi National Park, Indonesia

- Management plan goal is to support the establishment of effectively managed MPA sites as foundations for resilient networks of functionally connected MPAs.
- MPA network management, planning and design have occurred through the alignment of district spatial planning (District Management Plan) and national Park zoning (Wakatobi National Park Management Plan).

## Implications for MSP in Asia

### Positive aspects

- MSP is a planning process and can complement and link with other coastal, fisheries and ocean resource management plans developed through other approaches.
- For example, MSP, ICM and IWM are similar in that they are integrated, strategic, ecosystem-based and participatory.

## Implications for MSP in Asia

### Positive aspects

- MSP can link with ICM and IWM to integrate planning and management in the land/sea interface and to determine an efficient and effective allocation of land and ocean space.
- It can also be used to integrate across agencies and sectors with differing mandates on land and sea and to link terrestrial and ocean legislation.
- EAFM and MPAs are approaches and tools to link with MSP to implement EBM

## A Range of Paradigms

### Challenges

- Capacity to implement is lacking
- Resources to implement over other paradigms
- Must meet a clearly defined need and purpose
- Issue of scale and appropriateness of response
- Costs
- Simple versus complex plan
- Inconsistencies or lack of local and national policies and laws to support MSP
- Institutional mechanisms

## Conclusions

- Confusion reigns
- MSP and zoning is increasingly recognized as an important management approach
- Many examples in the region are not "real" MSP but spatial zoning
- Application may be location specific in scale and scope
- Link with other management approaches
- Future use will depend on effectiveness and cost

## Appendix 7: Ratana Chuenpagdee

### Back to Basics in Marine Governance

Ratana Chuenpagdee

International Coastal Network  
Memorial University of Newfoundland  
ratanac@mun.ca

IMCC2, Victoria, May 16, 2011

### Some observations

- MSP is a place-based tool, similar to MPAs, developed to help operationalize concepts like ICM and EBM;
- Rather than aiming mainly at conservation, it seeks to integrate the social, economic and political elements of human activities into the planning process;
- Even something (relatively speaking) 'simple' like MPAs, we're not doing it very well, is there a reason to think that we can do better in MSP?
- Given that MPAs are often met with reluctant reception from affected stakeholders, is there a reason to think that MSP will do better?

### From the "interactive governance" perspective, we posit that...

- It is not the MSP itself, and the promises that it holds, that determine how people will respond;
- Rather, it is the 'images' that people have about what it is and does that determine how people will react;
- But people's images may differ, creating what we refer to as 'governability problem'; thus
- Before embarking on the MSP crusade, we might want to ask some basic questions about images.

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- It is not the MSP itself, and the promises that it holds, that determine how people will respond;
- Rather, it is the 'images' that people have about what it is and does that determine how people will react;
- But people's images may differ, creating what we refer to as 'governability' problem; thus
- Before embarking on the MSP crusade, we might want to ask some basic questions about images.

### Interactive governance

"The whole of public as well as private interaction taken to solve societal problems and create societal opportunities. It includes the formulation and application of principles guiding those interactions and care for institutions that enable them."

(Koolman et al. 2005:17)



Fisheries Governance Network ([www.fishgovnet.org](http://www.fishgovnet.org))

### Interactive governance

"The whole of public as well as private interaction taken to solve societal problems and create societal opportunities. It includes the formulation and application of principles guiding those interactions and care for institutions that enable them."

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Fisheries Governance Network ([www.fishgovnet.org](http://www.fishgovnet.org))

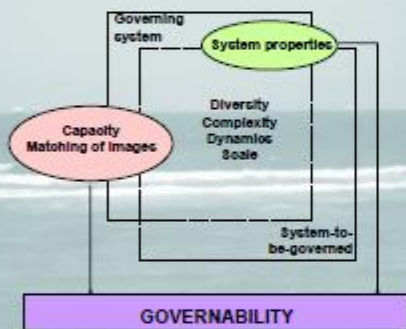
## MSP governability

- Whether MSP is going to work or not depends on:
  - The characteristics (diversity, complexity, dynamics and scale) of the natural and social systems associated with the MSP;
  - The capability of the 'governing system' to address challenges raised by systems-to-be-governed;
  - The matching of "images" that affected stakeholders have about their surroundings, and the MSP, with those of the MSP promoters; and
  - The overall quality of their interactions.

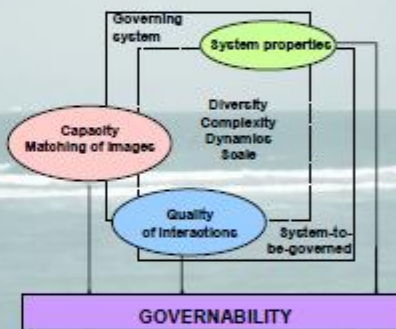
## Governability assessment framework



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## Questions related to 'images' of the systems-to-be-governed

- *Ecosystem*: What do stakeholders think about the marine environment?
- *Livelihoods*: What do stakeholders think about livelihoods opportunities and social wellbeing?
- *Power*: What do stakeholders think about power relations and sharing?

## Questions related to 'images' of the MSP as a governing system

- *Values*: What do stakeholders think about the significance of the MSP on conservation, resource use, access and other stated goals?
- *Norms*: What do stakeholders think about the rules and regulations associated with the MSP?
- *Principles*: What do stakeholders think about the underlying considerations in the design and the process of the MSP?



### Questions related to 'images' of the governing interactions

- *Relevance*: What do stakeholders think about the meaning of the MSP (is it worth doing)?
- *Effectiveness*: What do stakeholders think about the contribution of the MSP (is it going to work)?
- *Equity*: What do stakeholders think about the distribution of impacts of the MSP (who is going to benefit from it)?

### Concluding thoughts

- Like MPAs and other tools before it, MSP is not a fix all, not applicable to all, and not without governability problem;
- Need to get the 'step zero' right, i.e., to begin from understanding the basic governance elements like 'images'; and
- From the interactive governance perspective, it means (1) knowing what stakeholders think about the MSP, what it is and does, (2) encouraging interactions among stakeholders in determining values, norms and principles underlying MSP process and what it takes to make it work; and (3) recognizing that MSP is not only about solving problems, but also about creating opportunities.

Thank you for your attention.